East Asia's Foreign Exchange Rate Policies

Michael F. Martin
Specialist in Asian Affairs

August 16, 2010

Congressional Research Service
7-5700
www.crs.gov
RS22860

CRS Report for Congress
Prepared for Members and Committees of Congress

Summary

Financial authorities in East Asia have adopted a variety of foreign exchange rate policies, ranging from Hong Kong's currency board system which links the Hong Kong dollar to the U.S. dollar, to the "independently floating" exchange rates of Japan, the Philippines, and South Korea. Most Asian monetary authorities have adopted "managed floats" that allow their local currency to fluctuate within a limited range over time as part of a larger economic policy. A "crawling peg" is a special type of managed float in which a nation allows its currency to gradually appreciate or depreciate over time. China adopted a "crawling peg" policy from July 2005 to July 2008.

U.S. policy has generally supported the adoption of "free float" exchange rate policies. Legislation has been introduced during the 111th Congress designed to pressure nations seen as "currency manipulators" to allow their currencies to appreciate against the U.S. dollar. However, most East Asian monetary authorities consider a "managed float" exchange rate policy more conducive to their economic goals and objectives. A "managed float" can reduce exchange rate risks, which can stimulate international trade, foster domestic economic growth and lower inflationary pressures. However, it can also lead to serious macroeconomic imbalances if the currency is severely over or under valued. In either case, a managed float usually means that the nation has to impose restrictions on the flow of financial capital or lose some autonomy in its monetary policy.

Over the last five years, the value of the U.S. dollar has generally declined against most major currencies, although the U.S. dollar has partially rebounded against several major currencies since the beginning of 2010. The governments of East Asia have differed in their response to the fluctuations in the value of the U.S. dollar. Some have allowed their local currency to appreciate against the U.S. dollar; others have held the value of their currency against the U.S. dollar relatively unchanged. A few have seen their currencies depreciate in value relative to the U.S. dollar despite the weakness of the U.S. currency.

Some Members of Congress and analysts maintain that the exchange rate policies of some nations are keeping the prices of their exports artificially low and the cost of U.S. exports artificially high, leading to a U.S. trade deficits with those nations. However, it is uncertain if the adoption of "free float" exchange rate policies in East Asia would necessarily lead to a major decline in the U.S. trade deficit with East Asia. Some studies have predicted significant trade effects from the appreciation of certain East Asian currencies; others show little or no impact. Recent trends in trade with China, Japan, and South Korea seem to indicate that exchange rates are not the pivotal factor determining bilateral trade balances.

This report will be updated as events warrant.

Contents

Figures

Tables

Contacts

The exchange rate policies of some East Asian nations—in particular, China, Japan, and South Korea—have been sources of trade tension with the United States in the past and in the present. Some analysts and Members of Congress maintain that some countries have intentionally kept their currencies undervalued for a period of time in order to keep their exports price competitive in global markets. Some argue that these exchange rate policies constitute "currency manipulation" and violate Article IV, Section 1(iii) of the *Articles of Agreement the International Monetary Fund*, that stipulate that "each member shall avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members."

Under U.S. law, the Secretary of the Treasury is required to conduct a biannual analysis of the exchange rate policies of foreign countries and determine if they violate Article IV, Section 1.[1] In its report to Congress released in July 2010, the U.S. Treasury "concluded that no major trading partner of the United States met the standards identified in Section 3004 of the Act during the reporting period" (i.e. none was manipulating its exchange rate).[2]

Several bills have been introduced during the 111th Congress concerning the issue of "currency manipulation" or "misalignment" in general. These include the Currency Exchange Rate Oversight Reform Act of 2009 (S. 1254); the Currency Reform for Fair Trade Act of 2009 (H.R. 2378 and S. 1027); the End the Trade Deficit Act (H.R. 1875); the Trade Reform, Accountability, Development, and Employment (TRADE) Act of 2009 (H.R. 3012); and Currency Exchange Rate Oversight Reform Act of 2010 (S. 3134). While these bills address the exchange rate issue in general, it is widely understood that the main targets are in East Asia, particularly China.

