

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 the second half of 2010, and data as available through the first four months of 2011. 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 is recovering from its deepest recession in the post war period. The recovery is being led by private demand, as personal consumption and business investment are increasing while government support for the economy is receding. Over the last seven quarters personal consumption has increased by 2.2 percent at an annual rate and business investment in capital equipment has grown by 13.9 percent. The private sector has added more than 2 million jobs over the last 14 months. The positive outlook for the remainder of 2011 and for 2012 reflects growing momentum in these sustainable sources of private demand.

While recent growth is encouraging, the economy still faces significant challenges. The severe effects of the recent recession are particularly apparent in the labor market and in the housing market, and our long-term fiscal position is unsustainable.

The global economic recovery continues to gain strength, although risks remain. Global output expanded by 5 percent in 2010, after a contraction of 0.5 percent in the previous year. Advanced economies grew in the aggregate by 2.9 percent in 2010 while emerging market and developing economies (EMEs) grew 7.2 percent, led by developing Asia with a growth rate of 9.5 percent. EMEs benefitted significantly from the recovery in global trade, as exports by non-fuel exporting EMEs increased 19 percent.

The recovery faces a number of significant challenges. In Europe, leaders face a set of difficult choices over how to resolve pressures on their sovereign debt markets. Commodity prices have risen by nearly 35 percent over the past twelve months, leaving consumers with less money to spend. Inflation is accelerating in many fast growing emerging economies, leading them to tighten monetary policy. The G-20 needs to advance efforts to prevent the re-emergence of persistently large current account surpluses and deficits. Advanced countries need to take steps to put their public finances on sustainable trajectories. Finally, higher growth and rates of return in emerging economies are attracting significant inflows of foreign capital.

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, since the authorities decided in June 2010 to allow the exchange rate to appreciate in response to market forces, the renminbi (RMB) has appreciated by a total of 5.1 percent against the dollar in nominal terms through the end of April 2011, or at an annual pace of approximately 6.0 percent. Because inflation in China is significantly higher than it is in the United States, the renminbi has appreciated more rapidly against the dollar on a real, inflation-adjusted basis, at a rate of around 9 percent per year. A more rapid pace of nominal appreciation would enable China to achieve the needed adjustment in the real value of its currency while simultaneously reducing inflationary pressures in its domestic economy. China's international reserves have risen by \$197 billion over the first quarter of 2011.

That continued rapid pace of foreign reserve accumulation in China; the broadly unchanged level of China's real effective exchange rate, especially given rapid productivity growth in the traded goods sector; and the projected widening of current account surpluses, all indicate that the real effective exchange rate of 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. By trying to limit the pace of appreciation, China is not allowing the exchange rate to serve as a tool to counter inflation in its own economy. The policy complicates the adjustment needed for broader financial sector reform. It works against China's stated goal of strengthening domestic demand. And it places an undue burden of adjustment on other emerging market economies that maintain more flexible exchange rate systems and that have already seen substantial exchange rate appreciation.

There has been increasing recognition of the role of exchange rate appreciation in addressing inflation in China. On April 19, People's Bank of China Deputy Governor Hu Xiaolian stated that China should "increase exchange rate flexibility to ease imported inflation pressures," and in comments to China's State Council in April, Premier Wen noted that "strengthening the flexibility" of the exchange rate can serve as one of the tools available to control inflation. During the recent Strategic and Economic Dialogue (S&ED), China stressed that it "will continue to promote RMB exchange rate flexibility."

Based on the ongoing appreciation of the renminbi against the dollar since June 2010, China's public statements asserting that it will continue to promote RMB exchange rate flexibility, and China's recent policy commitments through the G-20 and the S&ED to address external imbalances, 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 renminbi by China. We will continue to encourage China to open markets and to pursue policies that level the playing field and support a shift to domestic-demand led growth.

It is a high priority for Treasury, working through the G-20, the IMF, and through direct bilateral discussions to encourage policies that will produce greater exchange rate flexibility.

Introduction

This Report focuses on international economic and foreign exchange developments in the second half of 2010. Where pertinent and when available, data and developments through April 2011 are included.

Exports and imports of goods to and from the areas whose economies and currencies are discussed in this report accounted for 73 percent of U.S. merchandise trade in 2010.

U.S. Macroeconomic Trends

The ongoing economic recovery gained momentum at the end of 2010. Real GDP growth accelerated in the fourth quarter, led in part by the fastest pace of consumer spending in four years, and private-sector hiring picked up. Although the pace of expansion slowed in the first quarter of 2011, the recovery remains on firm footing. Consumer spending continued to grow, business investment in equipment and software accelerated, job growth picked up, and factory output rose at a rapid rate. These developments, along with generally positive business survey data, suggest the underlying trend in economic activity is solid. Even so, risks remain. The unemployment rate remains very high at 9.0 percent, and the housing sector continues to be a point of weakness. Home sales and residential construction are being held back by a number of factors, including excess supply, tight lending standards, uncertainty about future house prices, and the high level of unemployment. The recent run-up in oil prices is also a concern, as higher fuel prices reduce consumer purchasing power and increase business costs. Despite these risks, the outlook for the remainder of 2011 is positive. Private forecasters expect growth to strengthen in the second quarter, with real GDP growth projected to grow by 3 to 3.5 percent through the end of the year.

The U.S. Economy Continued to Grow in Early 2011

Real GDP growth moderated from a 3.1 percent annual rate at the end of 2010 to a 1.8 percent annual rate in the first quarter of 2011 – the seventh straight quarter of growth since the economy emerged from recession in mid-2009. The slowdown appears to have been driven in part by temporary factors, including severe winter weather early in the quarter that curtailed construction spending. Business investment in structures fell sharply, extending a trend that began in mid-2008 and pulling business construction expenditures down to their lowest level since 1978. Residential investment also edged lower in the first quarter and is now at a 28-year low. Housing activity has been essentially neutral for growth since mid-2009, shaving less than 0.1 percentage point, on average, off of real GDP growth from the third quarter of 2009 through the first quarter of 2011. In the previous 3.5 years, residential investment reduced growth by an average of 1 percentage point per quarter.

Consumer spending moderated to a 2.2 percent annual rate from the prior quarter's rapid 4.0 percent pace, which was the fastest quarterly increase since 2006. The trade deficit widened slightly in the first quarter as imports rose faster than exports. This shaved 0.1 percentage point off of real GDP growth, a distinct shift from the fourth quarter when trade boosted growth by more than 3 percentage points. A drop in government spending, led by a large decline in federal defense outlays, cut another 1.1 percentage points off the first-quarter growth rate.

On the plus side, business investment in equipment and software accelerated in the first quarter to a solid 11.6 percent annual rate, and firms accumulated inventories at a faster rate than in the fourth quarter, boosting real GDP growth by 1.2 percentage points. Private domestic final demand (the sum of consumer spending and private fixed investment) rose 2.2 percent in the first three months of 2011, substantially less than the 4.4 percent increase posted in Q4 but still indicative of reasonable momentum from sustainable sources of demand. Since the current expansion began in mid-2009, real GDP has risen by 4.9 percent, more than reversing the 4.1 percent drop in output during the recession.

The Housing Sector Remained Weak

Housing activity remained depressed at the start of 2011. Housing starts picked up in the first quarter but fell sharply in April, approaching the record low level posted two years earlier. New single-family home sales dipped to a new low in February and, despite gains in March and April, remained at a historically low level. Sales of existing homes (single-family as well as condos and co-ops) have trended up since last summer, when they dropped sharply following the expiration of the home buyer tax credit, but at the start of the second quarter were still about 13 percent below the levels recorded in the spring of 2010, when the tax credit boosted housing demand. Mortgage rates have risen from the record low levels recorded last fall but remain attractive. Freddie Mac's benchmark measure for a 30-year fixed rate mortgage remained in a narrow band between 4.75 and 5 percent during the first quarter but has since eased to around 4.6 percent. Low mortgage rates are lending support to housing demand but a number of other factors, including relatively tight lending standards, are weighing on demand.

