

# **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”).<sup>1</sup>

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<sup>1</sup>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 first half of 2011 and, where pertinent and available, data through mid-December 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 the Report.

The pace of U.S. economic growth slowed markedly during the first half of 2011, to just 0.9 percent at an annual rate, due partly to temporary factors, then picked up in the third quarter to a 1.8 percent annualized rate of growth. Private sector forecasters are projecting growth of 2.25 percent in 2012. Unemployment is still high at 8.6 percent, although 2.9 million private sector jobs have been added over the past 21 months. Boosting growth and creating jobs in the near term remains a key Administration priority. At the same time, the Administration is firmly committed to putting U.S. government finances on a sustainable trajectory. Significant deficit reduction was recently ensured by the Budget Control Act, which became law on August 2, 2011, but additional deficit reduction is clearly necessary to restore long-term fiscal sustainability.

Following modest global growth in the first half of 2011, driven principally by emerging market economies, rising financial stress in the euro area dampened the global outlook. Economic and financial stresses in the euro area have spread to some of its largest economies, with sharp increases in sovereign bond yields and indicators of banking stress. This has adversely affected credit, confidence, and growth in the euro area. Many private sector forecasters are now projecting negative growth over the next several quarters in some euro area economies.

Global financial markets are strongly interconnected. The deepening of Europe's crisis has already impacted global capital flows and the currency markets. Although most emerging market currencies appreciated against the dollar in the first half of 2011, in many cases that appreciation was more than unwound in the second half of 2011 as risk aversion increased. The European crisis remains a significant risk to the global recovery. Growth forecasts for 2012 have been repeatedly reduced. Consensus Forecasts in early December projected just 2.7 percent global growth in 2012, down from 3.2 percent projected in September.

This report reviews the exchange rate policies of ten economies accounting for 70 percent of U.S. foreign trade. Foreign exchange markets have functioned well and in an orderly manner over the past year despite broader turmoil in the global economy, and real effective exchange rates for the major advanced economies are in line with historic norms. All of the major advanced economies have fully flexible exchange rates, although in a notable change from recent practice, Japan twice announced it intervened unilaterally in the past year. Among major emerging market economies, a select few have more tightly managed exchange rates, with varying degrees of management. This Report highlights the need for greater exchange rate flexibility in these economies and most notably in China.

Over the past decade, China has resisted very strong market pressures for RMB appreciation. China's real effective exchange rate has exhibited persistent and substantial undervaluation, although the estimated range of misalignment has narrowed over the course of the past 18 months.

China held more than \$3.2 trillion in foreign exchange reserves at the end of September 2011 – with \$373.1 billion of foreign exchange reserves accumulated in the first three quarters of 2011. In the fourth quarter of 2011, reserve accumulation likely slowed significantly, and the RMB has at times traded at or near the bottom end of the trading band, as capital inflows to China and other emerging markets diminished, and as increased uncertainty about the global economy reduced market expectations of continued RMB appreciation against the dollar.

These recent events reflect the particular conditions and risks facing the global economy at this moment, as well as investors' expectations of likely Chinese policy responses, and are not an indication that the process of required adjustment has been completed in China. Slowing growth and diminished import demand in Europe has already begun to slow the exports of China and other emerging markets. Increased prices for China's commodity imports have also significantly reduced China's trade surplus.

Despite these short-term forces, the underlying factors that distort China's economy and constrain global growth remain. China continues to increase its global export market share, it remains heavily dependent on exports, and it has made little progress in making the required shift to domestic consumption. China's large foreign reserve accumulation has prolonged the misalignment in China's real effective exchange rate and hampered progress toward global rebalancing, including among economies that compete with China for exports.

While China's real exchange rate has appreciated, the process of appreciation remains incomplete. China's long-standing pattern of reserve accumulation, the persistence of its current account surplus and the incomplete appreciation of the renminbi, especially given rapid productivity growth in the traded goods sector, indicate that the real exchange rate of the renminbi is persistently misaligned and remains substantially undervalued.

It is in China's interest to allow the exchange rate to continue to appreciate, both against the dollar and against the currencies of its other major trading partners. A lack of continued appreciation by China would prevent the exchange rate from serving as a tool to encourage consumption so as to maintain strong, sustainable growth, further complicate the adjustment needed for broader financial sector reform, and undermine China's stated goal of strengthening domestic demand.

