Report to Congress on International Economic and Exchange Rate Policies

U.S. Department of the Treasury
Office of International Affairs

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This report reviews developments in international economic and exchange rate policies and is submitted pursuant to the Omnibus Trade and Competitiveness Act of 1988, 22 U.S.C. § 5305 (the "Act").[1]

[1] The Treasury Department has consulted with the Board of Governors of the Federal Reserve System and IMF management and staff in preparing this report.

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Key Findings

The Omnibus Trade and Competitiveness Act of 1988 (the "Act") requires the Secretary of the Treasury to provide semiannual reports on the international economic and exchange rate policies of the major trading partners of the United States. Under Section 3004 of the Act, the Report must consider "whether countries manipulate the rate of exchange between their currency and the United States dollar for purposes of preventing effective balance of payments adjustment or gaining unfair competitive advantage in international trade." This Report covers developments in 2010. Treasury has concluded that no major trading partner of the United States met the standards identified in Section 3004 of the Act during the period covered in this Report.

The U.S. economy continues to recover, with six consecutive quarters of expansion and cumulative growth of 4.5 percent since mid-2009. The unemployment rate eased from 9.9 percent to 9.4 percent over the course of 2010 as businesses added more than 1.3 million workers to private payrolls, but unemployment remains unacceptably high. Recovery was fueled by the fiscal stimulus of the American Recovery and Reinvestment Act, along with the Financial Stability Plan, housing-related programs, and actions taken by the Federal Reserve to ease monetary and financial conditions. To help ensure that the recovery is sustained, Congress passed and the President signed the Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010 in December. Partly as a result of improving economic and financial conditions, the federal budget deficit narrowed to $1.3 trillion (8.9 percent of GDP) in FY2010, from $1.4 trillion (9.9 percent of GDP) in FY2009. The Administration is committed to reducing the deficit substantially further and to putting the debt-to-GDP ratio on a sustainable path.

The overall global recovery has gained considerable momentum, but has proceeded at very different speeds in emerging market economies and advanced economies. Global economic activity in 2010 was stronger than anticipated, with aggregate global growth of around 5 percent according to the IMF. That result was markedly higher than the 1.9 percent pace of growth projected for 2010 by the IMF in early 2009 during the depth of the crisis, and the 3.9 percent pace of growth envisaged for 2010 by the IMF in early 2010. Emerging market economies grew in the aggregate by 7 percent and contributed 68 percent of total global growth, while the advanced economies grew 3 percent. Growth was stronger than originally expected in Germany, Japan, and the United States. The IMF is currently projecting global growth of 4.5 percent in both 2011 and 2012.

The multi-speed global recovery in 2010 was dominated by several key developments. The first was heightened concern over sovereign debt, particularly in Europe, which resulted in rising interest rates and yield spreads in the affected European economies. During the crisis in Greece in April and May, investors reduced their exposure, financial market volatility increased, and capital flowed into safe haven currencies and jurisdictions. Later, near the end of 2010, during the crisis in Ireland, contagion was less pronounced but sovereign debt yields increased in the European periphery countries, where they remain high. Economic conditions in the periphery pose considerable downside risks to the region, and beyond the region if not contained.

The second key development was the steady rise in commodity prices throughout the year, both oil and non-oil commodities, amid stronger global growth, adverse weather developments, and weak supply responses. The IMF estimates that prices increased 20 to 30 percent for oil and non-oil commodities in 2010. Higher prices for commodity inputs and food prices, coupled with reduced spare capacity in some economies, has put upward pressure on inflation across most emerging market economies, forcing authorities in those countries to tighten monetary policy. Inflation in the advanced economies appears to remain well contained, while in Japan the authorities continue to grapple with weak domestic demand and deflation. In the event increased global growth and demand for oil is not associated with a corresponding increase in oil supply, higher oil prices would pose a risk to the recovery.

Third, capital flows to emerging markets (EMs) were buoyant in 2010, especially in the latter part of the year. The fundamental driver of increased capital flows to emerging markets is the strengthened performance of these economies, especially relative to advanced economies, and the ensuing higher yields on EM investments, particularly in the context of continued easy monetary policies in the advanced economies. Though data are only partial and suffer lags, the evidence suggests that capital inflows to emerging markets had returned to pre-crisis levels in 2009 and continued at that pace through mid-2010. Beginning in late September and running through the first week of November, capital flows to EMs increased, most prominently equity flows, before tapering off. In December, flows were back to levels prevailing for most of the past 18 months and the several years prior to the crisis. In response, a number of countries have either implemented or are contemplating putting in place capital controls or prudential measures. Restrictions on capital inflows and intervention to maintain rigid exchange rates in some countries have diverted capital flows to emerging markets with open capital accounts and more flexible exchange rate policies, forcing the latter to bear the brunt of adjustment and leading in some cases to overvalued exchange rates.

Fourth, whereas the global recession and sharp decline in global trade had the effect of reducing global current account imbalances, the recovery has witnessed a modest widening of external imbalances once again. Recognizing the risk to future global growth posed by the partial reemergence of large external imbalances, G-20 Leaders agreed in Seoul to devise a framework to help identify imbalances in need of corrective and preventive actions. As part of the Seoul Action Plan, Leaders agreed on the importance of greater exchange rate flexibility and market-determined exchange rate systems where exchange rates reflect underlying economic fundamentals. G-20 Leaders also agreed to refrain from competitive devaluation of their currencies.

With respect to exchange rate policies, ten economies were reviewed in this Report, accounting for nearly three-fourths of U.S. trade. Many of the economies have fully flexible exchange rates. A few have more tightly managed exchange rates, with varying degrees of management. This report highlights the need for greater exchange rate flexibility, most notably by China, but also in other economies.

In China, the authorities decided in June 2010 to once again allow the exchange rate to appreciate in response to market forces. Since the June announcement, the renminbi (RMB) has appreciated by a total of 3.7 percent against the dollar as of January 27, or at a rate of approximately six percent per year in nominal terms. Because inflation in China is significantly higher than it is in the United States (in the second half of 2010, the annual rate of CPI inflation was more than 5 percentage points higher in China than in the United States), the RMB has been appreciating more rapidly against the dollar on a real, inflation-adjusted basis, at a rate which if sustained would amount to more than 10 percent per year. China is also undertaking a relaxation of restrictions on the use of the RMB. These reforms will gradually erode the controls that help the authorities manage the level of the exchange rate, and over time will contribute to a more market-determined exchange rate.

China's continued rapid pace of foreign reserve accumulation and the huge flow of capital from the Chinese public to advanced countries that it implies, the essentially unchanged level of China's real effective exchange rate especially given rapid productivity growth in the traded goods sector, and widening of current account surpluses, all indicate that the renminbi remains substantially undervalued. It is in China's interest to allow the nominal exchange rate to appreciate more rapidly, both against the dollar and against the currencies of its other major trading partners. If it does not, China will face the risk of more rapid inflation, excessively rapid expansion of domestic credit, and upward pressure on property and equity prices, all of which could threaten future economic growth. By trying to limit the pace of appreciation, China's exchange rate policy is also working against its broad strategy to strengthen domestic demand. And China's gradualist approach on the exchange rate also adds to the substantial pressure now being experienced by other emerging economies that run more flexible exchange rate systems and that have already seen substantial exchange rate appreciation.

Many in China recognize that China is too large relative to the world economy for it to continue to rely on foreign demand to grow. They also recognize that exchange rate flexibility needs to be part of China's efforts to change its pattern of growth. During President Hu's state visit to the United States in January 2011, China committed in a joint statement of Presidents Obama and Hu that "China will continue to promote RMB exchange rate reform and enhance RMB exchange rate flexibility, and promote the transformation of its economic development model."

Based on the resumption of exchange rate flexibility last June and the acceleration of the pace of real bilateral appreciation over the past few months, and in view of the commitment during President Hu's visit that China will intensify its efforts to expand domestic demand and further enhance exchange rate flexibility, Treasury has concluded that the standards identified in Section 3004 of the Act during the period covered in this Report have not been met with respect to China. Treasury's view, however, is that progress thus far is insufficient and that more rapid progress is needed. Treasury will continue to closely monitor the pace of appreciation of the RMB by China.

Introduction

This report focuses on international economic and foreign exchange developments in 2010. Where pertinent and when available, data and developments through January 2011 are included.

Exports and imports of goods to and from the areas whose economies and currencies are discussed in this report accounted for 72 percent of U.S. merchandise trade in the first 11 months of 2010.

U.S. Macroeconomic Trends

The U.S. economy continued to recover in 2010 from the deepest recession in the postwar period. Real GDP rose by 2.8 percent over the four quarters of the year and businesses started to hire again, adding more than 1.3 million workers to private sector payrolls. The unemployment rate eased by 0.5 percentage point to end the year at 9.4 percent – still very high by historical standards, but down from a peak of 10.1 percent in October 2009. Home sales and residential construction both surged during the spring, as consumers took advantage of the home buyer tax credit prior to its expiration on April 30. Since then, housing activity has slowed, but there are recent signs that the sector may be stabilizing. Financial and credit markets reacted strongly to adverse developments in European sovereign debt markets during the spring, but conditions have improved notably since then, as global prospects have improved.

The advancement in the U.S. economy has been supported by the fiscal stimulus of the American Recovery and Reinvestment Act, along with the Financial Stability Plan, housing-related programs, and actions taken by the Federal Reserve to ease monetary and financial conditions. To help ensure that the recovery is sustained, Congress passed and the President signed the Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010 in December. This legislation, which includes a 2 percent payroll tax cut and the extension of unemployment benefits through 2011, is expected to provide a significant boost to the economy in 2011. Partly in response to this legislation, private forecasters revised up their forecasts for real GDP growth in 2011. A broad consensus now expects real GDP to grow by 3.3 percent over the four quarters of 2011, and sees the unemployment rate declining gradually to around 9.1 percent by the end of the year.