Although the inventory of homes available for sale has fallen a great deal over the past several years, it remains very high relative to sales. At the end of April there was a 6.5-month supply of new homes on the market and a 9.2-month supply of existing homes. The average prior to the housing bubble (2000-2004) was around 4 months for new homes and 4.5 months for existing homes. The large stock of homes currently on the market is holding back new construction and putting downward pressure on house prices. After several months of improvement, house prices started to decline again in late 2010. The S&P/Case-Shiller 20-city house price index turned slightly lower on a year-over-year basis in October and declines have accelerated since then. In February, this measure was 3.3 percent below its year-earlier level. That was the largest 12-month decline since late 2009. Similarly, the FHFA house price index fell 5.9 percent over the year ending in March, the biggest 12-month drop since May 2009.

Labor Market Conditions Improved

The labor market recovery strengthened notably in early 2011. Payroll job growth accelerated in the first quarter, with private firms adding an average of 188,000 jobs per month – the most in five years. Roughly 2.1 million private-sector jobs have been created since firms began hiring steadily again in February 2010. The unemployment rate has fallen by 0.8 percentage point since November and in April stood at 9.0 percent. The drop in the jobless rate was due in large part to strong employment growth. The labor force participation rate fell from 64.5 percent in November 2010 to a 27-year low of 64.2 percent in January 2011, but has held steady at that level through April.

Despite these gains, private employment is still 6.7 million lower than at the start of the recession in December 2007 and the unemployment rate is 4 percentage points higher. In addition, long-term unemployment (the share of the unemployed out of work for 27 weeks or more) remains very high at 43.4 percent – close to its May 2010 peak of 45.6 percent.

Energy Prices Rose Sharply

Energy prices have risen sharply since the beginning of the year. The front-month futures contract for West Texas Intermediate crude surged from around \$85 per barrel in mid-February to nearly \$114 per barrel at the end of April. U.S. consumers and businesses faced sharply higher fuel costs as a result: between mid-February and mid-May, the U.S. average retail price for regular gasoline climbed 82 cents (or 26 percent) to \$3.96 per gallon.

Core Inflation Remained Low

Rising energy prices and a pickup in food price inflation pushed headline inflation measures higher in early 2011. However, core inflation remained subdued, reflecting the large degree of slack in labor markets and low level of capacity utilization. The consumer price index rose 3.2 percent over the year ended in April, up from a 2.2 percent increase during the year ended in April 2010. Core consumer prices (excluding food and energy) rose 1.3 percent over the year ended in April 2011, compared to 0.9 percent over the same period a year earlier. Growth of compensation costs remained contained in the first quarter. The Employment Cost Index (ECI) for private-industry workers rose 2 percent over the year ending in March. Recent year-over-year gains in this measure are among the smallest in the 30-year history of the data series.

Fiscal Consolidation is a Priority

With the recovery of the U.S. economy firmly in place, fiscal consolidation is a high priority. The U.S. government's fiscal position is projected to improve significantly over the next few years as the economy recovers and as the emergency measures taken during the recession expire. However, even with these improvements, deficits will remain too high, and our debt will continue to grow relative to the size of our economy. Left unaddressed, our growing debt burden threatens to undermine the foundations of our future economic strength.

The Administration is firmly committed to putting U.S. government finances on a sustainable trajectory. In mid-April, President Obama proposed a plan to reduce the budget deficit by \$4 trillion over the next 12 years and put the debt on a declining path as a share of the economy by the second half of the decade. Deficit reduction in the President's plan is phased in over time to protect and strengthen our economic recovery and the labor market. A debt "failsafe" would trigger across-the-board spending reductions if, by 2014, the projected debt-to-GDP ratio is not declining toward the end of the decade. A comprehensive and balanced fiscal reform plan will safeguard our economy and ensure we have the ability to invest in our future.

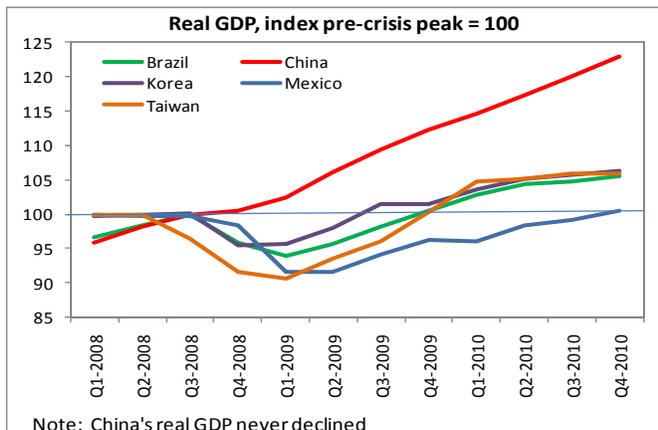
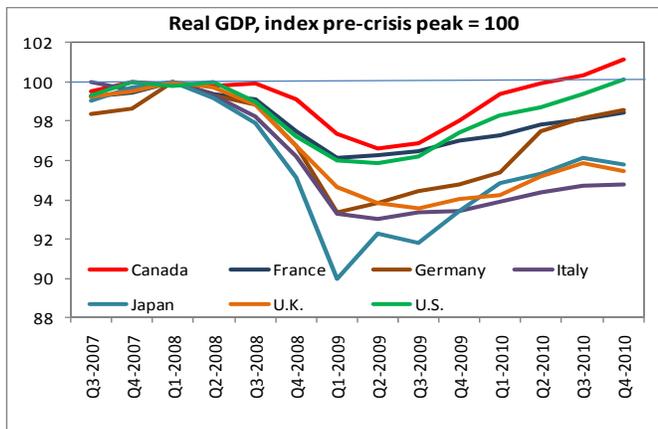
The Global Economy

The global economy recovered strongly in 2010, growing 5.0 percent compared to a contraction in output of 0.5 percent in 2009, according to the IMF. The pace of the recovery across economies, however, was uneven, with the advanced economies expanding by an estimated 3.0

percent in the aggregate and emerging market and developing economies growing by 7.3 percent in the aggregate. The economies of the G-7 countries grew by 2.8 percent in 2010, whereas the emerging market and developing economies in Asia grew a collective 9.5 percent.

In many advanced economies, growth has been too slow to make much headway against continuing high levels of unemployment, which in March 2011 stood at 9.9 percent in the euro area, 4.6 percent in Japan, and 8.8 percent in the United States. In the United Kingdom, the latest unemployment data are for February when the rate was 7.7 percent. Only two of the G-7 advanced economies (Canada and the United States) had returned to their pre-crisis levels of economic output by the end of 2010, and few have erased the employment losses suffered during the crisis.

In contrast, by the end of 2010, real GDP in all the emerging market economies discussed in this Report had exceeded pre-crisis levels.² These economies have benefited from the recovery in global trade. Exports by non-fuel exporting emerging market economies rose by 19 percent, well above their 2003-07 average of 12.5 percent.



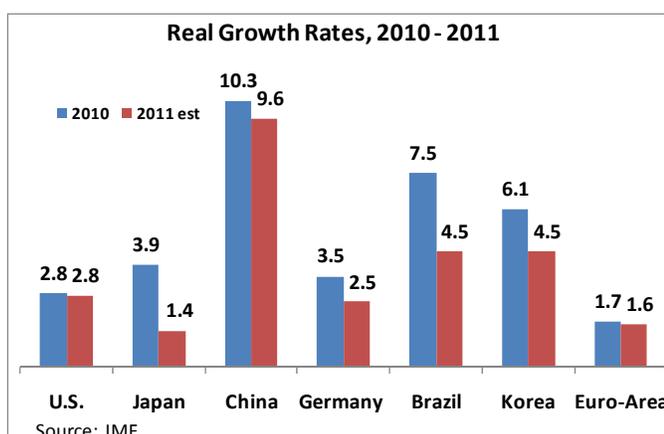
Global financial conditions generally improved throughout 2010, although there were marked disruptions in the late spring resulting from severe strains in sovereign debt markets in Greece and other countries in the euro area periphery and again in the late fall when troubles centered in Ireland. Elevated financial stress in the periphery of the euro area has carried over into early 2011, this time centering on Portugal.