This report examines the de facto foreign exchange rate policies adopted by the monetary authorities of East Asia. In some cases, there is a perceived discrepancy between the official (de jure) exchange rate policy and the observed de facto exchange rate policy. This report will focus primarily on the de facto exchange rate policies At one extreme, Hong Kong has maintained a "linked" exchange rate with the U.S. dollar since 1983, under which the Hong Kong Monetary Authority (HKMA) intervenes to keep the exchange rate between 7.75 and 7.85 Hong Kong dollars (HKD) to the U.S. dollar.[3] Such an arrangement is often referred to as a "fixed" or "pegged" exchange rate. At the other extreme, Japan, the Philippines, and South Korea have generally allowed their currencies to float freely in foreign exchange (forex) markets over the last few years—an exchange rate arrangement often referred to as a "free float." However, all three nations—much like the United States—have intervened in international currency markets if fluctuations in the exchange rate are considered too volatile and pose a risk to the nation's economic well-being.[4] Most of East Asia's governments, however, have chosen exchange rate policies between these two extremes in the form of a "managed float."

---

[1] Section 3004 of the Omnibus Trade and Competitiveness Act of 1988 (P.L. 100-418), codified into U.S. Code Chapter 22, Sections 5304-5306.

[2] U.S. Treasury, "Report to Congress on International Economic and Exchange Rate Policies," July 8, 2010, available online at http://www.treasury.gov/offices/international-affairs/economic-exchange-rates/pdf/Foreign%20Exchange%20Report%20July%202010.pdf.

[3] For more information about Hong Kong's exchange rate policy, see the HKMA's web page: http://www.info.gov.hk/hkma/eng/currency/link_ex/index.htm.

[4] According to the Federal Reserve Bank in New York, the United States intervened in foreign exchange markets twice between August 1995 and December 2006. For more information see http://www.newyorkfed.org/aboutthefed/fedpoint/fed44.html.

Types of Exchange Rate Policies

There are a number of different types of exchange rates policies that a nation may adopt, depending on what it perceives to be in its best interest economically and/or politically. At one extreme, a country may decide to allow the value of its currency to fluctuate relative other major currencies in international foreign exchange (forex) markets – a policy commonly referred to as a "free float." One advantage of a "free float" policy is that permits the nation more autonomy with its domestic monetary policy. However, disadvantages of a "free float" policy include greater exchange rate risk for international transactions, potentially destabilizing balance sheet effects, and possible rapid shifts in capital flows.

At the other extreme, a nation may decide to fix the value of its currency relative to another currency or a bundle of currencies – usually referred to as a "pegged" exchange rate policy. Pegged exchange rate policies can take several forms. The pegged exchange rate may be set by law, without special provisions to defend the value of the currency. Alternatively, a nation may create a "currency board" – a monetary authority that holds sufficient reserves to convert the domestic currency into the designated reserve currency at a predetermined exchange rate. The currency board utilizes those reserves to intervene in international forex markets to maintain the fixed exchange rate. For example, Hong Kong's three designated currency-issuing banks – The Bank of China, HSBC, and Standard Chartered Bank – must deposit with the Hong Kong Monetary Authority sufficient U.S. dollar denominated reserves to cover their issuance of Hong Kong dollars at the designated exchange rate of HK$ 7.80 = US$ 1.00. An advantage of a pegged exchange rate is that it virtually eliminates exchange rate risk. Disadvantages are the loss of autonomy in domestic monetary policy, potentially rapid changes in domestic prices (including fixed asset values), and exposure to speculative attacks on the pegged exchange rate.

A third common exchange rate policy is a "managed float." A nation that adopts a "managed float" allows the value of its domestic currency to fluctuate in international forex markets until such point that certain designated economic indicators reach critical levels. In some cases, the country may designate a band around a determined exchange rate, and intervene in international forex markets if the its currency hits the upper or lower value limits. One special form of a managed float is a "crawling peg," in which the nation allows its currency to gradually appreciate or depreciate in value against one or more other currencies over time. China initiated a "crawling peg" policy on July 21, 2005, which it maintained until the summer of 2008, a period in which the renminbi appreciated 21% against the U.S. dollar. Other forms of managed float policies do not rely on the exchange rate, but other economic factors such as the trade balance, current account balance, inflation, and overall economic growth.