The U.S. Economy Continued to Grow in 2010

During 2010, real GDP increased by 2.8 percent on top of a 3.3 percent gain in the second half of 2009, on an annualized basis. Growth slowed temporarily in the spring as imports jumped and the pace of inventory accumulation slowed sharply, but the expansion picked up speed again in the second half of 2010. In the fourth quarter, real GDP growth accelerated to a 3.2 percent annual rate as consumer spending strengthened and residential investment edged higher. Private domestic final demand (consumption plus investment) rose nearly 4.5 percent in the fourth quarter, up from 2.25 percent in the third quarter. This suggests that the recovery is increasingly being powered by core private demand rather than government spending. Since the expansion began in mid 2009, real GDP has increased 4.5 percent, more than reversing the 4.1 percent drop in output that occurred during the recession.

Housing Activity Was Volatile

Housing starts and home sales jumped sharply in the spring in response to the home buyer tax credit. After the tax credit expired on April 30, however, both sales and new home building slowed sharply. Single-family housing starts fell a cumulative 24 percent between April and July, leaving them at their lowest level since May 2009. Since then, they have been relatively stable, on balance, at a low level. Home sales have started to recover, helped in part by historically low mortgage rates. In the fourth quarter, sales of new and existing single-family homes rose about 15 percent, recouping almost two-thirds of the drop that occurred after the tax credit expired. The pickup in sales helped trim the stock of homes on the market, but inventories at the end of 2010 were still very high relative to sales: new homes for sale ended the year at a 6.9-month supply and existing homes for sale stood at an 8.1-month supply. The large overhang of homes on the market, exacerbated by the historically high level of homes in foreclosure, continued to weigh on prices in 2010. House price measures appeared to stabilize in early 2010 but began to fall again in the fourth quarter. The S&P/Case-Shiller 20-city house price index declined on a year-over-year basis in both October and November following eight straight months of growth; the FHFA house price index fell 4.3 percent over the year ending in November, the largest decline since July 2009.

Employment Turned Up but Unemployment Remained High

Employment started to grow again at the start of 2010. Over the twelve months of the year, nonfarm private-sector payrolls increased by more than 1.3 million. The bulk of these jobs have been in the service-providing industries, particularly health care and professional and business services. Manufacturing – a sector hit particularly hard by the downturn – also has added workers to its payrolls. During the year, factory employment rose by 136,000, accounting for 10 percent of total private sector job growth. Despite these gains, the level of private-sector employment in December 2010 was still 7.1 million lower than in December 2007, when the recession began.

Unemployment eased slightly but was still very high at year's end. The headline unemployment rate stood at 9.4 percent in December, 0.5 percentage point lower than a year earlier, but still nearly double its pre-recession level.

Inflation Remained Low and Stable

The large degree of slack in labor markets and low level of capacity utilization continued to restrain inflation in 2010. Headline consumer prices rose a moderate 1.5 percent over the twelve months of 2010, and core consumer prices were up just 0.8 percent. That was the lowest calendar year core inflation rate in the history of the series, dating back to 1957. Growth of compensation costs remained subdued, exerting little upward pressure on price inflation. The Employment Cost Index (ECI) for private-industry workers rose 2.0 percent over the year ending in December. Recent year-over-year gains in this measure are among the smallest in the 30-year history of the data series.

Conditions in Financial and Credit Markets Improved

Conditions in financial and credit markets deteriorated somewhat during the spring of 2010, reflecting concerns about the sustainability of sovereign debt in Europe and the pace of recovery in the United States. Equity markets began to slip in late April and financial market volatility increased sharply. Interest rate spreads widened, reflecting stepped up risk aversion, but did not approach late 2008 levels. Despite these developments, financial and credit market conditions remained far better than during the 2008 financial crisis.

The CBOE Volatility Index (VIX), a measure of perceived risk in credit markets, rose to a 14-month high of nearly 46 percent in early May, but eased during the summer and was fluctuating around 18 percent in late December. The S&P 500 recovered from the decline that occurred in the spring to post a 12.8 percent gain for the year. The 3-month U.S. dollar LIBOR-OIS spread (a measure of stress in term interbank funding markets) increased to around 35 basis points in late June but by the end of the year had narrowed to around 13 basis points. Spreads for corporate debt over Treasuries also widened during the late spring and early summer but remained elevated heading into 2011. The 10-year Baa corporate yield spread over Treasuries was around 270 basis points at the end of 2010, up about 30 basis points since April but notably lower than the December 2008 peak of 616 basis points. Mortgage rates, which were generally stable at a low level during the first four months of 2010, fell steadily from late April through mid-November, when they reached new lows. Mortgage rates edged higher in subsequent weeks but remained low, with the 30-year rate around 4.8 percent at the end of 2010.

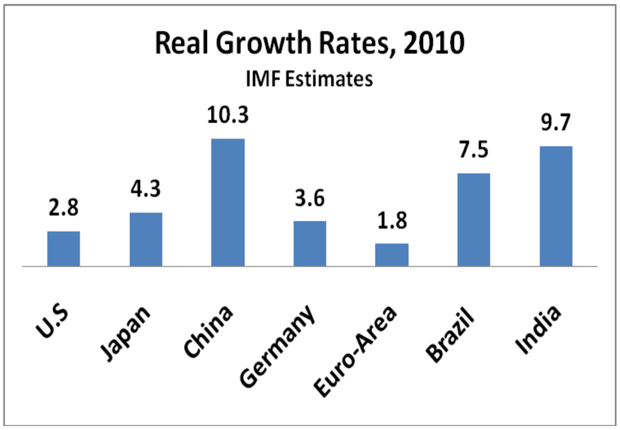
The Federal Budget Deficit Narrowed

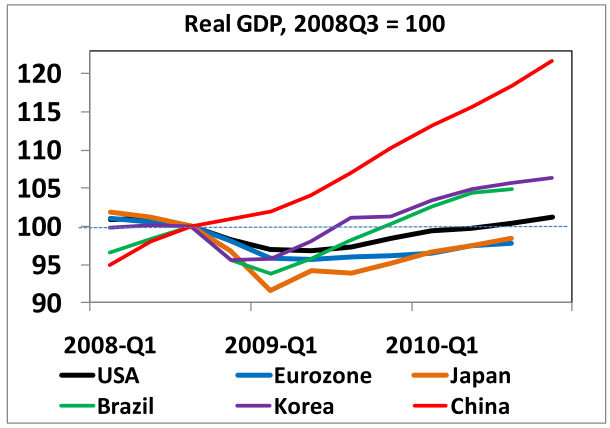
Partly as a result of improving economic and financial conditions, the federal budget deficit narrowed to $1.3 trillion (8.9 percent of GDP) in FY2010 from $1.4 trillion (9.9 percent of GDP) in FY2009. The Administration remains committed to trimming the deficit substantially further and to putting the debt-to-GDP ratio on a sustainable path. The FY2012 budget, to be released in mid-February, will include updated assumptions about the future path of economic growth and new projections for the path of the deficit over the next ten years.

The Global Economy

The global economy recovered strongly in 2010, growing an estimated 5.0 percent compared to a contraction in output of 0.9 percent in 2009. The pace of the recovery across economies, however, was highly uneven, with the advanced economies expanding by an estimated 3.0 percent in the aggregate and emerging market and developing economies growing by 7.1 percent in the aggregate. Emerging market economies in Asia grew a collective 9.3 percent.

In many economies, growth was too slow to make much headway against continuing high levels of unemployment, which at the end of the year stood at 10.0 percent in the euro area, 7.9 percent in the UK (in October), 4.9 percent in Japan, and 9.4 percent in the United States. Only some of the G-7 advanced economies have returned to their pre-crisis levels of economic output, and even fewer have erased the employment losses suffered during the crisis.





Global financial conditions generally improved throughout 2010, although there were marked disruptions in the late spring resulting from severe strains in sovereign debt markets in Greece and other countries in the euro area periphery and again in the late fall when troubles centered in Ireland. Elevated financial stress in the periphery of the euro area has carried over into 2011. Major advanced economy ten-year sovereign yields were below pre-crisis levels throughout 2010, with yields declining through much of the first half of 2010, rising in the fall, but still ending the year below where yields started the year. Sovereign yields on ten-year maturities in the European periphery economies widened to near 10 percent in some countries and over 10 percent in Greece; while spreads over Treasuries in emerging market economies declined throughout the year to at or below pre-crisis levels. Equity markets across all regions gained in 2010.

Inflation was contained throughout 2010 in the advanced economies, estimated in the aggregate by the IMF at 1.5 percent, but picked up in emerging markets to 6.3 percent. In the former group, economic slack restrained upward price pressures while, in the latter, stronger economic activity and rising food prices boosted inflation by about 1 percentage point over 2009. Commodity prices rose steadily throughout 2010, with oil prices up, on average, about 28 percent and non-fuel commodity prices up 23 percent.

As the global recovery has broadened, and inflation has picked up in some emerging market economies, attention has increasingly shifted to the withdrawal of the extraordinary stimulus provided in 2009 and 2010. At the G-20 Leaders Summit in Toronto in June 2010, Leaders of the advanced economies (except Japan) committed to halving their budget deficits by 2013 and to stabilizing or reducing their debt-to-GDP ratios by 2016. Many G-20 countries are planning to gradually reduce their budget deficits beginning in 2011.

Monetary policy was on hold or eased somewhat among the major advanced economies in 2010. Australia and Canada were exceptions among the advanced economies, raising policy rates in 2010 by 100 and 75 basis points, respectively. In emerging markets, however, where inflation is higher and has been moving up in some economies, a number of economies, including Brazil, China, India, Korea, and Taiwan, have taken steps to tighten monetary conditions.

As the global economy has recovered, and investor risk appetites have returned, global capital flows have picked up. The fundamental driver of increased capital flows to emerging markets is the strengthened performance of these economies, especially relative to advanced economies, and the ensuing higher yields on EM investments, particularly in the context of continued easy monetary policies in the advanced economies. Though data are only partial and suffer lags, the evidence suggests that capital inflows to emerging markets had returned to pre-crisis levels in 2009 and continued at that pace through mid-2010. Beginning in late September and running through the first week of November, capital flows to EMs increased, most prominently equity flows, before tapering off. In December, flows were back to levels prevailing for most of the past 18 months and the several years prior to the crisis. In response, a number of countries have either implemented or are contemplating putting in place capital controls or prudential measures. Restrictions on capital inflows and intervention to maintain rigid exchange rates in some countries have diverted capital flows to emerging markets with open capital accounts and more flexible exchange rate policies, forcing the latter to bear the brunt of adjustment and leading in some cases to overvalued exchange rates.