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.

² The IMF includes Korea and Taiwan in the advanced economy category. In the charts above we group these two economies with other emerging markets.

Through the first quarter of 2011, ten-year sovereign yields for most European economies increased marginally, though sovereign debt concerns raised yields by 300 basis points in Greece and Portugal. Non-European advanced economy and emerging market yields moved by less than one percent over the first quarter of 2011, ending in March close to year-beginning values. Equity markets in the advanced economies maintained moderate growth through the first quarter, but almost all major advanced countries' equities contracted from February into March. Emerging market equities were mixed for the beginning of 2011, though most finished the first quarter higher than year beginning values. The Asian emerging markets and oil-producing countries showed the strongest growth into March, though China's equity market contracted by 0.5 percent.

The IMF projects global growth will moderate to 4.4 percent in 2011 with the advanced economies growing by 2.4 percent and the emerging and developing economies growing by 6.5 percent. Following the earthquake and tsunami in March 2011, the IMF revised downwards its projection for Japan's economic growth in 2011, though it expressed confidence in Japan's recovery and revised upwards its 2012 projected growth to 2.1 percent.



Inflation was contained throughout 2010 in most advanced economies, averaging 1.5 percent according to the IMF, but picked up to 6.2 percent in emerging markets. In the former group, economic slack restrained upward price pressures while, in the latter, stronger economic activity and rising food prices boosted inflation by 1 percentage point over 2009. Commodity prices rose throughout 2010, most sharply in the second half of the year. The Commodity Research Bureau (CRB) index of commodity prices rose 25 percent in 2010, and a further 11.4 percent in the first quarter of 2011. The CRB food sub index rose 22 percent in 2010, and is up 16.8 percent in the first quarter of 2011. Crude oil prices (based on the WTI price) rose 29 percent in 2010 and increased 15.6 percent in the first quarter of 2011. Commodity prices have been driven upward in part by the global recovery in demand but also by supply constraints, most particularly in the case of food, where bad weather reduced the stocks of key grains – including rice and wheat.

As the global recovery has broadened and inflation has picked up, 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. The United States remains committed to the Toronto objectives.

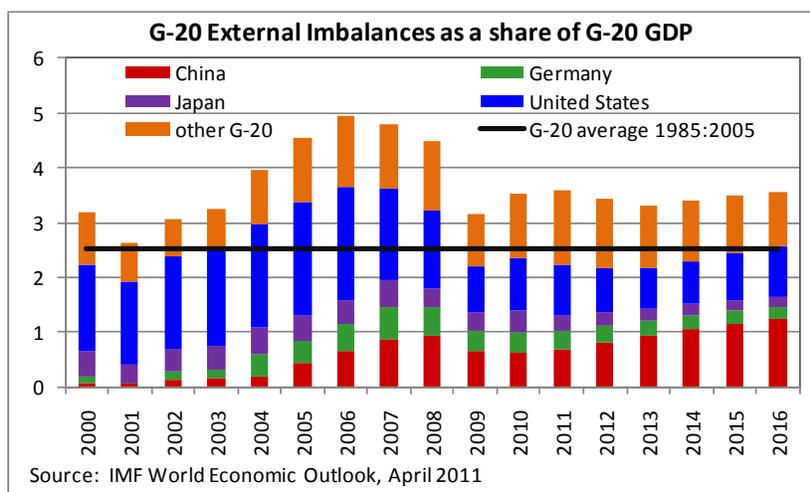
Monetary policy was on hold or eased somewhat among the major advanced economies in 2010. Australia and Canada were exceptions among the advanced economies, raising policy rates in 2010 by 100 and 75 basis points, respectively. In April 2011, the European Central Bank raised its key interest rate by 25 basis points. 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 emerging market 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 the second half of 2009 and continued at that pace through mid-2010. Beginning in late September and running through the first week of November, capital flows to emerging markets 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.

The combination of accelerating inflation and increased capital inflows has made some emerging markets reluctant to allow traditional monetary and exchange rate responses to operate. Some of these economies have opted for a combination of capital controls and prudential measures to mitigate the degree of tightening via interest rate or exchange rate channels. Restrictions on capital inflows and intervention to maintain rigid exchange rates in some countries, especially in Asia, have diverted capital flows to other 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.

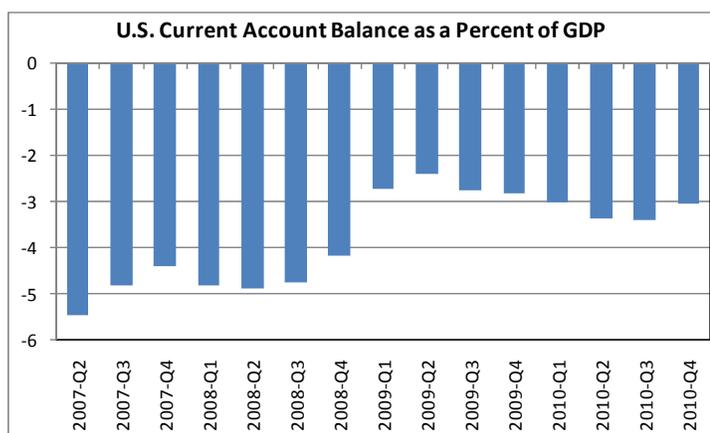
Global current account imbalances widened in 2010 from their crisis-related lows. The combined external imbalances of the G-20, which represent 85 percent of global output remained well above the long-term average in 2010, and are projected by the IMF to remain above average through 2016 absent policy adjustments.



At the initiative of the United States, Leaders of the G-20 agreed in November 2010 to intensify their efforts to get at the root causes, impediments, and needed policies to accelerate adjustment of external imbalances. That work is ongoing, with the goal of a G-20 policy action plan by the fall of 2011. More broadly, the G-20 is focused on putting in place the building blocks of a more effective and efficient international monetary system, of which a central component is a consensus that all systemically-important G-20 economies must have fully flexible, market-determined exchange rates.

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 the U.S. current account deficit widened by \$91.8 billion to 3.2 percent of GDP, a 0.5 percentage point increase over 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 \$42.1 billion to partially offset the increase in the trade deficit.