Contemporary economic theory asserts that a nation cannot simultaneously maintain a fixed exchange rate, free capital movement, and an independent monetary policy. If a nation wishes to peg its currency and allow free capital movement (for example, Hong Kong) it must tie its monetary policy to that of the reserve currency nation (the United States). Many nations with pegged exchange rates chose to restrict the movement of capital to allow them greater autonomy in their monetary policies (such as anti-inflation measures, interest rate adjustments, or regulating the money supply).

East Asia's Exchange Rate Policies

Many East Asian governments have adopted "managed float" exchange rate policies. **Table 1** lists the current *de facto* exchange rate policies of East Asia according to the International Monetary Fund (IMF) as of April 30, 2008, divided into four general categories: (1) Pegged; (2) Crawling Peg; (3) Managed Float; and (4) Free Float. Cambodia, China, Indonesia, Malaysia, Singapore, Taiwan, Thailand, and Vietnam allow their currency to adjust in value in forex markets so long as the fluctuations in value do not violate some other economic policy goal (such as inflation limits or money supply constraints). In addition, China and Vietnam have officially adopted a type of managed float known as a "crawling peg"—that typically includes either the gradual appreciation or depreciation of the currency over time against one or more currencies.

Table 1. De Facto Exchange Rates Policies of East Asia (as of April 30, 2008)

Economy	Exchange Rate Policy
Cambodia	Managed Float
China	Crawling Peg*
Hong Kong	Pegged
Indonesia	Managed Float
Japan	Free Float
Laos	Managed Float
Macau	Pegged
Malaysia	Managed Float
Philippines	Free Float
Singapore	Managed Float
South Korea	Free Float
Taiwan	Managed Float
Thailand	Managed Float
Vietnam	Crawling Peg*

Source: International Monetary Fund, *De Facto Classification of Exchange Rate Regimes and Monetary Policy Framework*, http://www.imf.org/external/np/mfd/er/2008/eng/0408.htm.

***Note:** Status of exchange rate policies of China and Vietnam subject to debate; some analysts think both nations have recently adopted a managed float.

Categorization of a government's exchange rate policy can be complicated. For example, according to South Korea's central bank, the Bank of Korea, the nation's official exchange rate policy has been a "free floating system since December 1997."[5] However, it was reported that the South Korean government sold about $1 billion for won on March 18, 2008, to stop a "disorderly decline" in the value of Korea's currency.[6] There were also reports that Korea sold more dollars for won in early April 2008.[7] At the time, some forex analysts claimed that the new South Korean government had adopted a *de facto* pegged exchange rate policy of holding the exchange rate between the won and the U.S. dollar at 975-1,000 to 1.[8] From the summer of 2008 to March 2009, the won sharply declined in value against the U.S. dollar, hitting a low of 1,569.61 won to the dollar on March 3, 2009. Since then, the won has strengthened against the U.S. dollar, but was still 15% weaker in June 2010 than it was in June 2005.

[5] See the Bank of Korea's webpage for a description of its exchange rate policy: http://www.bok.or.kr/template/eng/html/index.jsp?tbl=tbl_FM0000000066_CA0000001186.

[6] Yoo Choonsik and Cheon Jong-woo, "S. Korea Sold Dollars to Calm Markets-Dealers," *Reuters*, March 18, 2008.

[7] "Intervention Detected as S. Korea Won Pares Gains," *Reuters*, April 4, 2008.

[8] Yoo Choonsik, "S. Korea Won Hit by New Policy, Consumption at Risk," *Reuters*, April 7, 2008.

Another source of complication arises when there is a seeming discrepancy between the official exchange rate policy and observed forex market trends. For example, both China and Vietnam officially maintained a crawling peg policy prior to the global financial crisis that allowed their currencies—the renminbi and the dong, respectively—to adjust in value with respect to an undisclosed bundle of currencies within a specified range each day. In theory, this allowed the renminbi and dong to appreciate or depreciate in value gradually over time, depending on market forces.