The Chinese leadership has identified shifting away from growth driven by exports toward a greater reliance on domestic consumption as a critical goal for sustaining growth in the medium term. At the G-20 Leaders Summit in Cannes in November, G-20 members, including China, committed to, "move more rapidly toward more market-determined exchange rate systems and enhance exchange rate flexibility to reflect underlying economic fundamentals, avoid persistent exchange rate misalignments and refrain from competitive devaluation of currencies." China also stated that its rebalancing actions "will be reinforced by ongoing measures to promote greater exchange rate flexibility to better reflect underlying economic fundamentals, and gradually reduce the pace of accumulation of foreign reserves."

Since the authorities decided in June 2010 to allow the exchange rate to appreciate, the renminbi has appreciated by a total of 7.5 percent against the dollar, as of December 16. Taking into account the

higher rate of domestic inflation in China than in the United States, the renminbi has appreciated against the dollar on a real, inflation-adjusted basis by nearly 12 percent since June 2010 and nearly 40 percent since China first initiated currency reform in 2005.

Based on the ongoing appreciation of the renminbi against the dollar since June 2010, the decline in China's current account surplus, and China's commitments at the G-20 and the U.S.-China Strategic and Economic Dialogue (S&ED) asserting that it will continue to promote faster RMB 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.

Nonetheless, in light of the persistent misalignment of the RMB at a substantially undervalued level, Treasury assesses that movement of the RMB to date is insufficient and more progress is needed. Treasury will continue to closely monitor the pace of RMB appreciation and press for policy changes that yield greater exchange rate flexibility, level the playing field, and support a pronounced and sustained shift to domestic-demand led growth.

## **Introduction**

This Report focuses on international economic and foreign exchange developments in the first nine months of 2011. Where pertinent and when available, data and developments through mid-December are included.

Exports and imports of goods to and from the areas whose economies and currencies are discussed in this Report accounted for 70 percent of U.S. merchandise trade in the first ten months of 2011.

## **U.S. Macroeconomic Trends**

Real GDP grew by 3.1 percent during 2010, but the ongoing recovery slowed markedly during the first half of 2011 as a number of temporary factors weighed on economic activity (most notably the Japanese earthquake and tsunami). The pace of expansion picked up in the third quarter of 2011, led by stronger growth of consumer spending and business investment. Nonetheless, the unemployment rate remained elevated, and the housing sector continued to be a point of weakness. Home sales and residential construction have been held back by a number of factors, including excess supply, relatively tight lending standards, uncertainty about future house prices, and the high level of unemployment. Still, food and energy price inflation has moderated in recent months, which should provide some support for consumer purchasing power and relieve pressure on business input costs.

The economy is expected to expand at a moderate pace through the end of 2012. A consensus of private forecasters expects real GDP to grow at a 2.7 percent annual rate in the fourth quarter of 2011 and at a 2.2 percent annual rate over the four quarters of 2012.

The deeper crisis now facing Europe, however, is a significant risk to the U.S. outlook as our recovery remains fragile and vulnerable to events abroad. A tightening of financial markets in Europe can adversely impact the willingness of U.S. banks to lend and invest. Our trade connections with Europe are broad and deep. It remains of critical importance to the U.S. and the global economy that Europe mobilize the resources needed to respond effectively to economic and financial stress.

### *U.S. Economic Growth Moderated in the First Half of 2011*

The Bureau of Economic Analysis's annual revisions to the national income and product accounts, released in late July, showed that the Great Recession was even more severe than previously estimated. From the GDP peak in late 2007 through the trough in June 2009, real GDP fell by a cumulative 5.1 percent (revised down from a 4.1 percent decline). Growth was slower in 2008 as well as 2009, reflecting weaker consumer spending and business investment.

The economy began to grow again in the second half of 2009, and over the four quarters of 2010, real GDP expanded by 3.1 percent. The pace of growth slowed sharply in the first half of 2011, to just 0.9 percent at an annual rate, as a number of temporary factors including surging energy prices, supply-chain disruptions stemming from the disaster in Japan, and poor weather early in

the year curtailed economic activity. The absence of these factors in the second half of 2011 set the stage for a stronger pace of growth and, in the third quarter, real GDP growth accelerated to a 1.8 percent annual rate.

Consumer spending strengthened in the third quarter, rising by 1.8 percent at an annual rate, following a tepid 0.7 percent gain in the second quarter. Business fixed investment also grew at a faster rate, accelerating to a 13.0 percent pace from 9.2 percent in the second quarter. The pickup reflected stronger growth of equipment and software spending. Growth of outlays for nonresidential structures moderated in the third quarter, but was still relatively strong. Even so, the level of investment in business structures remained very low, at just 10 percent above the 33-year low recorded in early 2010.