U.S. Balance of Payments and Trade (\$ billions, seasonally adjusted unless indicated)	2008	2009	2010	2010-Q1	2010-Q2	2010-Q3	2010-Q4
Current Account							
-- Balance on goods	-834.7	-506.9	-647.1	-150.9	-169.1	-170.8	-156.2
-- Balance on services	135.9	132.0	151.4	37.0	36.6	38.2	39.5
-- Balance on income 1/	152.0	121.4	163.0	40.1	42.9	41.4	38.6
-- Net unilateral current transfers	-122.0	-124.9	-137.5	-34.9	-33.2	-34.2	-35.2
Balance on current account	-668.9	-378.4	-470.2	-108.7	-122.7	-125.5	-113.3
Balance on current account as % of GDP	-4.7	-2.7	-3.2	-3.0	-3.4	-3.4	-3.1
Major Capital Flow Components (financial inflow +)							
Net bank flows	10.7	-590.1	-326.9	-108.0	-63.8	-89.3	-65.9
Net direct investment flows	-22.8	-134.0	-151.2	-51.2	-54.4	-9.2	-36.3
Net sales of securities	917.3	290.2	638.2	149.7	114.7	249.7	124.1
Net liabilities to unaffiliated foreigners by nonbank concerns	384.6	123.0	51.5	31.7	20.7	-14.9	14.0
Memo Items							
Statistical discrepancy	85.0	162.5	235.1	73.9	91.7	-11.4	80.9
Change in foreign official assets in the United States	550.8	450.0	298.0	72.5	43.6	132.9	49.1
Trade in Goods: Balance	-816.2	-503.6	-633.9	-148.0	-166.2	-167.2	-152.5
Total exports, of which:	1287.4	1056.0	1278.1	303.6	313.8	321.1	339.6
-- Agricultural products	108.4	93.9	107.7	26.5	23.9	26.0	31.4
-- Capital goods except autos	457.7	390.5	445.9	105.8	110.5	113.8	115.8
-- Automotive products	121.4	81.7	111.9	27.1	28.3	27.9	28.5
-- Consumer goods except autos and food	161.3	150.0	165.8	40.7	40.4	41.2	43.5
-- Industrial supplies and materials 2/	388.0	296.7	390.7	90.5	97.1	97.4	105.7
Total imports, of which:	2103.6	1559.6	1912.0	451.6	480.0	488.3	492.1
-- Petroleum and products	779.5	462.5	601.3	85.3	84.6	81.7	84.5
-- Capital goods except autos	453.7	369.3	449.3	101.9	112.2	116.4	118.8
-- Automotive products	231.2	157.6	225.2	50.4	57.6	59.9	57.3
-- Consumer goods except autos and food	481.6	428.4	483.3	113.9	120.7	125.0	123.7

1/ Including compensation of employees 2/ Including petroleum and petroleum products

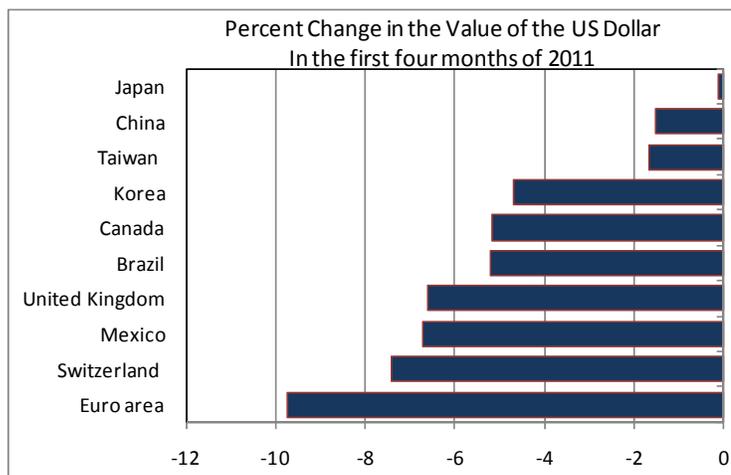
Source: BEA, Bureau of Census

The dollar value of U.S. exports of goods and services in 2010 increased 16.4 percent over 2009, while imports increased 19.8 percent. In real, price-adjusted terms, exports increased 11.7 percent while imports increased 12.6 percent.

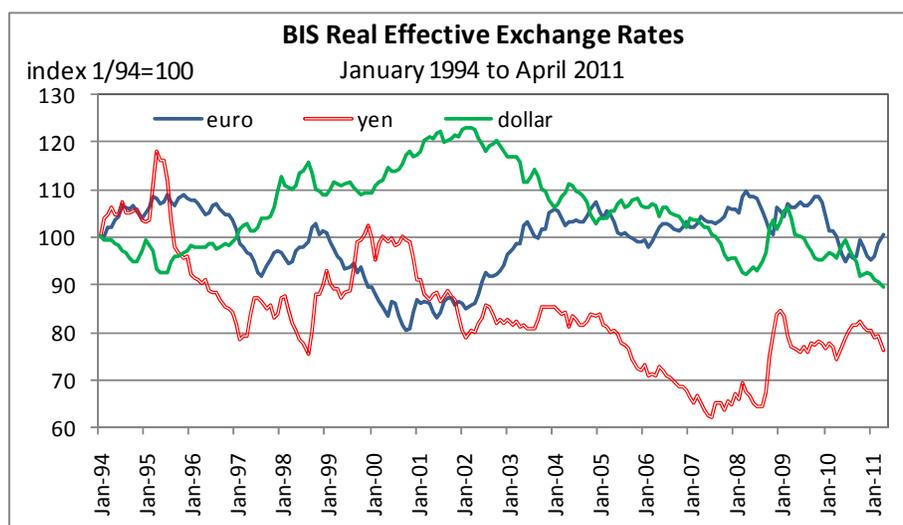
On a quarterly basis, the current account deficit rose through the third quarter in 2010, reaching 3.4 percent of GDP before declining to 3.1 percent of GDP in the fourth quarter. Exports of goods and services reached their pre-crisis level in the fourth quarter of 2011, but imports remained 10 percent below pre-crisis levels.

The Dollar in Foreign Exchange Markets

Over the course of the first four months of 2011, the dollar tended to trade in response to changes in relative interest rates, particularly among major economies, and shifts in global risk appetite. Based on the Federal Reserve's nominal effective exchange rate index, the dollar depreciated by 7.1 percent against the other major currencies in the first four months of 2011 and 3.4 percent against the other important trading partners (OITP). The latter is a measure of the dollar's value against emerging market currencies. Against the broad set of currencies (major and OITP combined), the dollar depreciated by 5.1 percent on a nominal effective basis in the first four months of 2011.



On a real effective basis, the dollar depreciated by 3.4 percent in the first four months of 2011. The euro appreciated by 4.5 percent and the yen depreciated by 5.3 percent. Taking a longer-term perspective, the euro is near its average value since the start of the BIS index in January 1994 whereas the dollar and the yen are below their long-term averages.



With the exception of short-lived periods of heightened volatility surrounding an escalation of tension in the Middle East and the catastrophic earthquake and tsunami in Japan, a general moderation in asset and currency market volatility reduced safe haven demand for dollars through April 2011. The dollar depreciated against the currencies of all the economies discussed in this report during the first four months of 2011, with the exception of the Japanese yen.

The dollar depreciated by 10.8 percent against the euro in the first four months of 2011 as investors increased their expectations that the ECB would raise policy rates (which it did in early April) and euro-area peripheral strains were believed to be increasingly contained.

In the first two months of 2011 the dollar appreciated by 0.7 percent against the yen. However, in the aftermath of the March 11 Japanese earthquake and tsunami the yen displayed heightened volatility, appreciating sharply as speculative investors anticipated substantial repatriation flows into Japan to cover the costs of the earthquake.

On March 18, authorities of the G-7 countries, including the United States, the United Kingdom, Canada, and the European Central Bank, joined Japan in a coordinated intervention in foreign exchange markets. At Japan's request, G-7 nations entered the market in an effort to counter excess volatility and disorderly movements in the yen exchange rate. The G-7 has long stated that excess volatility and disorderly movements in exchange rates "have adverse implications for economic and financial stability." The dollar appreciated by 7.9 percent against the yen from March 17 through April 6, but declined through the remainder of April.

Analyses of Individual Economies

Asia

China

After a period of roughly two years in which the Chinese renminbi (RMB) was pegged to the U.S. dollar, Chinese authorities decided in June 2010 to allow the exchange rate to appreciate in response to market forces. Since the June announcement, the RMB has appreciated by a total of 5.1 percent against the dollar through the end of April 2011, or at a rate of approximately 6 percent per year in nominal terms. Because inflation in China is higher than it is in the United States, the RMB has been appreciating more rapidly against the dollar on a real, inflation-adjusted basis, at a rate of around 9 percent per year. A more rapid pace of nominal appreciation would enable China to achieve the needed adjustment in the real value of its currency, while simultaneously reducing inflationary pressures in its economy.