Current Account Balance as a Percent of GDP

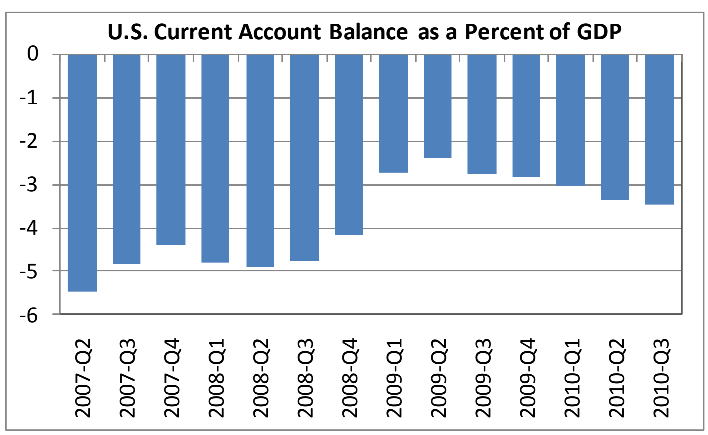
	2008	2009	2010	2010-Q1	2010-Q2	2010-Q3	2010-Q4
Euro area	-1.8	-0.8	n.a.	-0.1	-0.3	-0.6	n.a.
France	-1.9	-2.0	n.a.	-2.0	-1.9	-2.4	n.a.
Germany	6.7	4.9	n.a.	4.9	4.4	5.5	n.a.
Japan	3.3	2.8	n.a.	3.9	3.2	3.7	n.a.
United States	-4.7	-2.7	n.a.	-3.0	-3.4	-3.5	n.a.
China		4.8*	5.2		4.0**	7.2	5.3

* Estimated based on revised balance of payments methodology.

** First half 2010

Following the collapse in global trade of more than 10 percent in 2009, trade recovered in 2010 and by the end of the year was near its pre-crisis peak. As trade recovered, global current account imbalances also widened from their crisis-related lows – especially among the largest trading economies. Partly because of the widening imbalances, but also because of insufficient progress in achieving the global demand rebalancing envisioned under the G-20 Framework for Strong, Sustainable, and Balanced Growth, G-20 Leaders agreed in Seoul to devise a framework to help identify imbalances in need of corrective and preventive actions. As part of the Seoul Action Plan, Leaders agreed on the importance of greater exchange rate flexibility and market-determined exchange rate systems where exchange rates reflect underlying economic fundamentals. G-20 Leaders also agreed to refrain from competitive devaluation of their currencies.

U.S. International Accounts



The U.S. current account deficit in 2009 was the smallest since 1999 in dollar terms and the smallest as a share of GDP since 1998. In 2010, through the third quarter, the U.S. current account deficit widened by $82.1 billion to 3.3 percent of GDP, a 0.7 percentage point increase over the same period in 2009. This included a 0.5 percentage point widening in the non-oil goods and services deficit and a 0.5 percentage point increase in the oil deficit. The net investment income surplus increased by $37.9 billion to partially offset the increase in the trade deficit.

U.S. Balance of Payments and Trade ($ billions, seasonally adjusted unless indicated)	2008	2009	2009-Q4	2010-Q1	2010-Q2	2010-Q3
Current Account						
-- Balance on goods	-834.7	-506.9	-140.1	-151.3	-169.6	-171.2
-- Balance on services	135.9	132.0	35.4	36.9	36.5	36.8
-- Balance on income 1/	152.0	121.4	35.1	40.2	43.0	41.1
-- Net unilateral current transfers	-122.0	-124.9	-31.3	-34.9	-33.2	-33.9
Balance on current account	-668.9	-378.4	-100.9	-109.2	-123.2	-127.2
Balance on current account as % of GDP	-4.7	-2.7	-2.8	-3.0	-3.4	-3.5
Major Capital Flow Components (financial inflow +)						
Net bank flows	10.7	-590.1	-7.3	-108.0	-63.8	-88.6
Net direct investment flows	-22.8	-134.0	-41.6	-51.4	-54.5	-12.6
Net sales of securities	917.3	290.2	91.5	149.7	114.7	269.9
Net liabilities to unaffiliated foreigners by nonbank concerns	384.6	123.0	-8.7	31.7	20.7	1.9
Memo Items						
Statistical discrepancy	85.0	162.5	-14.8	74.5	92.2	-54.4
Change in foreign official assets in the United States	550.8	450.0	116.8	72.5	43.6	141.6
Trade in Goods: Balance	-816.2	-503.6	-139.0	-148.4	-166.6	-167.7
Total exports, of which:	1287.4	1056.0	286.9	303.1	313.3	320.6
-- Agricultural products	108.4	93.9	25.8	25.9	23.3	25.4
-- Capital goods except autos	457.7	390.5	102.1	105.9	110.6	113.8
-- Automotive products	121.4	81.7	25.0	27.1	28.3	27.9
-- Consumer goods except autos and food	161.3	150.0	39.7	40.7	40.4	41.1
-- Industrial supplies and materials 2/	388.0	296.7	82.7	90.5	97.0	97.4
Total imports, of which:	2103.6	1559.6	426.0	451.5	479.9	488.2
-- Petroleum and products	779.5	462.5	75.4	85.4	84.8	81.9
-- Capital goods except autos	453.7	369.3	98.4	101.8	112.1	116.2
-- Automotive products	231.2	157.6	49.1	50.4	57.6	60.0
-- Consumer goods except autos and food	481.6	428.4	111.2	113.7	120.5	124.7

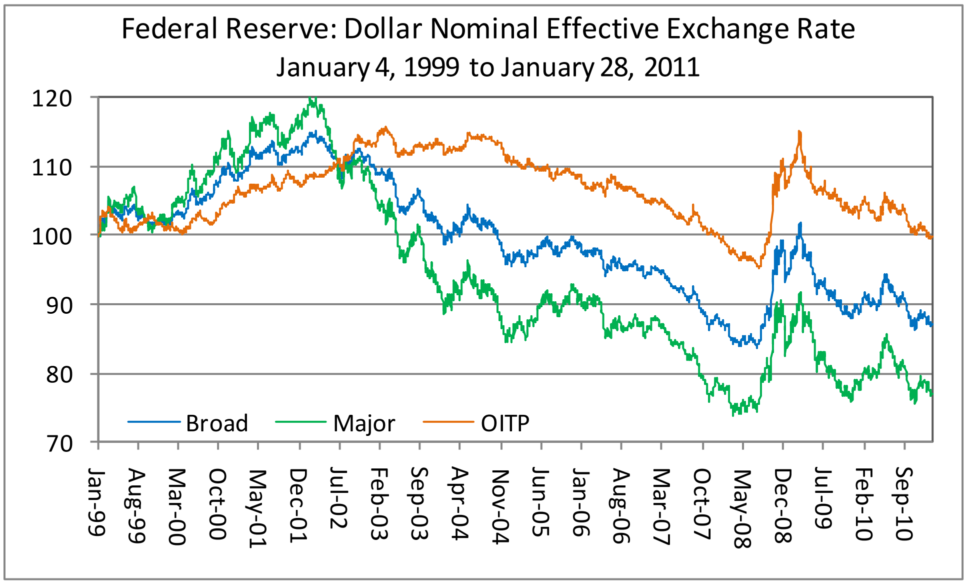
1/ Including compensation of employees 2/ Including petroleum and petroleum products *Source: BEA, Bureau of Census*

The dollar value of U.S. exports through the first three quarters of 2010 increased 17.2 percent relative to the same time period in 2009, while imports increased 21.8 percent. In real, price-adjusted terms, exports increased 15.7 percent while imports increased 15.6 percent.

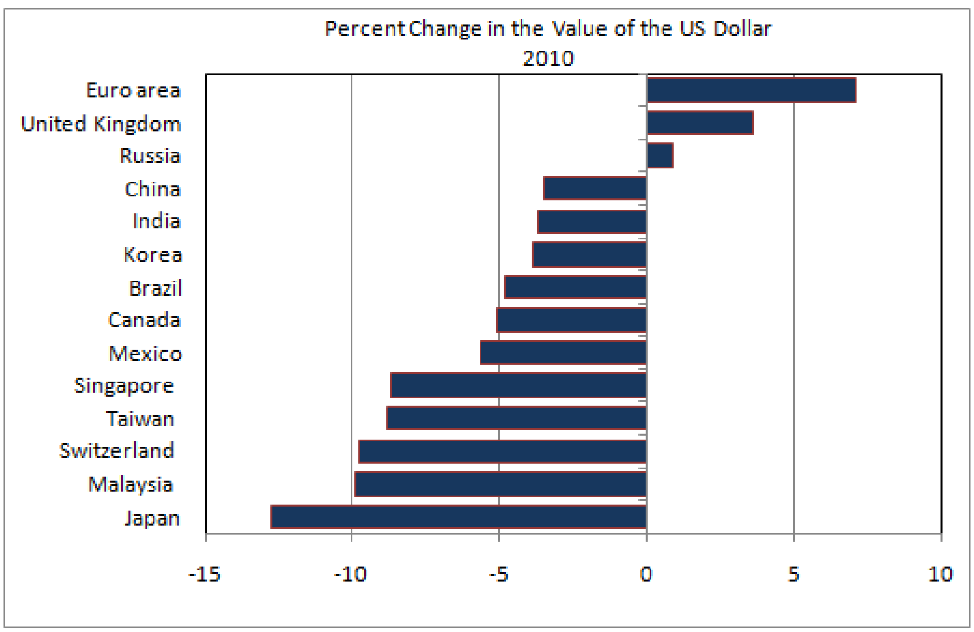
The Dollar in Foreign Exchange Markets

Over the course of 2010, the dollar was affected by shifts in global risk appetite and changes in relative growth expectations, especially among the major economies. In the first quarter of 2010, the nominal effective value of the dollar rose by 0.3 percent against a broad group of currencies. The dollar then appreciated by 4.7 percent on a nominal effective from the end of April to the first week of June as spreading market concerns about sovereign debt in Greece and other euro area periphery countries led to a sharp reduction in risk appetite across all asset classes, with particularly strong gains against the euro. From early June through mid-September the dollar traded back toward where it began the year as a moderation in asset and currency market volatility reduced safe haven demand for dollars, and the dollar ended the year slightly below where it began against the other major currencies.