Residential investment edged higher in the third quarter, but made very little contribution to real GDP growth. Housing activity has been essentially neutral for growth since mid-2009, shaving 0.03 percentage point per quarter, on average, off of real GDP growth from the third quarter of 2009 through the third quarter of 2011. In the previous four years, residential investment reduced growth by an average of 0.8 percentage point per quarter.

Private domestic final demand (the sum of consumer spending and private fixed investment) accelerated sharply in the third quarter to a 3.4 percent annual rate, from just under 2 percent in the first half of the year. Trade was also a bright spot in the third quarter, as exports once again grew faster than imports. The resulting decline in the net export deficit contributed 0.4 percentage point to real GDP growth.

The pickup in underlying private demand and improvement in the trade balance was partly offset by a marked slowdown in private inventory accumulation, which subtracted 1.4 percentage points from third-quarter real GDP growth after trimming 0.3 percentage point from growth in the second quarter. Government purchases edged down at a 0.1 percent annual rate in the third quarter as a 2.1 percent increase in Federal government outlays was slightly more than offset by continued cutbacks at the state and local level.

### *The Housing Sector Remained Weak*

Housing activity remained very weak during the first three quarters of 2011. Housing starts averaged 592,000 at an annual rate through October — a modest improvement compared to the 585,000 starts averaged over all of 2010. Nevertheless, single-family home building remains close to a historically low level. Despite record low mortgage rates and a near-record level of housing affordability, home sales remained depressed. Sales of new single-family homes through October averaged 302,000 at an annual rate, putting them on track to hit a new annual all-time low in 2011.<sup>2</sup> Sales of existing single-family homes averaged 4.36 million at an annual rate through October 2011, up just 1 percent from 4.31 million in 2010, the worst year on record for single-family home sales (dating back to 1968).

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<sup>2</sup> The data series started in 1963.

Housing demand remains constrained by relatively tight lending standards, uncertainty about future home prices, and the high level of unemployment. While the inventory of homes available for sale has fallen a great deal over the past several years, it is still very high relative to sales. At the end of October there was a 6.3-month supply of new homes on the market, roughly in line with the long-term average. However, the supply of existing homes available for sale (94 percent of all home sales) was still elevated at an 8.0-month supply level; nearly double the average level that prevailed prior to the housing bubble. In addition, there is a large shadow inventory of homes (either in foreclosure or with mortgages more than 90 days past due) with the potential to add significantly to the number of homes available for sale in the future. The overhang of homes on the market has held back new construction and put downward pressure on house prices. House price measures have shown signs of stabilization in recent months but continued to decline on a year-over-year basis. The S&P/Case-Shiller 20-city house price index fell 3.6 percent below its year-earlier level in September. The FHFA house price index fell 2.2 percent over the year ending in September.

#### *Labor Market Conditions Continued to Improve*

The strength of the labor market recovery waned during the summer but has more recently shown signs of improvement. On average, nonfarm payrolls increased by 132,000 per month in the first eleven months of 2011, up from a monthly average of 78,000 in 2010. Nearly 2.5 million jobs have been created since February 2010, including 2.9 million in the private sector. The unemployment rate fell a full percentage point between November 2010 and March 2011 to 8.8 percent, but edged higher in subsequent months and remained just above 9 percent until recently. In November, the unemployment rate fell 0.4 percentage point to 8.6 percent – the lowest since March 2009. Despite these gains, private employment is still 5.9 million lower than at the start of the recession in December 2007 and the unemployment rate is 3.6 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 percent, close to the record level of 45.6 percent posted in May 2010.

#### *Energy Prices Have Eased from Peaks Earlier in the Year*

Energy prices rose sharply earlier in the year, but moderated during the spring and summer. The front-month futures contract for West Texas Intermediate crude oil 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. The price of oil trended lower from late April through early October, dipping to a low of \$76 per barrel, but has since moved higher and in early December touched the \$100 mark. The retail price of gasoline has declined by more than 60 cents since mid-May to around \$3.30 per gallon.

#### *Core Inflation Accelerated but Remains Low*

Rising energy prices and a pickup in food price inflation pushed headline inflation measures higher in the first eleven months of 2011. Core inflation remained relatively subdued, however,



reflecting the large degree of slack in labor markets and low level of capacity utilization. The consumer price index rose 3.4 percent over the year that ended in November 2011, up from a 1.1 percent increase during the year that ended in November 2010. Core consumer prices (excluding food and energy) rose 2.2 percent over the year that ended in November 2011, compared to 0.8 percent over the same period a year earlier. Growth of compensation costs remained contained in the third quarter. The Employment Cost Index (ECI) for private-industry workers rose 2.2 percent over the year that ended in September 2011. Recent year-over-year gains in this measure are among the smallest in the 30-year history of the data series, as comparatively low growth in wages and salaries has offset more rapid increases in benefit costs.