The Chinese economy continued to grow rapidly in 2010 and so far in 2011. In the first quarter of 2011, China's economy expanded by 9.7 percent in real terms year-on-year, down slightly from 9.8 percent growth in the fourth quarter of 2010. As part of the first quarter data release, China's National Bureau of Statistics reported, for the first time, sequential seasonally adjusted data, which showed a 2.1 percent quarter-on-quarter rise in real GDP, equal to an annualized growth rate of 8.7 percent. In 2010, China's economy expanded by 10.3 percent in real terms, with the contribution from investment accounting for over half of the growth. The IMF forecasts real GDP growth of 9.6 percent for 2011 as a whole.

Controlling inflation has become a top priority for Chinese authorities in 2011. Throughout 2010 and the first quarter of 2011, China has shifted to less stimulative monetary policies. The People's Bank of China (PBOC) cut the rate of broad money (M2) growth to 16.6 percent in the first quarter of 2011 (from 19.7 percent in 2010) and 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 20.5 percent as of mid-April 2011. The PBOC also raised China's benchmark 1-year lending rate four times since the beginning of October 2010, with a total increase of 100 basis points from 5.31 percent to 6.31 percent.

Despite these policy measures, the inflation rate has continued to climb. China's consumer prices rose 5.4 percent year-over-year in March 2011, up from 2.4 percent in March 2010. Although the rise in inflation primarily has been driven by higher food costs, non-food consumer price inflation reached 2.7 percent year-over-year in March 2011, its highest level in more than ten years. Most likely reflecting in part the continued rise in housing and food prices, Chinese household surveys continue to show relatively low levels of satisfaction with current inflation, and relatively high expectations of future inflation. Chinese authorities set a 4 percent target for inflation in 2011.

China's exchange rate regime impairs its ability to contain inflation. Rather than following the accepted practice of increasing domestic interest rates to contain inflation, the PBOC has limited increases in domestic interest rates in order to avoid additional capital inflows. The PBOC's approach will in turn require it to further increase foreign exchange purchases to maintain a stable renminbi.

In addition, strictly regulated low domestic interest rates mean that Chinese households earn very little on their savings, and a declining amount in real terms as domestic inflation in China accelerates, constraining the growth of household income and consumption relative to national income.³ The exchange rate itself can also serve as a tool to counter inflation, as appreciation of the RMB reduces the local currency price of imports.

There has been increasing recognition of the role of exchange rate appreciation in addressing inflation in China. On April 19, People's Bank of China Deputy Governor Hu Xiaolian stated that China should "increase exchange rate flexibility to ease imported inflation pressures," and in comments to China's State Council in April, Premier Wen noted that "strengthening the flexibility" of the exchange rate can serve as one of the tools available to control inflation. During the recent Strategic and Economic Dialogue (S&ED), China stressed that it "will continue to promote RMB exchange rate flexibility."

China's current account surplus fell from 9.1 percent of GDP in 2008, to 5.2 percent in 2009. The current account surplus was \$305.4 billion in 2010, approximately the same share of GDP as in 2009.⁴ Preliminary data for the first quarter of 2011 indicated a current account surplus of \$29.8 billion, equal to 2 percent of first quarter GDP. The IMF currently forecasts China's 2011 current account will reach 5.7 percent of GDP.

Although China experienced a sharp slowdown in external demand during the crisis, the rebound has been rapid. China's international trade has recovered to well above its pre-crisis level, and China's exports have continued to gain global market share through the last three years. Goods exports on a balance of payments basis rose 31.4 percent in 2010 and are 10 percent above their 2008 level. Imports rose 39.1 percent in 2010 and are 24 percent above their 2008 level. The 2010 goods and services trade surplus was 3.9 percent of GDP, compared to 4.4 percent of GDP in 2009, and 7.7 percent in 2008. In the first quarter of 2011, preliminary balance of payments

³ Since 2004, average one-year deposit rates have not been sufficient to compensate depositors for consumer price inflation; the real deposit interest rate has averaged a 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.

⁴ Chinese authorities recently revised the methodology used to account for retained earnings in the income and FDI balances of its balance of payments data, and have issued revised data for the 2005-2010 period.

data indicate that China experienced a goods trade surplus of \$20.8 billion, as imports grew 32.8 percent while exports grew 26.7 percent compared to the first quarter of 2010. China's trade surplus is usually relatively low in the first quarter of the year due to seasonal factors, but rebounds later in the year. China's trade balance has also been lowered recently by the deterioration in China's terms of trade tied to the rise in commodity prices. In April, however, based on China's Customs data, China recorded a trade surplus of \$11.4 billion, as export growth significantly outpaced import growth.

The Chinese leadership recognizes that China is now too large relative to the world economy for it to continue to rely on foreign demand to grow. At the S&ED, China stated, "In order to promote a more balanced trade relationship, China will continue to take steps to expand domestic consumption and imports in accordance with the 12th Five-Year Plan." China's Twelfth Five-Year Plan, adopted on March 14, incorporated a number of specific targets to achieve these goals – targets which China reaffirmed bilaterally through the S&ED. At the S&ED, China committed to take steps to increase domestic consumption, including raising household incomes at a pace faster than GDP growth, steadily increasing the minimum wage, and ensuring that workers' pay keeps up with increases in productivity. China also pledged to raise the share of the services sector in China's economy by four percentage points over the next five years (an important element in expanding domestic consumption), and committed to further open the service sector to U.S. and other foreign participation. Finally, China committed to promote more market-based interest rates, which should over time increase household income and consumption by increasing the inflation adjusted return on household savings, which still largely remain in bank deposits. China's Five-Year Plan also aims to substantially expand the social safety net, continue price reform in the resource sector, and increase payment of dividends by state-owned enterprises, all of which have the potential to contribute to economic rebalancing.

These policy commitments are welcome, but it is important that China take more effective policy actions to bring about a durable reduction in its external imbalances, as it aims to do in the Twelfth Five-Year Plan. Otherwise, China's current account surplus will likely increase again, both in absolute terms and as a share of China's GDP. Exchange rate reform is an important element in this process to ensure that Chinese production shifts in a durable way to reflect an economy more dependent on domestic demand for growth.

As market pressure for further exchange rate appreciation increased in 2010, the PBOC stepped up its foreign exchange intervention, purchasing dollars with RMB and adding to foreign exchange reserves. In 2010, China's foreign exchange reserves rose by \$448 billion, and they have increased by a further \$197 billion in the first quarter of 2011. In total, the PBOC held \$3.0 trillion worth of foreign reserves at the end of the first quarter of 2011, equivalent to 52 percent of China's 2010 GDP, over 27 months of imports, and more than \$2,000 for every Chinese citizen.⁵

In order to promote greater international use of the renminbi, China has taken steps to gradually increase convertibility of the renminbi, allowed for the use of renminbi in trade settlement, and

⁵ 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 \$3.6 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.

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 RMB 64 billion (\$9.9 billion) in January 2010 to RMB 451 billion (\$69.5 billion) in March 2011. In the first quarter of 2011, Chinese authorities reported that approximately 7 percent of China's trade was settled in renminbi, up from 0.4 percent in the first quarter of 2010. To date, the use of RMB for payment of Chinese imports has far exceeded the amount of RMB received as payment for Chinese exports. As a result, there is relatively less drain on the on-shore stock of foreign exchange, and a correspondingly larger increase in net foreign exchange inflows, than otherwise would have occurred.

China's real effective exchange rate — a measure of its overall cost-competitiveness relative to its trading partners — has appreciated only modestly over the past decade. China's large increases in productivity in export manufacturing, improvements in transportation and logistics, and increased investment in its productive capacity which accompanied its 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 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 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; the broadly unchanged level of China's real effective exchange rate, especially given rapid productivity growth in the traded goods sector; and the projected widening of current account surpluses, all indicate that the real exchange rate of the renminbi remains substantially undervalued. China's consistent, large reserve accumulation prolongs a substantial undervaluation and hampers progress toward global rebalancing. 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 is not allowing the exchange rate to serve as a tool to counter inflation. The policy complicates the adjustment needed for broader financial sector reform. It works against China's stated goal of strengthening domestic demand. And it places an undue burden of adjustment on other emerging market economies that maintain more flexible exchange rate systems and that have already seen substantial exchange rate appreciation.