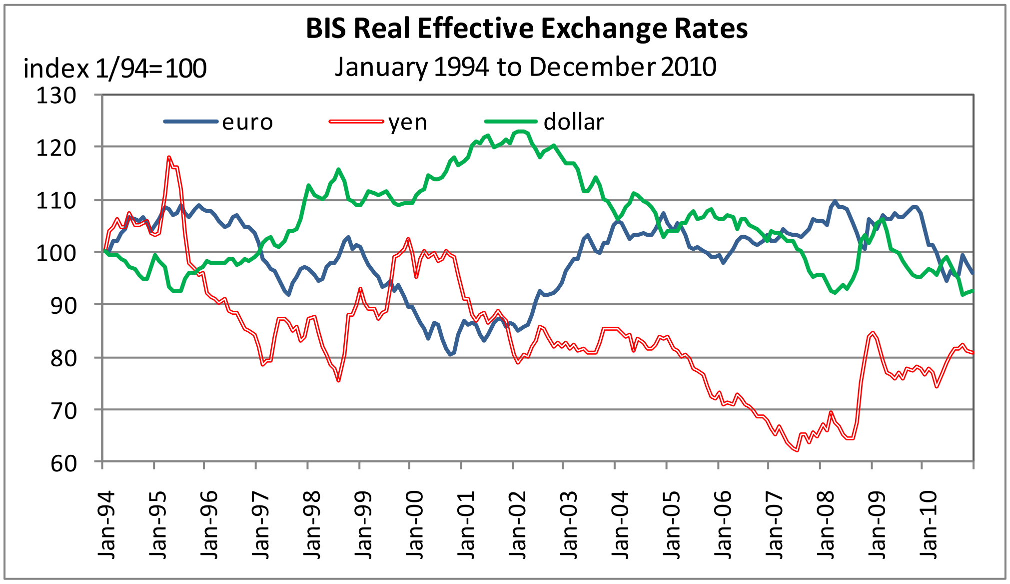
Based on the Federal Reserve's nominal effective exchange rate index, the dollar depreciated 1.1 percent against the other major currencies in 2010 and 3.6 percent against the other important trading partners (OITP). The latter is a measure of the dollar's value against emerging market currencies. In 2011, through late January, the dollar declined by 1.1 percent against the other major currencies but only 0.3 percent against the OITP currencies. Against the broad set of currencies (major and OITP combined), the dollar depreciated by 2.4 percent on a nominal effective basis in 2010. On a real effective basis, the dollar depreciated 2.7 percent against the other major currencies and 6.0 percent against the OITP currencies.



Against the euro, the dollar appreciated during the year by 7.1 percent. Against the yen, the dollar depreciated by 12.7 percent during 2010. Among the emerging market currencies covered in this report the dollar appreciated by 0.9 percent against the Russian ruble, and depreciated by 3.5 percent against the renminbi and 4.8 percent against the Brazilian *real*.



In real effective terms, the dollar's value ended the year about where it was prior to the crisis in spring 2008. Taking a longer-term perspective, the euro and the yen are less than 5 percent below their average values since the start of the BIS index in January 1994, while the dollar is more than 10 percent below its long-term average.



Analyses of Individual Economies

Asia

China

After a period of roughly two years in which China's currency, the renminbi (RMB), was pegged to the U.S. dollar, Chinese authorities decided in June 2010 to once again allow the exchange rate to appreciate in response to market forces. Since the June announcement, the RMB has appreciated by a total of 3.7 percent against the dollar as of January 27, or at a rate of approximately six percent per year in nominal terms. Because inflation in China is significantly higher than it is in the United States (in the second half of 2010, the annual rate of CPI inflation was more than 5 percentage points higher in China than in the United States), the RMB has been appreciating more rapidly against the dollar on a real, inflation-adjusted basis, at a rate which if sustained would amount to more than 10 percent per year. (See Box next page for a discussion of real (inflation-adjusted) appreciation measures.) China is also undertaking a relaxation of restrictions on the use of the RMB. These reforms will gradually erode the controls that help the authorities manage the level of the exchange rate, and over time will contribute to a more market-determined exchange rate.

In 2010, China's economy expanded by 10.3 percent in real terms, up from 9.2 percent in 2009. As it became clear that China's recovery from the global financial crisis and recession was nearly complete, policy attention increasingly turned toward avoiding overheating and containing inflation. As the global recovery strengthened, the composition of China's growth changed. Fostered by fiscal stimulus and strong bank lending, the policy-induced surge in investment that maintained China's high growth rates during the crisis has now begun to slow as economic stimulus has been reined in. At the same time, recoveries in other parts of the world have begun to narrow the gap between China's growth and that of its trading partners. As a result, the contribution of investment and consumption to China's growth both declined in 2010 compared to 2009 (5.6 percentage points versus 8.7 for investment; 3.9 percentage points versus 4.1 for consumption), while the contribution of real net exports to growth increased, adding 0.8 percentage points (after subtracting 3.7 percentage points in 2009). Thus, in 2009, China added to the rest of the world's aggregate demand, helping to support the global recovery, but in 2010, it returned to its previous trend of subtracting from the rest of the world's aggregate demand – although less significantly than in the years immediately preceding the global financial crisis.

Box: The Real Bilateral Exchange Rate

When comparing the relative cost of goods in two countries, changes in the **nominal bilateral exchange rate** are important but don't tell the full story. A more comprehensive measure, the **real bilateral exchange rate**, takes into account the difference in rates of domestic inflation between the two countries, which also impact the relative prices of their goods. To take the illustrative example of a train locomotive, suppose that:

1) The RMB/dollar exchange rate is 6.6, roughly as it is today.
2) A locomotive costs $2 million in the United States, and that the same locomotive costs RMB13.2 million in China. Therefore, the prices of the two locomotives are identical in dollar terms.

There are 2 different ways that the price of the Chinese locomotive could rise 10 percent in dollar terms, making it more expensive relative to the U.S. locomotive:

1) Nominal appreciation of the RMB: The RMB appreciates 10 percent against the dollar, so that the RMB/dollar exchange rate is now 6. The price of the Chinese locomotive in dollars is now $2.2 million, or 10 percent higher.

2) Relative Levels of Inflation: Prices in China rise by 10 percent while prices remain constant in the United States (or, equivalently, prices rise by 10 percentage points more in China than they do in the United States.) With domestic prices 10 percent higher in China, the domestic price of the locomotive is now RMB14.5 million. At an RMB/dollar exchange rate of 6.6, the price of the Chinese locomotive in dollars is now $2.2 million, or 10 percent higher.

Either alone or together, exchange rate appreciation and higher domestic inflation in China contribute to a **real bilateral appreciation** of the RMB against the dollar: The RMB appreciates 10 percent against the dollar, so that the RMB/dollar exchange rate is now 6, and inflation in China rises by 10 percent, so that the price of the Chinese locomotive is now RMB14.5 million. The price of the Chinese locomotive in dollars is now $2.4 million (14.5/6), or 21 percent higher than at the start of the period. In this example, real appreciation of the RMB (21 percent) is twice as large as nominal appreciation alone (10 percent).

Note: There are other factors that affect the relative price of Chinese and US goods, and there may not be an exact, one-to-one correspondence between relative inflation rates and the prices of particular goods. But more rapid inflation in China will eventually be reflected in higher costs of production and prices of all Chinese goods – a "real appreciation" – in the same manner that an RMB appreciation raises the prices of Chinese goods.

Throughout 2010, China shifted to less stimulative monetary and fiscal policies in an attempt to contain rising prices in both goods and property markets. China's fiscal deficit decreased from 2.3 percent of GDP in 2009 to 1.6 percent in 2010, as rising growth boosted revenues. Total bank lending growth fell from a record high of 31.7 percent in 2009 to 19.9 percent in 2010, while broad money (M2) growth fell from 27.8 percent to 19.9 percent. The People's Bank of China (PBOC), increased the amount of reserves that large commercial banks are required to hold at the central bank, from 15.5 percent of total deposits at the beginning of 2010 to 19 percent as of mid-January 2011. The PBOC also raised China's benchmark 1-year lending rate 50 basis points from 5.31 percent to 5.81 percent, although this increase was less than the rise in the inflation rate.

Despite these policy measures, the inflation rate continued to climb and there are signs of rising inflation expectations. China's consumer prices rose 4.6 percent year-over-year in December 2010, up from 1.9 percent in 2009. Non-food consumer price inflation reached 2.1 percent year-over-year in December 2010, its highest level in over ten years.

China's international trade has recovered to well above pre-crisis level. Goods exports on a balance of payments basis rose 31.4 percent in 2010 and are 10.2 percent above their 2008 level. Imports rose 39.1 percent in 2010 and are 23.6 percent above their 2008 level. The 2010 goods and services trade surplus was 4.0 percent of GDP, compared to 4.4 percent of GDP in 2009, and 7.7 percent in 2008. Due to a change in the way Chinese authorities account for retained earnings in the income and FDI balances, the 2010 current account balance is not easily comparable with past years, but it appears China's current account surplus is once again rising. The current account surplus in 2010 was 5.2 percent of GDP, 4.0 percent of GDP in the first half and 6.1 percent in the second half. In its most recent balance of payments data release, China indicated that the current account increased by 25 percent in aggregate between 2009 and 2010, implying an increase from 4.8 percent of GDP in 2009 to 5.2 percent of GDP in 2010.

Many in China recognize that China is too large relative to the world economy for it to continue to rely on foreign demand to grow. They also recognize that exchange rate flexibility needs to be part of China's efforts to change its pattern of growth. During President Hu's state visit to the United States in January 2011, China committed in a joint statement of Presidents Obama and Hu that "China will continue to promote RMB exchange rate reform and enhance RMB exchange rate flexibility, and promote the transformation of its economic development model."