### *Fiscal Consolidation is a Priority*

The U.S. economy has made important progress over the past two years, but the recovery is far from complete and still not proceeding fast enough to meaningfully bring down the unemployment rate. At the same time, the current fiscal trajectory is unsustainable. 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 the near term, however, the economy needs additional support. The scheduled expiration of the payroll tax cut and extension of unemployment benefits put in place last December, along with the continued fade-out of spending under the American Recovery and Reinvestment Act of 2009, is expected to be a substantial drag on the economy in 2012. Boosting growth and creating jobs in the near term remains an important priority for the Administration.

In early September, the President proposed the American Jobs Act, which would provide \$447 billion in targeted support for the economy next year. The measures included in this package were designed to increase household disposable income and private consumption, spur infrastructure investment, prevent hundreds of thousands of teachers from being laid off, and reform our unemployment insurance system to make it easier for the unemployed to get back to work.

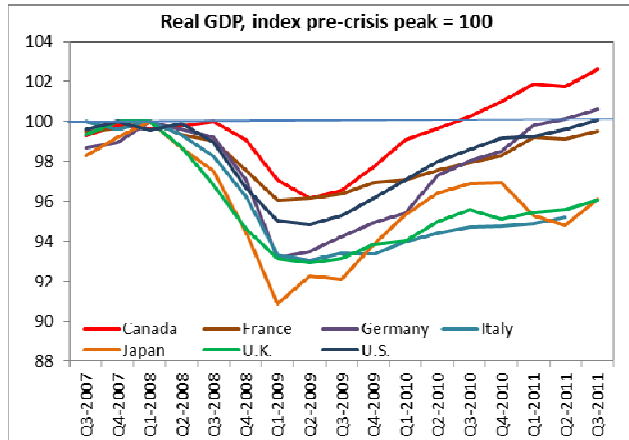
The President simultaneously called for deficit reduction that is large enough to stabilize the debt as a share of GDP. The Budget Control Act enacted in early August was an important first step in this direction. It put in place historic cuts in defense and domestic discretionary spending that will generate nearly \$1 trillion in savings over the next ten years. On September 19, the President proposed a comprehensive and balanced deficit reduction plan to offset the cost of the American Jobs Act and reduce the 10-year deficit by more than \$3 trillion, on top of the roughly \$1 trillion in spending cuts included in the Budget Control Act. The President's Plan for Economic Growth and Deficit Reduction would generate more revenue and reduce the rate of growth in health care spending, while protecting the government's investments in areas critical to economic growth and putting the economy in a stronger position to withstand future shocks. Under the President's plan, the deficit would fall to 2.3 percent of GDP in 2021; in the absence of any further deficit reduction, the deficit would be 4.7 percent of GDP in 2021. The plan would eliminate the primary deficit by 2017 and debt as a share of the economy would be on a declining path. In the absence of the deficit reduction called for in this plan, the debt-to-GDP ratio would rise to 86 percent in 2021.

## The Global Economy

Global growth was modest in the first half of 2011, driven principally by the emerging market economies. By the third quarter, however, the global economic outlook had started to deteriorate as strains in Europe's sovereign debt and financial markets increased and started to spill over into global markets. The euro area now faces the prospect of slipping into recession, with most forecasts projecting a fall in euro area output in the fourth quarter.

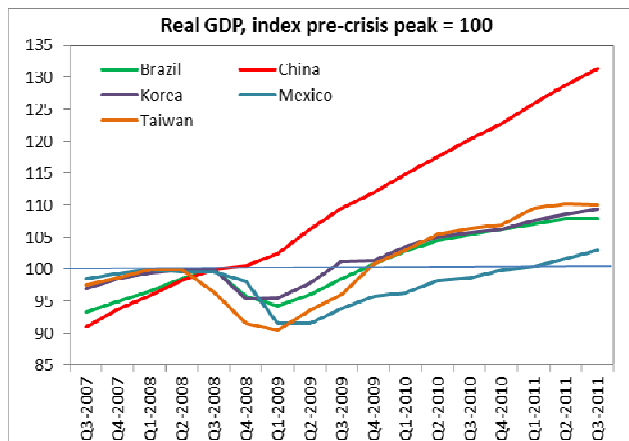
### *Moderate Growth in the First Half of 2011*

Most of the advanced economies (AEs) continued to recover in early 2011, although generally at a slower-than-optimal pace. By mid-year, among G-7 economies only Canada had moved from the recovery to expansionary stage (output above pre-crisis levels), as shown in the graph to the right. The Japanese economy, which had faltered in late 2010, was severely affected by the March 2011 earthquake and tsunami. The disaster also disrupted global supply chains, resulting in a drag on growth in many economies in mid-2011.