Japan

Japan maintains a floating exchange rate regime, but its authorities have intervened in the past, both individually and jointly with the G-7 to counter disorderly conditions in the market.

Japanese authorities recently have intervened twice in foreign exchange markets, once alone on September 15, 2010, and jointly with the G-7 on March 18, 2011.

On March 11, 2011, the Tohoku region northeast of Tokyo was struck by a 9.0-magnitude earthquake, followed by a massive tsunami. As of early April, the death count was over 14,000, with an additional 13,500 persons still missing. The tsunami also triggered the most serious nuclear incident since the 1986 Chernobyl disaster as power needed to operate the cooling system at a major reactor complex at Fukushima was disrupted. Damage to public infrastructure and private capital stock, as estimated by Japanese authorities, totals ¥16-25 trillion (roughly \$200-300 billion, or 3-5 percent of Japanese GDP). Over the course of three trading days following the March 11 earthquake, the yen appreciated by 7.9 percent against the dollar, reaching a record ¥/\$76.25 on March 16. The appreciation resulted in part from market views that Japanese banks and insurers might repatriate overseas investments. The benchmark Nikkei 225 and Topix stock indices both dropped 11 percent over the same period.

In response to these disorderly conditions, and at the request of the Japanese authorities, the authorities of the United States, the United Kingdom, Canada, and the European Central Bank joined with Japan on March 18, 2011, in concerted intervention in exchange markets. The coordinated intervention by the G-7 was the first in over a decade.

On March 18, the day of the G-7 announcement to intervene, the yen depreciated by 3.1 percent to ¥/\$81.70, and the Nikkei and Topix indices rose by 2.7 percent and 2.4 percent respectively. The yen continued to weaken to ¥/\$85.25 on April 7, before beginning to strengthen again. By late April the yen was trading around ¥/\$81-82, similar to pre-earthquake levels. The yen rose 0.1 percent against the dollar in the first four months of 2011 but depreciated by 3.7 percent on a nominal trade-weighted basis, and 5.3 percent on a real trade-weighted basis. In contrast the yen rose by 11.5 percent against the dollar in 2010 and appreciated by 3.9 percent on a real trade-weighted basis. In March, Japan's foreign exchange reserves increased to \$1.04 trillion from \$1.03 trillion in February as a result of valuation changes on existing reserve holdings, interest earnings, and foreign exchange intervention.

Prior to the earthquake, Japan's economy was recovering at a moderate pace from the global financial crisis. The economy grew 3.9 percent in 2010, with net exports driving growth in the first two quarters. In the fourth quarter, however, real GDP declined 1.3 percent on a seasonally adjusted annualized basis, as exports slowed, government incentives for consumers expired, and domestic demand remained weak. In the first quarter of 2011, as a result of both supply disruption and reductions in demand after the March 11 earthquake, Japanese GDP fell sharply, at a seasonally-adjusted annualized rate of 3.7 percent. The impact of the disaster is likely to continue into the second quarter. Once reconstruction begins, however, economic growth is likely to receive a boost in the second half of 2011 and in 2012. The timing of the impetus to growth from reconstruction will depend in part on the resolution of the situation at the Fukushima Dai-ichi nuclear power plant, as well as the restoration of the power grid. The private sector consensus forecast, as of April, is 0.3 percent for 2011 and 2.7 percent for 2012.

Over a longer time horizon, Japan will need to tackle its large fiscal deficit and public debt. Reforms to strengthen domestic demand and foster competition and productivity growth will be critical for Japan's long-term growth and fiscal health, and key to meeting Japan's commitment to contribute to the G-20 objective of strong, sustainable, and balanced global growth. The

Japanese government announced a ¥4 trillion (\$49 billion) supplemental budget on April 25, and is planning two more supplemental budgets this year to assist in reconstruction. Japan's general government deficit widened from 3.2 percent of GDP in FY 2008 (April-March) 9.4 percent of GDP in FY 2009. The IMF projects the government's gross debt to reach 229 percent of GDP in 2011.

Japan's current account surplus increased from \$144 billion (2.8 percent of GDP) in 2009 to \$195 billion (3.6 percent of GDP) in 2010, as external demand and the merchandise trade surplus recovered. Exports slowed significantly in the first quarter of 2011, however, particularly in January, when the trade balance fell into the first monthly deficit since early 2009. As a result, Japan's merchandise trade surplus declined sharply to \$4.5 billion in the first quarter of 2011 from \$20.5 billion in the fourth quarter of 2010. Japan's bilateral trade surplus with the United States increased to \$59.8 billion in 2010 from the 18-year-low of \$44.7 billion in 2009, but remains well below its pre-crisis average of \$77.5 billion from 2000-07.

South Korea

South Korea officially maintains a market-determined exchange rate, and its authorities intervene with the stated objective of smoothing won volatility. During the most severe period of the global financial crisis, Korea intervened heavily to support the won. Since early 2009, Korea has intervened in the opposite direction, selling won and buying foreign currency to rebuild foreign exchange reserves and slow won appreciation. In the first four months of 2011, the won appreciated by 4.7 percent against the U.S. dollar and 2.9 percent on a nominal trade-weighted basis through April. On a real effective basis the won appreciated by 3.5 percent during the first four months of 2011. The won remains 20 percent below its 2007 peak against the dollar, however, and is 22 percent weaker than its pre-crisis high in real effective terms, despite the strong recovery of Korea's domestic economy, exports, and foreign reserves. According to estimates from the September 2010 IMF Article IV consultation with Korea, the won was undervalued relative to its equilibrium level on a real effective basis (estimates range from 5 to 20 percent).

South Korea's economy continues to recover strongly from its sharp downturn in 2008, growing 6.2 percent in 2010, a significant rebound from 0.2 percent growth in 2009. Real GDP grew 4.2 percent year-over-year in the first quarter of 2011, primarily driven by net exports. The IMF expects economic growth of 4.5 percent and 4.2 percent in 2011 and 2012, respectively, similar to pre-crisis growth rates. Inflation now has become one of the main challenges for the Korean economy. Headline consumer price growth was 4.1 percent year-over-year in April, above the Bank of Korea's medium-term target range of 2 to 4 percent. Import prices have been rising rapidly over the past several months, up 17 percent in the first quarter of 2011 over the first quarter of 2010, driven by oil and commodity prices. The Bank of Korea has raised its policy interest rate twice in 2011, by 25 basis points each in January and March. The rate now stands at 3 percent, which is below its pre-crisis level of around 5 percent in 2007 through mid-2008, when inflation exceeded 5 percent year-over-year.

Korea's merchandise trade surplus was \$8 billion in the first quarter of 2011, the largest first quarter surplus for Korea since 1998, as exports increased by 30 percent year-over-year. The private sector consensus forecast for Korea's 2011 trade surplus is \$33.7 billion (about 3 percent of GDP). After falling into deficit in 2008, Korea's current account has averaged a surplus of 3.3

percent of GDP over the past nine quarters, and totaled \$28.2 billion (2.7 percent of GDP) in 2010. Korea's trade surplus with the United States was \$10.0 billion in 2010, down from \$10.6 billion in 2009.

The Korean banking system entered the crisis heavily dependent on wholesale funding, much of it borrowed externally. Since 2008, the Korean authorities have taken a number of measures to reduce short term external debt and foreign exchange exposure of the financial system. In November 2009, the government announced limits on domestic banks and foreign bank branches' foreign currency forward positions, and required domestic banks to hold a part of their foreign assets in "safe" investments rated A or above, which took effect in January 2010. In June 2010, the government introduced caps on foreign exchange derivatives contracts for both domestic banks and branches of foreign banks located in Korea, effective October 2010. Last November, the government proposed reinstating a withholding tax on foreign investors' gains from Korean government bonds, which passed parliament and came into effect in January 2011. Most recently, last December the government proposed a tax on banks' foreign borrowing, with higher rates on short-term maturity debt, which will take effect this August. The authorities have also conducted audits of banks' trading of foreign exchange derivatives in recent months. In part due to the government's measures, Korea's short-term external debt has declined from \$189 billion in the third quarter of 2008 to \$135 billion at the end of 2010.