However, since the global financial crisis began in 2007, the renminbi has been comparatively stable in value relative to the U.S. dollar. Initially, this led some analysts to assert that China had abandoned the crawling peg in favor of a pegged exchange rate. Other analysts maintained that the stability of the renminbi with respect to the U.S. dollar was an artifact of the bundle of currencies being used by China. Because some major currencies have strengthened against the U.S. dollar while others have weakened, the weighted average used by China in determining the band for the crawling peg has resulted in a relatively unchanged value when compared to the U.S. dollar. On June 19, 2010, China's central bank, the People's Bank of China, announced it would "proceed further with reform of the RMB exchange rate regime and to enhance the RMB exchange rate flexibility," tacitly admitting that it had been intentionally maintaining a stable exchange rate during the global economic downturn.[9]

Competitive Adjustments?

There are indications that some of the financial authorities monitor the region's exchange rates and attempt to keep the relative value of their currencies in line with the value of selected regional currencies. These "competitive" adjustments in exchange rates are allegedly made to maintain the competitiveness of a nation's exports on global markets. For example, one scholar maintains, "Countries that trade with China and compete with China in exports to the third market are keen not to allow too much appreciation of their own currencies vis-à-vis the Chinese RMB [renminbi]."[10] The scholar, Taketoshi Ito, also speculates, "China most likely is more willing to accept RMB appreciation if neighboring countries, in addition [South] Korea and Thailand, allow faster appreciation."[11]

An examination of East Asian exchange rates over the last five years (July 2005 to June 2010) shows a full range of changes in exchange rates relative to the U.S. dollar (see **Figure 1**). Seven currencies—China's renminbi, Japan's yen, Laos' kip, Malaysia's ringgit, the Philippines' peso, Singapore's dollar, and Thailand's baht—have appreciated between 17% and 28% against the U.S. dollar over the last five years, albeit along different paths. Five currencies—Cambodia's riel, Hong Kong's dollar, Indonesia's rupiah, Macau's pataca, and Taiwan's dollar—were relatively unchanged in value in July 2010 when compared to July 2005. Two currencies—South Korea's won and Vietnam's dong—have lost nearly 20% in value over the last five years.

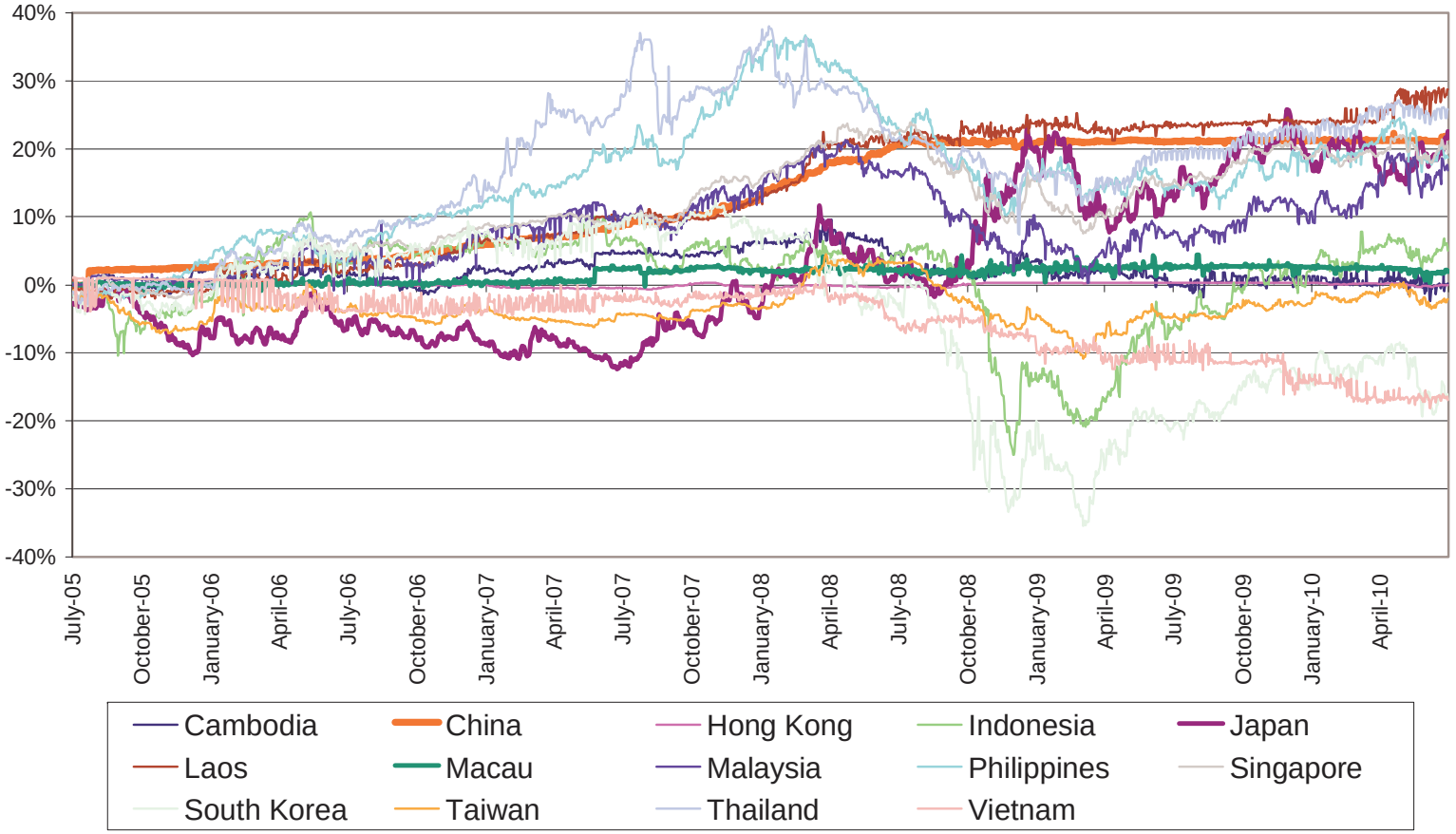
[9] The text of the People's Bank of China statement is available online at http://www.pbc.gov.cn/english/detail.asp?col=6400&id=1488.