The slow pace of growth in most AEs has hindered the recovery of labor markets. Among the G-7, only Canada and Germany have seen employment expand beyond pre-crisis levels.

In contrast, the emerging market economies (EMEs) continued to grow at a brisk pace in early 2011. All of the EMEs covered in this report had moved from recovery to expansion (as shown in the second graph) by the beginning of the year.



Growth in these economies was supported by a recovery in global trade, accommodative macroeconomic policies, and strong capital inflows. Rapid growth combined with stimulative macroeconomic policies helped fuel inflationary pressures. These factors together with rising food prices led inflation to move upward in many EMEs. Starting in late 2010, central banks in several EMEs had begun to raise interest rates; they continued to do so into 2011. The combination of rising inflation and increased capital inflows made some EMEs reluctant to rely primarily on traditional monetary policy and exchange rate responses. Instead, they opted to rely more on the use of capital controls to dampen inflows and prudential measures to limit domestic credit growth.

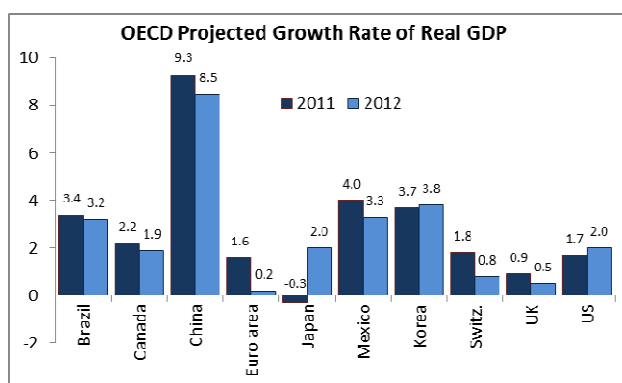
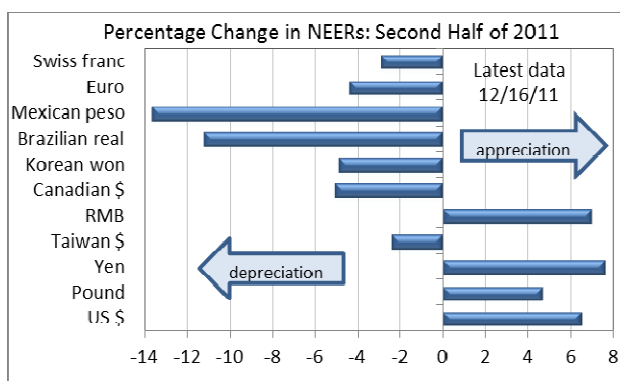
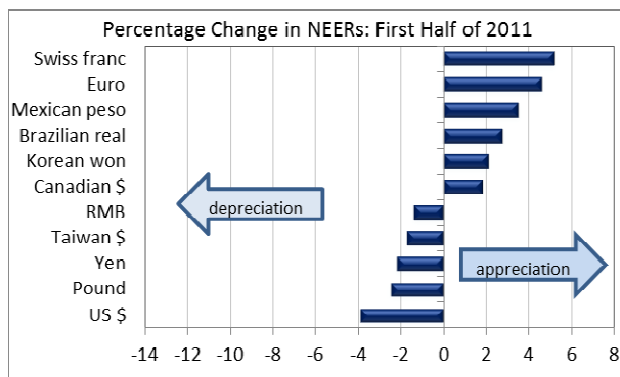
## Global Economic Growth Deteriorates in Second Half of 2011

By late summer, strong headwinds were buffeting the global economy. Economic and financial stresses in the euro area spread to some of its largest economies. Sovereign bond yields rose sharply in many countries. Many European financial institutions faced difficulties raising long-term financing in the market.

The associated rise in risk aversion resulted in a slowdown in capital flows to emerging markets and downward pressures on EMEs and other non-safe-haven currencies. This can be seen in the movements in effective exchange rates, as shown in the graphs to the right. All the currencies that had appreciated on a nominal effective basis in the first half of the year depreciated during the second half. The Swiss franc, which is typically a safe-haven currency and was under strong upward pressure, depreciated as a result of the actions by the Swiss National Bank to limit the currency's upward movement against the euro, as discussed later in this Report.