To implement these objectives, the government has articulated a comprehensive program aimed at rebalancing the economy in order to rely more on domestic demand for growth. While China will publish details of its next 5-Year Plan this March, preliminary reports indicate it will include increased public spending on health and education, higher and more strictly enforced minimum wages, greater private sector investment in services, expanded access to financial products for households and small businesses, and higher taxes on carbon and pollution-intensive industries.

While these policy commitments are welcome, it is clear that much of the recent shift toward domestic demand-led growth, and the reduction in China's current account surplus from pre-crisis levels, are the temporary product of the stimulus measures introduced during the crisis and the fact that China has remained much closer to trend GDP than have its trading partners over the past two years.[2] As the differential between China's and advanced economies' output gaps narrow, China's current account surplus will continue to increase, both in absolute terms and as a share of China's GDP, unless China accelerates policy actions to bring about a durable reduction in its external imbalances. Exchange rate reform is one element in this process, but a critical one to ensure that Chinese production shifts to reflect an economy more dependent on domestic demand for growth.

As market pressure for further exchange rate appreciation increased, the PBOC stepped up its foreign exchange intervention, purchasing dollars with RMB, adding to foreign exchange reserves. In 2010, China's foreign exchange reserves rose by $443 billion, and surged by $199 billion in the fourth quarter alone. Cumulatively, China has made net purchases of $2.3 trillion of foreign exchange over the last ten years.

In total, the PBOC held $2.85 trillion worth of foreign reserves at the end of 2010, equivalent to 48 percent of China's 2010 GDP, or over 24 months of imports, or more than $2000 for every Chinese citizen. China has transferred (or swapped) some of its accumulated foreign exchange reserves to commercial banks, as well as capitalizing the China Investment Corporation (CIC), its sovereign wealth fund. China's state sector as a whole – including the PBOC, state-owned banks, and CIC – holds roughly $3.4 trillion in foreign currency assets. China's foreign exchange reserves held in the state sector are roughly three times as high as the reserves held by Japan, the economy with the second largest holdings. When China intervenes to purchase foreign exchange, it creates far more RMB than can be absorbed by the domestic economy without significant inflation. The PBOC has tended to remove RMB liquidity created by issuing PBOC debt – effectively borrowing the money from the Chinese public to purchase foreign reserves. This effectively creates a large flow of capital resources from the Chinese public to the securities of advanced nations.

China's exchange rate regime imposes costs on the financial system and complicates monetary policy. In particular, policy makers have limited increases in domestic interest rates, which is the most often-used tool by central banks when facing rising inflation, to avoid encouraging additional capital inflows which would in turn require an increase in foreign exchange purchases to maintain a stable renminbi. Thus, the exchange rate regime constrains a key tool for containing inflation. Moreover, low domestic interest rates mean that Chinese households earn very little return on their savings, and a declining amount in real terms as domestic inflation in China accelerates.[3]

China's real effective exchange rate has appreciated only modestly over the past decade. China's large increases in productivity in export manufacturing, improvements in transportation and logistics, and China's accession to the WTO all suggest that the RMB should have appreciated more significantly on a real effective basis over this period. A renminbi which is

[2] The PBOC estimated that real industrial production in September 2010 was 1 percent above potential. As advanced economies recover, shortfalls in their GDP relative to potential will also narrow, as is already occurring this year. The IMF estimates that in advanced economies as a whole the output gap will decline from 5.4 percent in 2009 to 4.2 percent in 2010 to 3.5 percent in 2011.

[3] Since 2004, the average real annual return on a one-year deposit (deflated by the consumer price index) is negative 0.1 percent. In the six year period before 2004, when capital inflows and sterilization were not serious concerns for policy makers, the average real deposit rate for Chinese consumers was 2.5 percent.

below its equilibrium value decreases the purchasing power of China's consumers. Undervaluation increases the price tag on items such as imported food or gasoline, new homes built with imported materials, or a foreign automobile. It also encourages Chinese firms to produce for export markets and cater to the preferences of foreign rather than domestic consumers, placing an additional damper on the growth of domestic demand.

These factors highlight why exchange rate flexibility must play an important role in rebalancing China's economy towards domestic demand-led growth. Greater RMB flexibility would also reduce incentives for intervention by other economies trying to maintain trade competitiveness vis-à-vis China, further promoting global rebalancing and removing distortions and negative externalities from the international monetary system.

China's continued rapid pace of foreign reserve accumulation and the huge flow of capital from the Chinese public to advanced countries that it implies, the essentially unchanged level of China's real effective exchange rate especially given rapid productivity growth in the traded goods sector, and widening of current account surpluses, all indicate that the renminbi remains substantially undervalued. It is in China's interest to allow the nominal exchange rate to appreciate more rapidly, both against the dollar and against the currencies of its other major trading partners. If it does not, China will face the risk of more rapid inflation, excessively rapid expansion of domestic credit, and upward pressure on property and equity prices, all of which could threaten future economic growth. By trying to limit the pace of appreciation, China's exchange rate policy is also working against its broad strategy to strengthen domestic demand. And China's gradualist approach on the exchange rate also adds to the substantial pressure now being experienced by other emerging economies that run more flexible exchange rate systems and that have already seen substantial exchange rate appreciation.

In order to promote greater international use of the renminbi, China has taken steps to gradually increase convertibility of the renminbi and liberalized some capital account transactions. Although still limited in scope and tightly controlled by Chinese authorities, these reforms have spurred rapid growth (albeit from a very small base) of an off-shore renminbi market. Off-shore renminbi deposits, mostly concentrated in Hong Kong, have increased from RMB63 billion ($9 billion) in January 2010 to RMB280 billion ($42.4 billion) in November 2010.

Japan

Japan maintains a floating exchange rate regime, although the authorities have intervened at times to counter disorderly conditions in the market. The Japanese yen appreciated 12.7 percent against the dollar in 2010 but depreciated by 1.1 percent in January 2011. On a real trade-weighted basis, the yen appreciated 3.9 percent in 2010, although its current level remains weaker than its recent peak in January 2009. IMF estimates indicate that the real value of the yen was consistent with medium-term fundamentals as of October 2010. Recent yen appreciation appears to have reflected both safe haven inflows amid European sovereign debt concerns as well as a narrower interest differential between the U.S. and Japan.

On September 15, 2010, citing "excessive fluctuations in the currency market," Japan intervened in the foreign exchange market for the first time since March 2004, selling ¥2,125 billion and buying roughly US$25 billion. On that day, the Japanese yen depreciated sharply, falling by 3.2 percent against the dollar, from ¥/$82.88 in early Japanese market trading to ¥/$85.64 at New

York closing time. Within a few days, however, the yen began to appreciate again, strengthening beyond the level at which Japan's authorities intervened, reaching ¥/$80.2 on November 1. Most recently, the yen has traded around ¥/$82. At the time of this report, Japan had not intervened again. Japan's foreign exchange reserves increased by 3.9 percent in 2010 as a result of valuation changes on existing reserve holdings, interest earnings, and the September 15 intervention. At the end of 2010 Japan's foreign exchange reserves were $1.04 trillion, second only to those of China.

Although the Japanese economy expanded at a relatively solid pace in 2010 the pace of recovery has been insufficient to close the output gap that opened up during the global financial crisis and the level of economic activity remains well below its pre-crisis level. Japan's exports were hit particularly hard by the global recession, falling 41 percent in real terms between August 2008 and February 2009. Japan's economic growth over the past six quarters was initially driven by a recovery in exports. However, exports began to fall again in July 2010, and export volumes remained 4.5 percent below pre-crisis levels as of December. Japanese domestic demand growth has been particularly sluggish, and industrial production fell for five consecutive months beginning in June 2010 before increasing in November. The Japanese economy grew by 4.5 percent on an annualized basis in the third quarter of 2010, but the increase was boosted by private consumption brought forward due to the impending expiration of government incentives. Real GDP remains 2.6 percent below its pre-crisis level. The IMF projects Japanese real GDP will grow by 1.6 percent in 2011, down from 4.3 percent in 2010.

Moving forward, Japan will need to tackle its large fiscal deficit and contain growth of public debt. Reforms to strengthen domestic demand and foster competition and productivity growth will be critical both for Japan's long-term growth and fiscal health, as well as for meeting Japan's commitment to contribute to the G-20 objective of strong, sustainable, and balanced global growth.

Deflation remains a serious concern in Japan, with core consumer prices (excluding perishable foods and energy) falling 1.5 percent year-over-year in the third quarter of 2010. Deflation moderated in the fourth quarter, with prices falling 0.7 percent year-over-year in December. In October, the Bank of Japan (BOJ) announced a three-part "comprehensive monetary easing" policy. The central bank: 1) lowered the overnight policy rate to "0 to 0.1 percent," 2) committed to maintain this "virtual zero interest rate policy" until "price stability is in sight," and 3) established an asset purchase program, including outright BOJ purchases of government debt, corporate bonds, and other assets. On the fiscal side, in August, Prime Minister Kan announced a ¥0.9 trillion (0.2 percent of GDP) fiscal stimulus package, the sixth and smallest stimulus since October 2008, which included employment support programs and subsidies for energy-efficient products. The Kan Administration also has proposed a modestly contractionary budget for FY2011 that would hold both general account expenditures (excluding debt servicing costs) and new government bond issuance below FY2010 levels.

Japan's current account surplus has increased from a recession-induced low of $23 billion (1.9 percent of GDP) in the first quarter of 2009 to $51.6 billion (3.7 percent of GDP) in the third quarter of 2010, as the merchandise trade surplus recovered. In volume terms, Japan's overall trade surplus has narrowed as exports have declined since July. Japan's bilateral trade surplus with the United States increased 34 percent year-over-year to $53.9 billion in the first eleven months of 2010, as exports recovered to near pre-crisis levels, but Japan's bilateral surplus remains 22 percent below its January-November 2008 level.