[10] Takatoshi Ito, "The Influence of the RMB on Exchange Rate Policy of Other Economies," paper presented at Peterson Institute for International Economics Conference, October 19, 2007.

[11] Ibid.

Figure 1. Changes in U.S. Dollar Exchange Rates for East Asian Currencies, July 2005 - June 2010

(base value = June 2005)



Source: CRS calculations based on publicly available data.

Figure 1 also provides some support for the supposition that some nations are engaging in competitive exchange rate management. The two pegged currencies—the Hong Kong dollar and the Macau pataca—remained virtually unchanged throughout the time period considered, as would be expected. Two of the currencies that have appreciated the most over the last five years—the Laotian kip and the Chinese renminbi—appear to have followed a very similar path, which is not surprising given Laos' economic ties to China. The Malaysian ringgit and the Singaporean dollar seem to have followed along the same path as the kip and renminbi until May of 2008, when the ringgit and the Singaporean dollar began a year-long period of depreciation against the U.S. dollar, followed by an uneven, gradual recovery to near the levels of the renminbi.

In a similar fashion, the two currencies with the peak level of appreciation against the U.S. dollar over the last five years—the free-floating Philippine peso and the managed float Thai baht—also have fluctuated along comparable trend lines since July 2005. Another pair of currencies that moved along similar paths since July 2005 were the Indonesian rupiah and the South Korean won; both currencies depreciated against the U.S. dollar between 2005 and 2009, with the won down by over 20%. The reasons for the apparent links between the four currencies are unclear.