After falling by about \$60 billion during the crisis, Korea's gross foreign reserves have increased over \$90 billion since end-2008 to a record \$299 billion in March. This is \$30 billion above their pre-crisis peak and equivalent to 7.8 months of imports and over twice the amount of short-term external debt. The Bank of Korea continues to be active in the forward market, and Korea's net long foreign currency/short domestic currency forward position has largely been increasing since early 2009. It stood at \$52.4 billion in March 2011, compared to -\$11.1 billion in February 2009. Given the strong domestic recovery, the rebuilding of foreign exchange reserves, rising inflationary pressure, and the rebound in the current account, Korea should adopt a greater degree of exchange rate flexibility and less intervention.

Taiwan

According to the central bank, Taiwan's exchange rate is market-determined in principle except when "seasonal or irregular factors (such as massive flows of short-term capital) lead to excess volatility and disorderly movements in the Taiwan dollar exchange rate with adverse implications for economic and financial stability," and the central bank intervenes "to maintain an orderly market." The Taiwan dollar appreciated by 1.7 percent against the U.S. dollar in the first four months of 2011, following an appreciation of 8.8 percent during 2010. According to BIS statistics, the real effective exchange rate of the Taiwan dollar depreciated by 0.5 percent in the first four months of 2011, after appreciating 4.3 percent in 2010

Taiwan's real GDP increased by 10.8 percent last year, as a result of both rising exports and strengthening domestic demand. First quarter real growth in 2011 was 6.2 percent year-on-year and 13.4 percent on a seasonally-adjusted annualized rate, on strong exports and private consumption. The authorities expect real growth of 5.0 percent in 2011, while the IMF projects growth at 5.4 percent. Taiwan's inflation rate remains one of the lowest in Asia, with consumer prices increasing by only 1.4 percent year-on-year in March. Government price and administrative controls have partially offset rising imported commodity and fuel prices. The

central bank, citing a strong economy and rising inflation, particularly in the housing sector, raised its discount rate by 12.5 basis points to 1.75 percent on March 31, following a series of three 12.5 basis point hikes in 2010. To deter speculation in the property market, on April 15, 2011, the legislature approved a new luxury tax of 10-15 percent on property sold within two years of purchase.

Taiwan's current account surplus narrowed moderately in 2010 on a smaller trade surplus as imports rose faster than exports. The current account surplus contracted to \$40.6 billion or 9.4 percent of GDP, compared with 11.4 percent in 2009. The trade balance accounted for \$26.9 billion of the surplus in 2010, down from \$42.9 billion in 2009. The trade surplus narrowed in the first quarter of 2011, with exports rising 19.5 percent and imports increasing 21.8 percent on a year-over-year basis. The income surplus declined slightly to \$13.6 billion in 2010. The financial account recorded a net outflow of \$0.6 billion in 2010 compared with the large surplus of \$13.6 billion in 2009, as foreign portfolio inflows and increases in foreign lending by the banking sector offset overseas investment in debt securities by insurance companies and in mutual funds by residents. Taiwan's foreign exchange reserves increased by \$11 billion to \$393 billion during the first four months of 2011, due to valuation gains and net purchases of foreign exchange. Taiwan's foreign exchange reserves amount to 88 percent of GDP, 18.5 months of imports, and about 4.5 times the economy's short-term external debt.

Europe

Euro Area

The value of the euro in foreign exchange markets is market-determined. The euro continues to fluctuate significantly against the dollar, in part because of changing perceptions about relative risks related to sovereign debt. The Irish sovereign debt crisis contributed to a 4.3 percent fall in the euro against the dollar in the two months to end-November 2010. Driven by interest rate differentials, the euro rallied against the dollar in early 2011 despite worsening debt problems in Portugal; rising 9.7 percent during the first four months of the year. On a real effective basis, the euro appreciated by 4.5 percent in the first four months of 2011. On March 18, the ECB participated in the joint G-7 intervention to prevent excess volatility in the yen.

The euro area returned to growth in 2010, with real GDP expanding by 1.8 percent, and the recovery is continuing into 2011. The economic rebound is broad-based, with private consumption, government consumption, and net exports all contributing to GDP growth, although fixed investment continued to decline slightly last year. To a large extent, however, the euro area's recovery masks a wide divergence across countries. The German economy grew 3.6 percent in 2010, but growth was much more modest in France (1.5 percent) and Italy (1.3 percent). In Spain and some smaller euro area countries, real GDP continued to decline.

The euro area's current account has been close to balance over the past two years. The current account deficit grew marginally in 2010 to 0.4 percent of GDP from 0.3 percent in 2009. 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 2010, at 7.7 and 5.6 percent of GDP, respectively, and growth there has been driven by net exports. Since their economic recoveries began in 2009, net exports have accounted for over 60 percent of economic growth in Germany and the vast majority of growth in the

Netherlands. Meanwhile, 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 debt crises in the European periphery countries shifted the 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 debt crisis affecting several euro area countries 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 continues to provide unlimited, fixed-rate liquidity, but raised its refinancing rate from 1 percent to 1.25 percent in April. 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. Banks in the euro area “periphery,” however, remain heavily dependent on ECB refinancing, which will complicate the central bank’s exit strategy. Meanwhile, the ECB has all but halted its sovereign bond purchase program, which it had instituted in May 2010 to reduce funding stresses in sovereign debt markets for some countries in the euro area periphery. The ECB has purchased less than €80 billion in securities under this program as of April 22, 2011, and most of these purchases were made in the program’s first months (including €26 billion in May).

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 and fiscal surplus.

The Swiss economy grew by 2.6 percent in 2010 owing to strong exports, rising domestic demand, and robust fixed investment. After falling in the first quarter of 2010, domestic demand strengthened in the remainder of the year, increasing 0.6 percent overall in 2010. Public consumption fell by 1.6 percent in 2010 as the recovery strengthened.

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 that it would resume intervention if further currency appreciation threatened deflation. Consumer prices rose by 0.7 percent in 2010, and are up 0.9 percent year-over-year as of March 2011.

Switzerland's foreign exchange intervention resulted in a substantial increase in foreign exchange reserves through June 2010, when its foreign exchange reserves reached \$208.0 billion, substantially higher than the \$49.1 billion in March 2009 when the intervention policy began. International reserves showed little increase in the second half of 2010, however, increasing by \$9.4 billion to \$217.4 billion, and this change was due to valuation changes rather than intervention. At the end of February 2011, Swiss foreign exchange reserves were \$223.9 billion.

The Swiss franc depreciated by 4.1 percent against the dollar in the first half of 2010, but appreciated by 13.3 percent in the second half of 2010 and by an additional 7.4 percent in the first four months of 2011. On a real effective basis, the Swiss franc rose by 9.4 percent in 2010 and has risen by 0.2 percent through the first four months of 2011. Despite this real exchange rate appreciation, Switzerland's current account surplus rose to 14.6 percent of GDP in 2010 from 11.5 percent of GDP in 2009, driven by a 39 percent increase in net investment income.

United Kingdom

The United Kingdom (UK) has a freely floating market-determined exchange rate. The pound depreciated by 3.6 percent against the dollar during 2010, falling through much of the first half of the year, but rising 4.2 percent in the second half of 2010. The pound has continued to appreciate into early 2011, rising 6.6 percent against the dollar through the end of April as above-target inflation increased prospects of a widening interest rate differential. On a real effective basis, the pound depreciated by 0.6 percent in the second half of 2010 and by an additional 1.3 percent in the first four months of 2011, reflecting the pound's nominal depreciation against other currencies excluding the dollar, notably the euro. The Bank of England (BOE) participated in the joint G-7 intervention on March 18 to prevent excess volatility in the yen.