South Korea

South Korea officially maintains a market-determined exchange rate. The Bank of Korea (BoK) intervenes in the exchange market with the stated objective of smoothing won volatility. During the severest period of the global financial crisis, Korea intervened heavily to support the won. Despite the BoK's intervention, by the fourth quarter of 2008, the won had depreciated 45 percent against the dollar and 35 percent in real effective terms from its 2007 peak.[4]

In early 2009, foreign exchange market pressures reversed, and since that time the won has strengthened, as capital inflows returned and exports recovered. In this period, Korea has intervened in the opposite direction, selling won and buying foreign exchange to rebuild reserves and slow won appreciation.

In 2010, the won appreciated 3.6 percent against the U.S. dollar and 0.8 percent in real effective terms. As of end-December, the won was still 24 percent below its 2007 peak against the dollar, and 25 percent weaker than its pre-crisis high in real effective terms, despite a strong recovery of its domestic economy and exports. According to estimates from the 2010 IMF Article IV consultation with Korea, the real effective exchange rate of won is undervalued relative to its equilibrium level (estimates range from 5 to 20 percent). Korea's foreign exchange reserves are now $23 billion above their pre-crisis peak.

South Korea's economy continues to recover strongly from its sharp downturn in 2008. The economy grew 6 percent on an annualized basis in the first half of 2010 and 3.5 percent in the second half, bringing full year growth to 6.1 percent. Korea's real GDP is now 6.2 percent above its pre-crisis peak. Exports were the main driver of Korea's recovery in 2009, but investment and private consumption have made stronger contributions to growth in 2010, with domestic demand contributing over 6 percentage points. The IMF expects economic growth of 4.5 percent in 2011.

As the recovery has gained momentum, the Korean authorities have shifted their attention to countering inflation, and President Lee has made containing consumer price inflation to around 3 percent an economic policy priority for 2011. The BoK has raised its policy interest rate on three occasions since June 2010. The rate now stands at 2.75 percent, which is still well below its pre-crisis level of around 5 percent when inflation was around 5 percent year-over-year. Consumer price inflation averaged 3.6 percent year-over-year in the fourth quarter of 2010, driven by rising food and commodity prices, and reached 4.1 percent year-over-year in January, just over the BoK's target inflation range of 2 to 4 percent. The prices of Korea's imports, of which energy and commodities are a significant component, have been rising rapidly over the past several months, averaging around 9 percent year-over-year growth since May.

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[4] Korean intervention to support the won took a variety of forms. Korea intervened in the spot market, and its headline foreign exchange reserves declined by $57 billion or 22 percent from July 2008 to February 2009. Korea also reduced its net forward position by $31 billion over the same period. The establishment of a swap line with the U.S. Federal Reserve in October 2008 did much to restore confidence; Korea's swap line drawings rose to $18 billion at one point, but these drawings were fully unwound by November 2009 and the swap line expired in February 2010.

Korea's merchandise trade surplus was $41.2 billion in 2010, exceeding the peak of $40.4 billion (4.8 percent of GDP) reached in 2009. The increase was driven by strong growth in exports, particularly to China and other emerging Asian economies. Korea posted a $9.3 billion trade surplus with the United States in 2010 through November, as exports reached $49.8 billion. Following a transition to a new IMF balance of payments accounting methodology, Korea's 2009 current account surplus was revised downward from $42.7 billion (5.1 percent of GDP) to $32.8 billion (3.9 percent of GDP). Korea's current account surplus in 2010 was $28.2 billion (2.9 percent of IMF-estimated 2010 GDP).

Korean authorities have been vocal in expressing concern about what they consider large and volatile capital inflows, and are considering a number of steps that they describe as preemptive and precautionary against excessive capital flows. In November and December, the financial authorities proposed the reinstatement of a withholding tax on foreign investors' gains on Korean government bonds as well as a new tax on the external borrowings of banks located in Korea, with a higher tax imposed on short-term debt. The withholding tax was adopted in January 2011 and the other proposals are under consideration in the National Assembly. In June 2010, the government introduced limits on foreign exchange derivatives contracts for both domestic banks and local branches of foreign banks, which became effective in October.

Korea's foreign exchange reserves increased from $201 billion in February 2009 to $287 billion in December 2010, $23 billion above their pre-crisis high, equal to 29 percent of GDP and twice the amount of short-term external debt. Korea's net intervention over this period was larger than the $86 billion net increase in reserves suggests, considering the central bank's operations in the forward market (data collected by the IMF indicate that Korea's net long foreign currency/short domestic currency forward position increased from -$11.1 billion in February 2009 to $52.4 billion in December 2010), the unwinding of the swap line with the Federal Reserve (Korea repaid the $18 billion it withdrew from the swap line), and recent reserve transfers into Korea Investment Corporation, Korea's sovereign wealth fund. The authorities' desire to rebuild reserves after experiencing sharp and sudden capital outflows during the crisis is one factor behind this intervention. However, given the strength of the Korean recovery, rebuilding of reserves, and the rebound of the current account surplus, there is room for a greater degree of exchange rate flexibility and less intervention.

Taiwan

According to the central bank, Taiwan's exchange rate is market-determined except in instances when "the market is disrupted by seasonal or irregular factors" and the central bank intervenes. The Taiwan dollar appreciated rapidly against the U.S. dollar in the second half of 2010, for a total nominal appreciation of 8.8 percent during 2010, after appreciating by 2.5 percent in 2009. According to the BIS, the real effective exchange rate of the Taiwan dollar appreciated 4.4 percent in 2010, after a depreciation of 3.5 percent for 2009. The appreciation in 2010 appears due in part to optimism about the benefits of increased trade and economic ties with China as the long-awaited Economic Cooperation and Framework Agreement between Taiwan and China was signed by both sides on June 29, 2010.

Taiwan's real GDP increased by an estimated 10.5 percent in 2010, after falling by 1.9 percent in 2009, as exports recovered and domestic demand strengthened. Taiwan's economy has historically been vulnerable to swings in global demand, as exports amount to well over 50 percent of GDP. The pace of export growth moderated at the end of the year, to 18.8 percent year-over-year in December, down from 59 percent year-over-year in May. The authorities expect economic growth of 5.0 percent in 2011. Despite creeping upward, Taiwan's inflation rate remains one of the lowest in Asia, with consumer prices increasing by 1.3 percent in 2010. The central bank, citing the strong economic recovery and a very rapid rise in housing prices, undertook a series of three 12.5 basis point hikes in its discount rate in 2010. The rate now stands at 1.625 percent.

Taiwan's current account surplus has remained large due to sizable trade and income surpluses. In the first three quarters of 2010, the current account surplus averaged 10.3 percent of GDP, ($31.5 billion) down from 12.0 percent in the first three quarters of 2009. The trade balance accounted for $24.4 billion of the surplus during this period, as exports rebounded on strong global demand. The income surplus totaled $10.7 billion, on higher income earned from residents' foreign exchange assets and direct investments abroad. The financial account also recorded a net inflow of $6.1 billion in the first three quarters of 2010, as resident portfolio outflows were offset by increasing bank deposits of non-residents, capital drawn from overseas bank branches, and withdrawals from foreign deposits. Taiwan's foreign exchange reserves increased by $34 billion to $382 billion during 2010, due to valuation gains, interest earnings, and purchases of foreign exchange by the authorities, particularly in the first half of the year. Taiwan's foreign exchange reserves amount to 90 percent of GDP, 20 months of imports, and about five times the economy's short-term external debt.

In response to capital inflows and market pressure for appreciation in the fall of 2010, Taiwanese authorities took a number of steps to discourage foreign speculation in the Taiwan dollar. On November 11, Taiwan's Financial Supervisory Commission (FSC) imposed a rule that restricts foreign investors from holding more than 30 percent of any new investments in fixed income products (previously, local government bonds and money-market products with maturities of a year or more were excluded). This rule applies only to new inflows and not existing holdings. On December 27, the central bank tightened the limit on commercial banks' holdings of non-deliverable forwards and options on the Taiwan dollar to 20 percent of their overall positions in the local currency, down from 33 percent. Banks also are now required to set aside 25 percent of all existing deposits held by foreigners in non-interest bearing accounts at the central bank, and a maximum 90 percent ratio will be imposed on any net increase in foreign-held local-currency deposits. Previously, banks were required to set aside only ten percent of foreign deposits. Finally, the FSC and central bank have also stepped up their efforts to prevent currency speculation through increased monitoring of financial institutions and moral suasion.

Europe

Euro Area

The value of the euro in foreign exchange markets is market-determined. Over the past year, the euro has fluctuated significantly against the dollar in part because of changing perceptions about relative risks related to sovereign debt. The Greek debt crisis and fears of contagion contributed to a 12 percent depreciation of the euro on a real effective basis in the first half of 2010. The coordinated European policy response led to some reversal in the euro's exchange rate, however, and the euro appreciated by 1.6 percent during the second half of the year.   On a bilateral basis, the euro declined by 20 percent against the dollar between the end of 2009 through early June 2010 (the peak of the Greece debt crisis). Since then, however, the euro has risen by 12.6 percent (through January 27), although the crisis in Ireland has contributed to considerable volatility over the past six months.

Following a 4 percent decline in real GDP in 2009, the euro area saw an economic recovery in 2010, growing an estimated 1.8 percent according to the IMF. The economic recovery was broad-based, with private consumption, government consumption, and net exports all contributing to real GDP, although fixed investment continued to decline slightly. To a large extent, however, the euro area's recovery masks a wide divergence across countries. Germany grew 3.6 percent, but growth was much more modest in France (1.6 percent) and Italy (1 percent). In Spain and some smaller euro area countries, real GDP continued to decline.

The euro area's current account deficit narrowed slightly in the first three quarters of 2010, falling to 0.3 percent of GDP versus a deficit of 0.6 percent of GDP in 2009 and a deficit of 1.5 percent of GDP in 2008. Despite the near balance in the euro area current account, substantial imbalances remain among euro area countries. The Netherlands and Germany each had substantial current account surpluses in the first three quarters of 2010, at 6.2 and 4.9 percent of GDP, respectively; whereas the current accounts of the other major euro area economies (France, Italy, and Spain) remained in deficit. Stronger domestic demand growth in surplus European economies would help reduce imbalances in the euro area.