By the final months of the year, the global growth outlook had deteriorated significantly. This reflected the significant strains in Europe's financial markets, the increase in sovereign yields in some countries, deleveraging, and rapid slowing of growth which weighed further on fiscal finances in the affected economies. By late in the year, many private and public sector forecasts were projecting recessionary conditions in the euro area during late 2011 and into 2012. Projections for growth in most other economies were also lowered. Moreover, in nearly all countries, growth in 2012 is projected to be lower than in 2011, as shown in the November 2011 OECD projections. Consensus Forecasts in early December projected just 2.7 percent global growth in 2012, down from 3.2 percent projected in September.

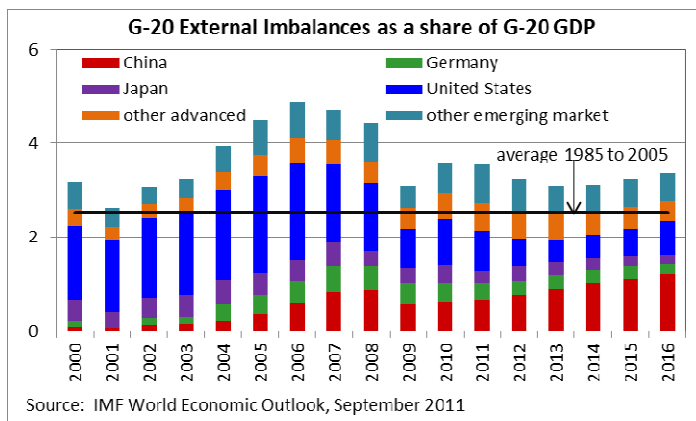
Uncertainty surrounding 2012 growth prospects also has risen. Without prompt policy actions, the combination of weak credit growth, slumping private sector confidence, and public sector expenditure reductions saps growth and has the potential to create a downward, self-reinforcing



spiral resulting in a return to a broader recession affecting more economies. On the upside, decisive, comprehensive policy actions to ward off contagion and restore confidence would limit the downside risks in Europe and help to secure the global recovery.

### Limited Progress Toward Global Rebalancing

At the Pittsburgh Summit in 2009, Leaders of the G-20 launched a Framework for Strong, Sustainable, and Balanced Growth. The goal of the Framework was to help ensure a better balanced global economy that was less prone to crisis. Two years later, there has been some rebalancing but most of this appears to be cyclical.



As shown in the chart, much of the decline in external imbalances has resulted from the narrowing of the U.S. current account deficit since 2006. China’s current account surplus also has fallen in the past couple of years, but imbalances are expected to rise over the medium-term in the absence of structural changes.

Other indicators also point to limited rebalancing. Recently, the IMF has been publishing estimates of real effective exchange rate misalignment for some currencies as part of the country’s annual Article IV consultation. These estimates are generally based on the methodology developed by the IMF’s Consultative Group on Exchange Rates (CGER), which uses three models to analyze the degree to which the real effective exchange rate deviates from its medium-term fundamentals. The three models are: the Macroeconomic Balance Model, the Equilibrium Real Effective Exchange Rate Model, and the External Stability Model.

IMF Estimates of Real Effective Exchange Rate Misalignment					
	Macro Balance	Equilibrium Real Exchange Rate	External Stability	Overall	Evaluation Date
Brazil	n.a.	n.a.	n.a.	overvalued	Fall 2011
Canada	7	3	3	n.a.	Fall 2010
China	-23	-3	-14	undervalued	Spring 2011
Euro area	n.a.	n.a.	n.a.	about 0	Fall 2011
Japan	7	1	-2	about 0	Spring 2011
Mexico	6	-11	-1	about 0	Spring 2011
Korea	n.a.	n.a.	n.a.	undervalued by about 10%	Spring 2011
Switzerland	2	14	-1	about 0	Fall 2010
Taiwan	n.a.	n.a.	n.a.	n.a.	n.a.
United Kingdom	-4	-2	1	about 0	Spring 2011
United States	n.a.	n.a.	n.a.	overvalued by 0 to 15 percent	Spring 2011

Notes: Estimates of misalignment are from the Article IV report for each economy except Brazil and the euro area. Estimates for these are from the Fall 2011 WEO. Taiwan is not an IMF member.

The table to the right presents the estimates, where available, for the currencies covered in this Report. The real effective exchange rates of the Brazilian *real* and U.S. dollar were estimated as overvalued. No overall estimate was provided for the Canadian dollar, but based on the three models it was close to medium-term fundamentals. The real effective value of the euro, the yen, the Mexican peso, the Swiss franc, and the pound sterling were judged to be in line with medium-term fundamentals. The Korean won and the Chinese renminbi were undervalued.

The CGER estimates point to a need for several major emerging market currencies to appreciate against the currencies of the advanced economies. The persistent undervaluation of some emerging market currencies hinders global rebalancing.