The UK economy rebounded in 2010, expanding 1.3 percent. Modest growth resumed in the fourth quarter of 2009 and sustained positive momentum through the first three quarters of 2010, but contracted 1.9 percent on an annualized basis in the fourth quarter due in part to the temporary effects of bad weather. Real GDP rebounded in the first quarter of 2011, growing by 2.0 percent.

Economic expansion in 2010 was supported by robust manufacturing gains and inventory restocking. The UK's current account deficit widened to 2.5 percent of GDP in 2010 as a result of a rising trade deficit.

Stimulus measures, in conjunction with the economic downturn, resulted in a rise in the UK's fiscal deficit from 2.3 percent of GDP in 2007 to 11.1 percent of GDP in 2009. Consequently, public gross debt increased from 43.6 percent of GDP in 2007 to 71.1 percent of GDP in 2009. The coalition government that formed after the May 2010 elections has committed to an accelerated reduction in the fiscal deficit, led by expenditure reductions. This austerity package, announced by the government in June, is expected to reduce the deficit to 2.5 percent of GDP by 2014-2015 and to put the gross debt-to-GDP ratio on a declining path after peaking at 87 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 the size of its quantitative easing program at £200 billion through April 2011. Inflation has remained above the Bank of England's 2 percent target for over a year and has been driven primarily by commodity and food prices, currency weakness, and the 2010 increase of the value-added tax.

Western Hemisphere

Brazil

Brazil officially operates under a floating exchange rate regime, although the central bank performs regular and transparent interventions in the spot market for foreign exchange to smooth volatility. As a result of these operations, along with interest and valuation changes, total foreign exchange reserves increased by \$74 billion over the past 12-months, reaching \$312 billion at the end of April 2011.

The *real* appreciated by 4.8 percent against the U.S. dollar in nominal terms in 2010, and an additional 5.2 percent in the first four months of 2011. In April 2011, the *real* surpassed its pre-crisis high against the dollar of R\$1.56 per dollar. On a real effective exchange rate basis, the *real* appreciated by 7.8 percent in 2010 and an additional 5.0 percent in 2011 through April, based on data from the BIS.

Preventing additional appreciation of the *real* from strong foreign capital inflows is a priority for the Brazilian government. In October 2010, the authorities raised the financial operations tax (IOF) on non-resident investment in fixed income assets to 6 percent from 2 percent previously. The authorities also have broadened the scope of the IOF tax, by extending the 6 percent IOF tax to foreign borrowing by residents with a maturity of less than two years (April 2011) and to inflows into margin accounts held by non-residents in local derivatives markets (October 2010). Since January 2011, Brazil's central bank has intervened in foreign exchange derivatives markets through auctions of foreign exchange swaps and forwards. In January 2011, the central bank introduced unremunerated reserve requirements on the short U.S. dollar positions of financial institutions.

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

Fiscal policy has remained expansionary in spite of the strong economic recovery. One-time tax credits were allowed to expire in 2010, but permanent increases to public payroll and discretionary expenditures as well as investment expenditures have maintained the fiscal impulse. In February 2011, the government announced intentions to reduce current year spending by R\$50 billion (approximately 1.3 percent of GDP) and reduce annual financing to public financial institutions. 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 has increased inflationary pressure. Consumer prices rose 5.9 percent in 2010, above the central bank's target of 4.5 percent. In March 2011, annual inflation reached 6.3 percent, near the 6.5 percent upper limit of the target range. The central bank raised the benchmark Selic policy interest rate 200 basis points from a historical low of 8.75 percent to 10.75 percent between April and June 2010. After holding that rate steady through the end of 2010, the central bank initiated a further tightening cycle, raising the Selic rate by 125 basis points (to 12.00 percent) over three consecutive meetings through April 2011. The central bank also increased banks' reserve and capital requirements to slow credit growth in December 2010, and, in April 2011, the Finance Ministry similarly raised taxes on consumer credit (excluding housing).

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 2010. Simultaneously, investor confidence in future growth, strong commodity prices, and global interest rate differentials led to persistent strong capital inflows despite bouts of global risk aversion in the first quarter of 2011.

Canada

Canada maintains a flexible exchange rate. The Bank of Canada participated in the joint G-7 intervention on March 18, to prevent excess volatility in the yen. The Canadian dollar appreciated by 5.1 percent against the U.S. dollar in 2010, and has risen an additional 5.2 percent through the end of April 2011. On a real effective basis, the Canadian dollar appreciated by 4.6 percent in 2010 and a further 3.3 percent in the first four months of 2011. The appreciation of the Canadian dollar was driven in part by rising commodity prices as well as speculation that the Bank of Canada will raise interest rates ahead of the Federal Reserve.

The Canadian economic recovery continued in 2010 with real GDP expanding by 3.1 percent, although the pace of growth slowed in the middle of the year before picking up again in the fourth quarter. The Bank of Canada is forecasting growth to moderate to 2.9 percent in 2011 and 2.7 percent in 2012. In 2010, the main drivers of economic growth included rising commodity prices as well as the strengthening of private and export demand, which contributed to 8.3 percent growth in exports by volume over 2009. Growth in 2011 is expected to be led by business investment, with personal consumption growing more slowly.

Canada's exports have been supported by rising commodity prices and the global (and particularly U.S.) economic recovery. Imports have also strengthened, as the rising Canadian dollar boosts purchasing power. Canada's current account deficit rose to 3.1 percent of GDP in 2010, but rising commodity prices improved Canada's trade balance in the first quarter of 2011.

The government has shifted its fiscal policy stance from stimulus to consolidation, targeting a balanced budget by the end of FY2014, down from a 2.7 percent deficit 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, but since then has remained unchanged. The Bank of Canada's target for inflation is 2 percent. Headline inflation rose to 3.2 percent in March 2011

on a year-over-year basis, in large part due to rising food and fuel prices, while core inflation remained contained at 1.6 percent.

Mexico

Mexico has a flexible exchange rate and employs an inflation-targeting monetary policy regime. On a real effective basis, the peso appreciated by 6.0 percent during 2010 and a further 2.8 percent in the first four months of 2011. Against the dollar, the peso appreciated by 5.7 percent during 2010 and 6.7 percent during the first four months of 2011.

Mexico's reserves increased by \$22.0 billion in the year ending March 2011, to a total of \$118 billion. Most of this increase was driven by foreign exchange inflows from the state-owned oil company Pemex. Mexico also has continued its 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 the central bank at the previous day's exchange rate any day in the month that the peso appreciates above its 20-day average. 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 April 2011, Mexico had not drawn on this line.

Real GDP expanded 5.1 percent in the fourth quarter of 2010. Growth for all of 2010 was 5.5 percent and the Mexican government forecasts growth of 4.3 percent for 2011. Mexico's recovery was initially reliant on external demand (particularly in the United States, which buys 80 percent of Mexican exports). During the second half of 2010, growth was driven largely by private consumption and investment. Oil production has been flat in 2010 and the first quarter of 2011, but manufacturing production rose sharply in the fourth quarter of 2010 and in the first quarter of 2011.

The central bank has maintained an accommodative monetary policy stance since the crisis, keeping its target interest rate at 4.5 percent since July 2009. Inflation has declined in recent months, reaching 3.0 percent on a year-over-year basis in March 2011, squarely in the middle of the central bank's target band (2.0-4.0 percent).

Mexico's current account deficit was 0.5 percent of GDP in 2010, its lowest deficit since 2006. Rising oil export prices have been offset to a large degree by the rising cost of gasoline imports from the United States, while strong manufacturing export growth has been offset by rising volumes and prices of commodities and other imports. Exports to the United States grew 22.4 percent in the second half of 2010, while imports from the United States grew 23.2 percent.

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 particular 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.