The euro area economy was supported by fiscal expansion in 2010 (at the aggregate level), but the debt crises in Greece and Ireland have prompted a shift in focus to deficit reduction, even in those countries with more moderate debt levels. Most of the major euro area economies have committed to reducing their general government budget deficits to under 3 percent of GDP by 2013; although the German government recently announced that it would meet this deficit target this year.

The Greek debt crisis prompted the European Central Bank (ECB) to revise its plans to withdraw its exceptional liquidity measures, but it is now again cautiously pursuing an exit strategy. The ECB will provide unlimited, fixed-rate liquidity at least until April 2011, but phased out one-year and six-month offerings last year. There has been a steady decline in the volume of ECB liquidity demanded by euro area banks, as banks have regained access to the interbank market. However, banks in the euro area "periphery" remain heavily dependent on ECB refinancing, which will complicate the central bank's exit strategy. The ECB continues its sovereign bond purchase program (instituted in May 2010 to reduce funding stresses in sovereign debt markets for some countries in the euro area periphery), but on a relatively small scale. The ECB has purchased less than €80 billion in securities under this program as of January 28, and most of these purchases were made in the program's first months (including €26 billion in May). The main refinancing rate remains at 1 percent.

While ongoing challenges in repairing financial institutions' balance sheets could still constrain bank lending, credit availability has improved. Euro area bank credit to households and non-financial corporations fell by 1.3 percent from January 2009 to January 2010, but has recovered since then, and is up by 1.9 year-over-year as of November 2010.

Switzerland

The Swiss franc is a freely floating currency and the Swiss National Bank (SNB) sets monetary policy in order to keep inflation stable at around 2 percent. In 2010, the SNB sought to stem "excessive" appreciation against the euro to address deflation concerns, since CPI inflation remained well below its 2 percent target. The Swiss franc experienced appreciation pressure in 2010 due to the rising Swiss current account surplus, concerns about economic and financial developments in the euro area, and "safe haven" capital inflows attracted by Switzerland's low net government debt (estimated at less than 10 percent of 2010 GDP) and fiscal surplus. The franc appreciated by 11 percent against the euro in the year to January 21, 2011.

The Swiss economy returned to growth in the third quarter of 2009, and has continued to grow since then. Growth in the first and second quarters of 2010 was strong at 3.7 percent and 3.1 percent on an annualized basis, respectively, but slowed to 2.8 percent in the third quarter as real appreciation lowered net exports. Nevertheless, domestic demand has strengthened considerably, growing by 8.3 percent in the second quarter and 9.2 percent in the third quarter of 2010 driven by a rebound in inventory investment. CPI inflation stood at 0.5 percent in the year to December 2010, relatively unchanged compared to the 0.3 percent in the year to December 2009.

In March 2009, the SNB initiated a policy to intervene in the foreign exchange market to "prevent any appreciation of the Swiss franc against the euro." These interventions were unsterilized and, as the threat of deflation diminished and upward pressure on the Swiss franc continued, the SNB subsequently amended its policy. In March 2010, the SNB shifted its stance to prevent "excessive" appreciation, and in June 2010, appeared to end its foreign exchange intervention policy altogether, noting it would resume intervention if further currency appreciation threatened deflation. Switzerland's foreign exchange intervention resulted in a substantial increase in foreign exchange reserves through June 2010, when its foreign exchange reserves were $207.8 billion, substantially higher than the $49.1 billion in March 2009 when the intervention policy began. However, international reserves showed little increase in the second half of 2010 ($216.1 billion as of October 2010), and this change was due to valuation changes rather than intervention.

The Swiss franc depreciated 4.6 percent against the dollar in the first half of 2010, but appreciated by 13.3 percent in the second half of 2010. On a real effective basis, the Swiss franc rose by 9.4 percent year-over-year to December 2010. Switzerland's overall trade balance fell to 2.4 percent of GDP in the third quarter of 2010 due to real exchange rate appreciation. Despite this, Switzerland's current account surplus rose to 15.1 percent of GDP in the third quarter of 2010 from 12.1 percent of GDP in the third quarter of 2009 driven by a more than 200 percent increase in net investment income.

United Kingdom

The United Kingdom (UK) has a freely floating market-determined exchange rate. The pound depreciated 8.2 percent against the dollar in the first half of 2010, as the escalating euro area sovereign debt problems caused investors to seek safety in the dollar. However, the pound pared back those losses in the second half of the year, appreciating by 4.2 percent, as risk appetite improved. It has continued this trend in early 2011, up 2.6 percent against the dollar in January.

On a real effective basis, the pound appreciated by 1.7 percent in the first half of 2010, but depreciated by 1.1 percent in the second half of the year.

The economic recovery in the UK, which began in the fourth quarter of 2009, continued through the first three quarters of 2010. Domestic demand and inventory restocking have largely driven the recovery, more than compensating for a negative contribution from net exports. In the third quarter of 2010, a 1.5 percent annualized contraction in government spending was more than offset by an increase in investment. Preliminary estimates of fourth quarter GDP point to a contraction of 2.0 percent on an annualized basis partly reflecting the impact of severe weather at the end of the year. Even taking into account the weather the underlying output was stagnant. The IMF estimates that growth for all of 2010 was 1.7 percent. Unemployment peaked at 8.0 percent in February 2010 and stood at 7.9 percent in October 2010.

Stimulus measures and the impact of the economic downturn resulted in a rise in the UK's fiscal deficit from 2.3 percent of GDP in 2007 to 11.0 percent of GDP in 2009. Consequently, public debt increased from 43.6 percent of GDP in 2007 to 71.2 percent of GDP in 2009. The new coalition government formed after the May 2010 elections has committed to an accelerated reduction in the fiscal deficit, led by expenditure reductions. The austerity package, announced by the government in June 2010, is expected to reduce the deficit to 1.9 percent of GDP by 2014-2015 and to put the gross debt-to-GDP ratio on a declining path after peaking at 86 percent in 2012-2013.

Monetary policy remains accommodative. The Bank of England (BOE) has maintained its historically low policy rate at 0.5 percent, and has maintained the stability of assets purchased by the issuance of central bank reserves (quantitative easing) at £200 billion since February 2010. Inflation has remained above the Bank of England's 2 percent target for over a year and has been primarily driven by commodity and food prices, as well as currency weakness over the past couple years. However, a spike in transportation prices, in particular airfares, contributed to the high December print of 3.7 percent year-over-year.

After shrinking to 0.9 percent of GDP in the fourth quarter of 2009, the UK's current account deficit widened to 1.4 percent of GDP and 2.6 percent of GDP in the second and third quarters of 2010, respectively, as growth in imports outpaced the rebound in exports.

Western Hemisphere

Brazil

Brazil officially operates under a floating exchange rate regime, although the central bank performs regular and transparent intervention in the spot market for foreign exchange to smooth volatility. As a result of these operations, along with interest earnings and valuation changes, total foreign exchange reserves increased to $276 billion at the end of November 2010, an increase of $47 billion since the end of 2009.

The *real* appreciated by 4.8 percent against the U.S. dollar in 2010. Although the *real* has appreciated against the U.S. dollar over the past two years, it remains below its level in July 2008, before the worst of the financial crisis. On a real effective exchange rate basis, the *real* rose by 7.8 percent in 2010 buoyed both by a nominal effective appreciation and relatively higher inflation. The *real* is at its strongest level in the 16-year history of the BIS real effective exchange rate index.

Concerned about an erosion of international competitiveness, preventing additional appreciation became an increasing priority for the Brazilian government in response to strong foreign capital inflows during 2010. In October, the authorities raised the tax on foreign investment in fixed income assets to 4 percent and then to 6 percent from 2 percent previously, and extended the tax to local derivatives markets by placing a 6 percent tax on inflows into margin accounts maintained by non-residents. The tax was previously extended to cover local equity investments made by non-residents abroad in the form of depository receipts (ADRs and GDRs) in late 2009. In January 2011, the central bank introduced unremunerated reserve requirements on the short U.S. dollar positions of financial institutions, and began intervening in the futures market for foreign exchange through the auction of reverse swap agreements.

Brazil experienced a strong economic recovery in 2010 following flat activity in 2009. The IMF estimates that the Brazilian economy expanded by 7.5 percent in 2010, concentrated in the first half boosted by strong consumer demand, residual fiscal stimulus, and inventory replenishment. Activity moderated in the second half, but the IMF forecasts real GDP to grow at 4.5 percent in 2011. Consumption and investment (both public and private) continue to drive economic growth.

Fiscal policy remained expansionary in 2010, but the government has announced its intention to tighten policy in 2011. The primary surplus narrowed to 2.8 percent of GDP in 2010, but the authorities have indicated that the surplus will be raised to 3.0 percent in 2011. One-time tax credits were allowed to expire in 2010, but permanent increases to public payroll and discretionary expenditures, and investment expenditures maintained the fiscal impulses. Increased public lending by the national development bank (BNDES) and state-owned commercial banks played an important role in maintaining credit availability during the crisis, but public credit has maintained a consistent rate of expansion even as private credit has resumed.

Robust private and public demand combined with a tight labor market have increased inflationary pressure. Consumer prices rose 5.9 percent in 2010, above the central bank's target of 4.5 percent. In response to overheating concerns, the central bank initiated a monetary policy tightening cycle between April and June 2010, raising the benchmark Selic policy interest rate 200 basis points from a historical low of 8.75 percent to 10.75 percent. The central bank held that rate through the end of 2010, but raised the policy rate by 50 basis points to 11.25 percent in January 2011. The central bank also increased bank reserve requirements on time deposits from 23 percent to 32 percent, and on demand deposits from 51 percent to 55 percent in December 2010.

Strong growth of imports and an outflow of payments on foreign investment in Brazil resulted in the current account deficit widening to 2.4 percent of GDP at the end of the third quarter of 2010. Simultaneously, investor confidence in growth prospects, recovering commodity prices, and global interest rate differentials led to strong capital inflows.