Another factor pointing to the undervaluation of key emerging market currencies and the lack of rebalancing has been the continued rapid accumulation of foreign currency reserves. The table to the right shows the dollar value of foreign currency reserves held by the economies covered in this report and the monthly addition to reserves in the pre- and post-crisis periods. In all economies, the monthly addition to reserves has risen. The increase is influenced by valuation gains and losses, as well as partly the result of passive accumulation, from the interest return on reserve holdings. For example, the United States added more reserves each month between February 2009 and July 2011 than in the pre-crisis period, yet has not intervened to purchase foreign currency. In most cases, however, the accumulation overwhelmingly reflects intervention in foreign exchange markets and in some cases an active intervention policy.

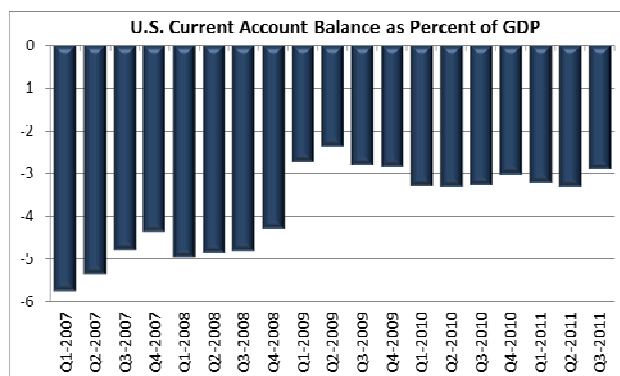
Foreign Currency Reserve Accumulation			
	Reserves \$millions	Monthly increase, \$ millions	
		Jan 2005 to Dec 2007	Feb 2009 to Jul 2011
China	3,245,283	25,846	45,973
Japan	1,071,531	3,622	3,151
Taiwan	400,766	788	3,675
Brazil	336,045	3,200	5,230
Korea	303,942	1,799	3,556
Switzerland	233,691	-275	6,564
Euro Area	213,687	542	940
Mexico	126,659	646	1,303
United States*	54,635	116	311
Canada	49,859	255	310
United Kingdom	7,353	-170	78
Global	10,195,736	81,666	107,991

The recent downward pressure on EME currencies, as a result of rising risk aversion and the deteriorating growth outlook, has tempered the pace of reserve accumulation. The reversal in EME exchange rates (as shown in the charts above) has been the most pronounced since the financial crisis. Not only have emerging market central banks not needed to buy foreign currency in order to prevent their currencies from rising, but many of the central banks have acted to slow the pace of depreciation by selling foreign currency. Preliminary data suggests that on a net aggregate basis, EME sales of foreign currency reserves were at their highest level in September and October 2011 since the height of the global financial crisis. Once this period of global financial stress has passed, reserve accumulation likely will return to its previous pace.

Conversely, this recent period of global risk aversion has put significant upward pressure on many advanced economy currencies. In the face of a deepening crisis in the euro area and large safe haven flows that had pushed the Swiss franc to a record high against the euro, Switzerland instituted a floor on its bilateral exchange rate with the euro. In addition, Japanese authorities announced they twice intervened unilaterally to stem pressure for yen appreciation.

## U.S. International Accounts

The U.S. current account deficit narrowed to 2.9 percent in the third quarter of 2011 after averaging 3.2 percent of GDP in the first half of 2011. The lower deficit was the result of continued improvements in the surplus in the services trade and on income, combined with a reduction in the merchandise trade deficit.



The dollar value of U.S. exports of goods and services in the third quarter of 2011 increased by 15.3 percent over the third quarter of 2010, while imports increased by 12.7 percent. In real, price-adjusted terms, exports increased 5.8 percent and imports increased by 1.9 percent.