Exchange Rates and U.S. Trade

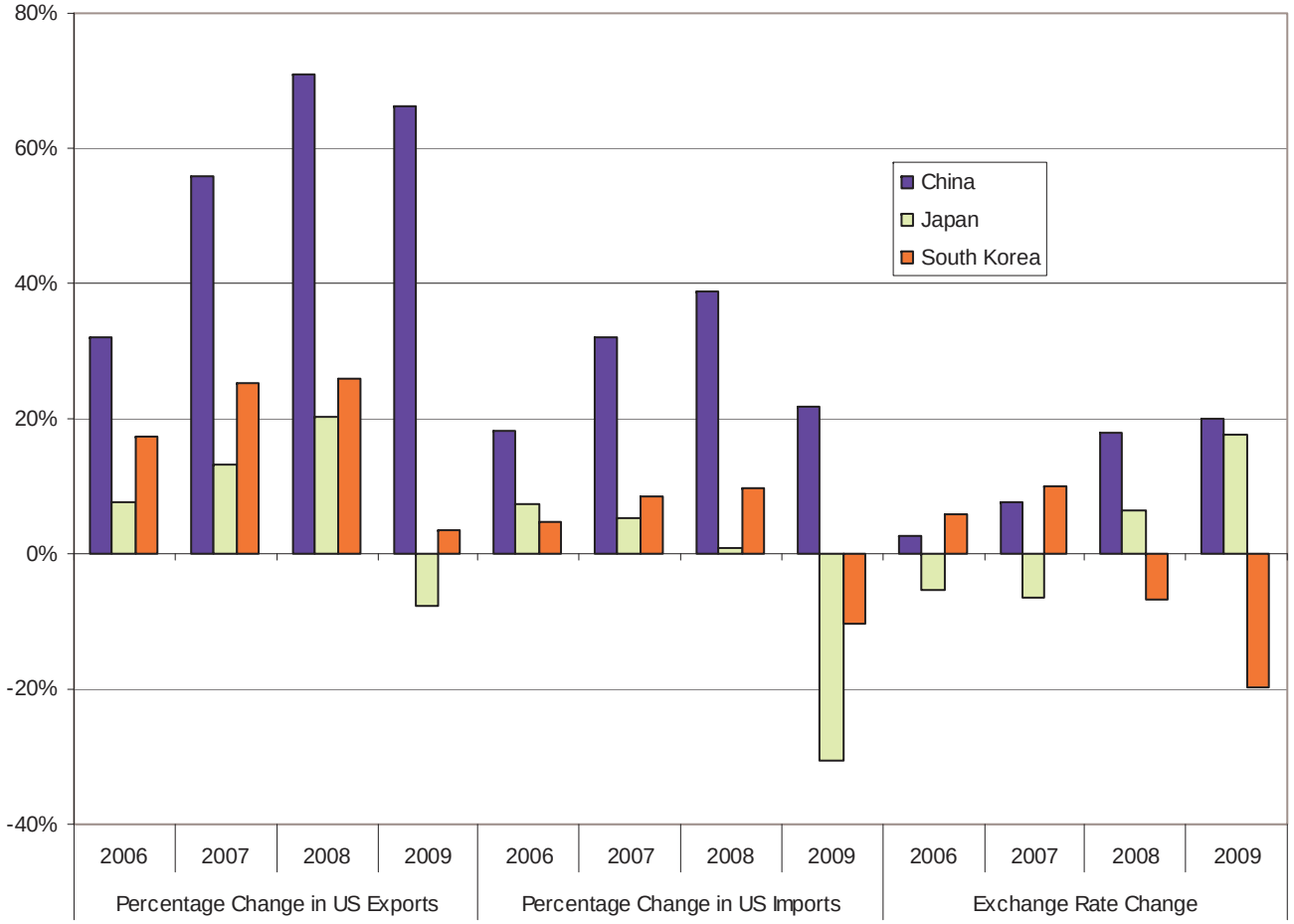
There is a widely held notion that if a nation's currency appreciates in value relative to other nations' currencies, its exports will tend to decline and its imports will tend to rise. In practice, recent trends in U.S. bilateral trade in Asia have not always followed the expected patterns, as can be seen by comparing recent U.S. trade flows with China, Japan, and South Korea (see **Figure 2**).

The three nations adopted different exchange rate policies between 2005 and 2009. China utilized a "crawling peg" from July 2005 to July 2008, allowing the renminbi to appreciate against the dollar by 21%, and then imposed an apparent peg for the rest of 2008 and 2009 in response to the global financial crisis. Japan maintained its "free float" policy throughout the time period, during which the yen initially weakened against the dollar and then strengthened by nearly as much as the renminbi. South Korea, which usually maintains a "free float," intervened in international forex markets in 2008 and 2009 in an effort to stem a sharp decline in the value of the won against the dollar. Overall, the renminbi and won strengthened against the dollar in 2006 and 2007, while the yen weakened. Then, in 2008 and 2009, the renminbi continued to strengthen, but the yen and won switched directions—the yen strengthened and the won weakened.