Canada

Canada maintains a flexible exchange rate. The central bank has not intervened in the currency market since 2000 when it when it defended the euro against depreciation in a concerted G-7 action. The Canadian dollar appreciated by 5.5 percent against the U.S. dollar in 2010 following a 16 percent appreciation in 2009. On a real effective basis, the Canadian dollar appreciated by 2.7 percent in 2010. The appreciation of the Canadian dollar was driven in part by rising commodity prices.

The Canadian economic recovery continued in 2010, although the pace of growth slowed in the middle of the year before picking up in the fourth quarter. After expanding by 4.9 percent on an annualized basis in the fourth quarter of 2009 and 5.8 percent in the first quarter of 2010, growth slowed in the second quarter to a 2.3 percent annual rate and to 1.0 percent in the third quarter. The Bank of Canada is forecasting growth of 2.4 percent in 2011 and 2.7 percent in 2012. Domestic demand led the recovery in late 2009, underpinned by relatively healthy consumer and financial sector balance sheets, low interest rates, and government spending. In 2010, business investment and personal consumption growth were the main drivers of economic growth. Growth in 2011 is expected to be led by business investment, with personal consumption growing more slowly.

The government is shifting its fiscal policy stance from stimulus to consolidation, targeting a balanced budget by the end of FY2014 down from 2.7 percent in FY2010. Citing robust growth and inflation pressures, in June 2010, the Bank of Canada began raising its policy rate; it reached 1.0 percent by September. The Bank of Canada's target for inflation is 2 percent; headline inflation was 1.8 percent for 2010.

Canada's foreign trade began recovering in the second half of 2009, but export growth slowed through the middle of 2010 in step with the U.S. economy and appreciation of the Canadian dollar, while imports remained strong. As a result Canada's current account deficit rose to 4.3 percent in the third quarter of 2010, its highest since 1989. Data for the first two months of the fourth quarter indicate a narrowing of the trade deficit as exports rebounded reflecting rising commodity prices.

Mexico

Mexico has a flexible exchange rate and employs an inflation-targeting monetary policy regime. On a real effective basis, the peso appreciated 5.9 percent during the year, 4.2 percent during the first half of 2010 and 1.7 percent during the second half. Against the dollar, the peso appreciated by 1.1 percent during the first half of 2010 and 4.6 percent in the second half, a 5.7 percent gain for the year as a whole.

Mexico's reserves increased during the year by $17.9 billion, to total $112 billion at the end of November 2010. Most of this increase was driven by foreign exchange inflows from the state-owned oil company Pemex. In February 2010, Mexico adopted an explicit strategy of reserve accumulation whereby the central bank auctions up to $600 million monthly in options to banks, which allow them to sell dollars to central bank at the previous day's exchange rate any day in the month that the peso appreciates above its 20-day.[5] While options sales are small relative to Pemex flows, the strategy allows the bank to accumulate reserves and "lean against the wind" in a transparent rules-based framework. In December 2010, Mexico obtained an augmented precautionary Flexible Credit Line (FCL) from the IMF, equivalent to $72 billion, up from $48 billion previously. As of the end of January 2011, Mexico has not drawn on this line.

Real GDP contracted slightly in the first quarter of 2010 (0.2 percent on an annualized basis) but grew strongly in the next two quarters. The government forecasts that economic growth will be 5.2 percent for 2010 as a whole. External demand for manufactured goods, which led the recovery during the first two quarters of 2010, has slowed, but recent indicators suggest that domestic demand growth is accelerating in tandem with rising wages. Oil production has been flat. Bolstered by an uptick in global crude prices, however, the value of oil exports rose from $9.5 billion in the third quarter to $12.2 billion during the fourth quarter.

The government adhered to a policy of fiscal discipline during 2010. Tax revenue increased 10.5 percent year-over-year in the first 11 months of 2010, while expenditures were up 6.7 percent, putting public finances on track to meet the government's fiscal deficit target of 0.75 percent of GDP (excluding Pemex investment). The target will increase to a deficit of 0.5 percent of GDP for 2011. The central bank has maintained an accommodative monetary policy stance since the crisis, keeping its target interest rate at 4.5 percent for 16 consecutive months. Inflation ended December at 4.4 percent on an annualized basis, implying real interest rates close to zero, as administrative price increases and rising food prices contributed to inflation slightly above the central bank's 2 to 4 percent target range.

The current account balance posted a slight surplus in the first quarter of 2010 as imports recovered more slowly than exports. The current account balance slid back into a deficit of 1.1 and 0.3 percent of GDP in the second and third quarters, respectively. By the end of the third quarter of 2010, trade flows had exceeded pre-crisis levels, as the externally-driven recovery sparked demand for intermediate goods. Highlighting this trend, exports increased 30.8 percent on an annualized basis in the year-to-November, while imports rose 29.2 percent over the same period. Remittance flows turned positive in the second quarter for the first time since end 2007, and totaled 3 percent year-over-year in the third quarter 2010.

[5] This strategy was originally used from August 1996 through mid-June 2001.

Glossary of Key Terms in the Report

Bilateral Real Exchange Rate -- The bilateral exchange rate adjusted for inflation in the two countries, usually consumer price inflation.

BIS Effective Exchange Rate -- An effective exchange rate index calculated as a geometric weighted average of bilateral exchange rates. The weights are based on manufacturing trade flows and capture both bilateral export and import trade and export competition in third markets. To capture changes in trade patterns over time, the weights are time varying.

Exchange Rate -- The price at which one currency can be exchanged for another. Also referred to as the bilateral exchange rate.

Exchange Rate Regime -- The manner or rules under which a country manages the exchange rate of its currency, particularly the extent to which it intervenes in the foreign exchange market. Exchange rate regimes range from floating to pegged.

Federal Reserve Dollar Indexes – The Federal Reserve calculates three effective exchange rate indexes for the dollar. All are weighted averages of the foreign exchange value of the dollar against a group of currencies. The weights are time-varying and are based on U.S. export shares, U.S. import shares, and export competition in third markets. The ***Broad index*** includes the 26 currencies used by the major trading partners of the United States. This index is then split into a Major currency index and an Other Important Trading Partner (OITP) index. The ***Major Currencies Index*** includes seven currencies that are used widely in international transactions (the euro, yen, pound sterling, Australian dollar, Canadian dollar, Swiss franc, and Swedish krona. The ***OITP Index*** includes 19 emerging market currencies. Although these currencies are used by major trading partners of the United States, they do not circulate widely internationally. The currencies in the OITP index are: the Argentine peso, Brazilian real, Chilean peso, Chinese renminbi, Colombian peso, Korean won, Hong Kong dollar, Indian rupee, Indonesian rupiah, Israeli shekel, Malaysian ringgit, Mexican peso, Philippine peso, Russian ruble, Saudi riyal, Singapore dollar, Taiwan dollar, Thai baht, and Venezuelan bolívar. Current weights are given in the tables. For weights in all years see: http://www.federalreserve.gov/releases/H10/Weights/

Weights in OITP Index

Country or Region	2010
Mexico	18.74
China	34.94
Taiwan	4.79
Korea	6.83
Singapore	3.72
Hong Kong	2.50
Malaysia	3.50
Brazil	4.08
Thailand	2.69
Philippines	1.17
Indonesia	1.92
India	3.08
Israel	2.28
Saudi Arabia	1.94
Russia	2.84
Argentina	1.10
Venezuela	1.07
Chile	1.65
Colombia	1.15
Total	100

Weights in the Major Index

Country or Region	2010
Euro area	36.56
Canada	30.21
Japan	16.98
United Kingdom	8.49
Switzerland	3.15
Australia	2.63
Sweden	1.97
Total	100

Floating (Flexible) Exchange Rate – A regime under which the foreign exchange rate of a currency is fully determined by the market with intervention from the government or central bank being used sparingly.

International Reserves -- Foreign assets held by the central bank that can be used to finance the balance of payments and for intervention in the exchange market. Foreign assets consist of gold, SDRs, and foreign currency (most of which are held in short-term government securities). The latter are used for intervention in the foreign exchange markets.

Intervention -- The purchase or sale of a country's currency in the foreign exchange market by a government entity (typically central bank) in order to influence its exchange rate. Purchases involve the exchange of a country's foreign currency reserves for its own currency, reducing foreign currency reserves. Sales involve the exchange of a country's own currency for a foreign currency, increasing its foreign currency reserves. Interventions may be sterilized or unsterilized.

Managed Float -- A regime under which a country establishes no predetermined path for the exchange rate but the central bank frequently intervenes to influence the movement of the exchange rate against a particularly currency or group of currencies. Some central banks explain this as a policy to smooth fluctuations in exchange markets without changing the trend of the exchange rate.

Nominal Effective Exchange Rate (NEER) -- A measure of the overall value of a currency relative to a set of other currencies. The effective exchange rate is an index calculated as a weighted average of bilateral exchange rates. The weight given to each country's currency in the index typically reflects the amount of trade with that country.

Pegged (Fixed) Exchange Rate – A regime under which a country maintains a fixed rate of exchange between its currency and another currency or a basket of currencies. Typically the exchange rate is allowed to move within a narrow predetermined (although not always announced) band. Pegs are maintained through a variety of measures including capital controls and intervention.

Real Effective Exchange Rate (REER) -- The effective exchange rate adjusted for relative prices, usually consumer prices.

Sterilized intervention – An action taken by the central bank to offset the effect of intervention on the domestic money supply. Intervention in which the central bank sells domestic currency increases the domestic money supply, in essence expansionary monetary policy. To neutralize the effect of the intervention on the money supply the central bank will sell domestic government securities, taking an equivalent amount of domestic currency out of circulation. If the intervention involved the purchase of domestic currency, the central bank will buy government securities, placing an amount of domestic currency equivalent to the size of the intervention back into circulation. An intervention is partially sterilized if the action by the central bank does not fully offset the effect on the domestic money supply.

Trade Weighted Exchange Rate -- see Nominal Effective Exchange Rate

Unsterilized Intervention -- The purchase of domestic currency through intervention in the exchange market reduces the domestic money supply, whereas the sale of domestic currency through intervention increases the money supply. If the central bank takes no action to offset the effects of intervention on the domestic money supply, the intervention is unsterilized.