Other factors aside, the expectation would be for U.S. exports to China to rise and its imports from China to fall throughout the time period. For Japan, U.S. exports should have risen in 2006 and 2007, and then declined in 2008 and 2009, while U.S. imports should have dropped in the first two years and then picked up in the second two years. In the case of South Korea, U.S. exports should have gone down in 2006 and 2007, and then rebounded in 2008 and 2009, while imports should have gone in the opposite direction.

Figure 2. Currency Appreciation and U.S. Trade Growth with the China, Japan, and South Korea, 2006 - 2010

(percentage change from 2005)



Source: CRS calculation based on USITC data and publicly available exchange rates

As shown in **Figure 2**, U.S. exports to China did grow from 2006 to 2008, but declined in 2009. However, U.S. imports from China also increased from 2006 to 2009, and then decreased in 2009. U.S trade with Japan also did not follow the expected pattern. U.S. exports to Japan steadily rose until through 2008 before declining in 2009 – a year later than expected. U.S. imports from Japan rose in 2006, but then dropped in value from 2007 onward – nearly the opposite of what the exchange rate effects would suggest. U.S exports to South Korea rose for the first three years, and then dropped in 2009, which is contrary to predictions. U.S. imports from South Korea also moved contrary to expectation, declining sharply in 2009 despite the weakening of the won.

The implication is that exchange rates are not necessarily the pivotal factor determining changes in bilateral trade between two nations. For example, the onset of the global financial crisis in 2007 is largely seen as being responsible for a global slowdown in economic growth and a decline in international trade. It also contributed to significant shifts in exchange rates, as nations faced liquidity problems and investors sought "safe haven" for their capital. Even in non-crisis periods, economic factors other than exchange rates may affect trade flows.[12]

Implications for U.S. Trade Policy in East Asia

While U.S. policy has generally supported the adoption of "free float" exchange rate policies, most East Asian governments consider a "managed float" exchange rate policy more conducive to their overall economic goals and objectives. In part, East Asian governments may be resistant to a "free float" policy because of the commonly held view in Asia that the economies with more liberal exchange rate policies suffered more during the 1997-1998 Asian financial crisis than the economies with pegged or managed exchange rates.[13] As a result, there may be skepticism about U.S. recommendations for adoption of "free float" exchange rate policies.

In addition, as indicated above, it is uncertain if the adoption of "free float" exchange rate policies by more monetary authorities in East Asia would significantly reduce the U.S. trade deficits with countries in the region.[14] Among economists, there is no consensus that the resulting appreciation of East Asian currencies against the U.S. dollar would either significantly increase overall U.S. exports or reduce U.S. imports. However, for some price-sensitive industries where U.S. companies are competitive, the appreciation of a competing nation's currency may stimulate U.S. export growth and/or a decline in U.S. imports.

---

[12] These other forces may include the U.S. federal deficit, comparatively low U.S. interest rates, and/or various tariff and non-tariff trade barriers. For more information, see CRS Report RL31032, *The U.S. Trade Deficit: Causes, Consequences, and Policy Options*, by Craig K. Elwell.

[13] For more about Asian views of the causes of Asian financial crisis of 1997-98, see Pradumna B. Rana, "The East Asian Financial Crisis—Implications for Exchange Rate Management," Asian Development Bank, EDRC Briefing Notes, Number 5, October 1998; and Ramkishen S. Rajan, "Asian Exchange Rate Regimes since the 1997-98 Crisis," Singapore Centre for Applied and Policy Economics, September 2006.

[14] In his abstract of his 2006 study, "The Effect of Exchange Rate Changes on Trade in East Asia," Willem Thorbecke concluded, "The results indicate that exchange rate elasticities for trade between Asia and the U.S. are not large enough to lend confidence that a depreciation of the dollar would improve the U.S. trade balance with Asia." Complete text of paper available at http://www.rieti.go.jp/en/publications/summary/06030003.html. However, in a 2010 examination of China's trade with the United States, William Cline of the Peterson Institute for International Economics maintains that a stronger renminbi will significantly reduce the U.S. trade deficit with China (a copy of his policy brief is available at http://www.iie.com/publications/interstitial.cfm?ResearchID=1636).

Author Contact Information

Michael F. Martin
Specialist in Asian Affairs
mfmartin@crs.loc.gov, 7-2199