<b>U.S. Balance of Payments and Trade</b>						
(\$ billions, seasonally adjusted unless indicated)	2009	2010	Q4-10	Q1-11	Q2-11	Q3-11
<b>Current Account</b>						
Balance on goods	-505.9	-645.9	-159.2	-182.2	-190.6	-181.8
Balance on services	124.6	145.8	40.5	42.3	44.4	46.2
Balance on income (including employee compensation)	128.0	165.2	39.9	52.7	56.9	58.3
Net unilateral current transfers	-123.3	-136.1	-33.4	-32.3	-35.4	-33.0
<b>Balance on current account</b>	<b>-376.6</b>	<b>-470.9</b>	<b>-112.2</b>	<b>-119.6</b>	<b>-124.7</b>	<b>-110.3</b>
<b>Balance on current account as % of GDP</b>	<b>-2.7</b>	<b>-3.2</b>	<b>-3.0</b>	<b>-3.2</b>	<b>-3.3</b>	<b>-2.9</b>
<b>Capital and Financial Account</b> (financial inflow = +)						
Net official assets	428.0	347.9	58.0	45.1	88.9	20.3
Net bank flows	-559.9	-337.9	-64.4	266.6	82.0	77.6
Net direct investment flows	-145.0	-115.1	-22.4	-60.7	-86.4	4.5
Net sales of securities	210.5	165.1	19.8	-9.4	45.9	-11.8
Net liabilities to unaffiliated foreigners by nonbank concerns	157.3	84.9	11.0	-53.0	31.3	-0.1
Other	155.0	109.3	27.4	-32.7	-127.1	93.5
<b>Balance on capital and financial account</b>	<b>245.8</b>	<b>254.1</b>	<b>29.3</b>	<b>156.0</b>	<b>34.6</b>	<b>183.9</b>
<b>Memo Items</b>						
Statistical discrepancy	130.8	216.8	82.8	-36.4	90.2	-73.6
Change in foreign official assets in the United States	480.2	349.8	57.8	48.8	95.1	24.4
<b>Trade in Goods</b>						
Exports of goods						
Agricultural products	93.9	107.7	30.6	32.0	32.1	30.7
Industrial supplies and materials (including petroleum)	307.7	406.2	109.7	124.2	129.1	134.0
Capital goods except autos	390.5	446.6	116.6	117.6	122.2	125.6
Automotive products	81.7	112.0	29.0	32.0	32.2	34.5
Consumer goods except autos and food	150.0	165.9	43.6	42.4	44.1	44.5
Other goods	45.7	50.3	13.2	13.2	13.4	13.4
<b>Total exports of goods</b>	<b>1,069.5</b>	<b>1,288.7</b>	<b>342.7</b>	<b>361.5</b>	<b>373.0</b>	<b>382.7</b>
Imports of goods						
Agricultural products	82.8	92.5	23.9	25.9	27.4	27.2
Industrial supplies and materials (including petroleum)	478.8	623.8	159.8	187.9	202.5	197.7
Capital goods except autos	372.7	450.0	119.9	123.4	128.6	129.2
Automotive products	159.2	225.6	58.6	64.0	58.2	66.8
Consumer goods except autos and food	432.5	486.6	125.2	128.7	131.4	128.8
Other goods	49.5	56.1	14.6	13.8	15.6	14.8
<b>Total imports of goods</b>	<b>1,575.4</b>	<b>1,934.6</b>	<b>501.9</b>	<b>543.8</b>	<b>563.6</b>	<b>564.5</b>
<b>Balance of trade in goods</b>	<b>-505.9</b>	<b>-645.9</b>	<b>-159.2</b>	<b>-182.2</b>	<b>-190.6</b>	<b>-181.8</b>

Source: Bureau of Economic Analysis (BEA).

Note: Current account + capital and financial account + statistical discrepancy = 0.

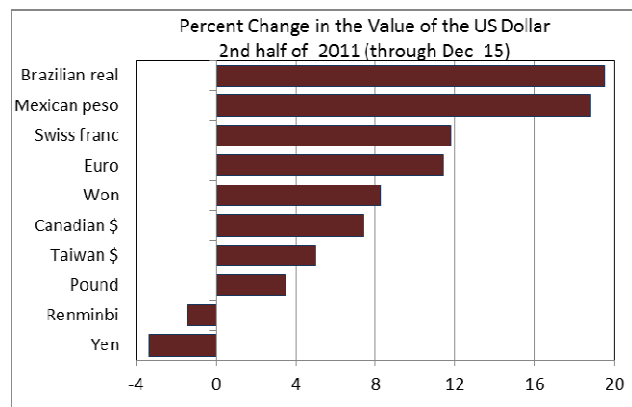
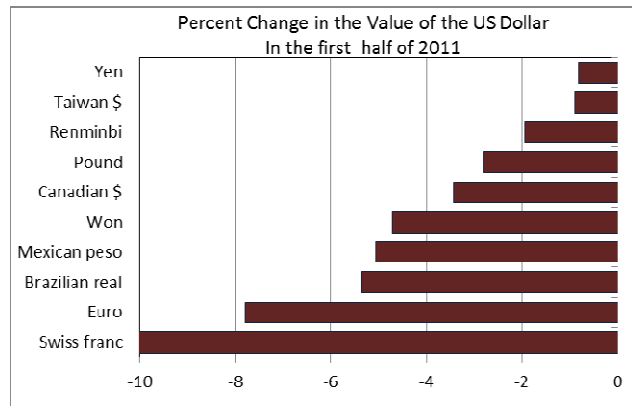
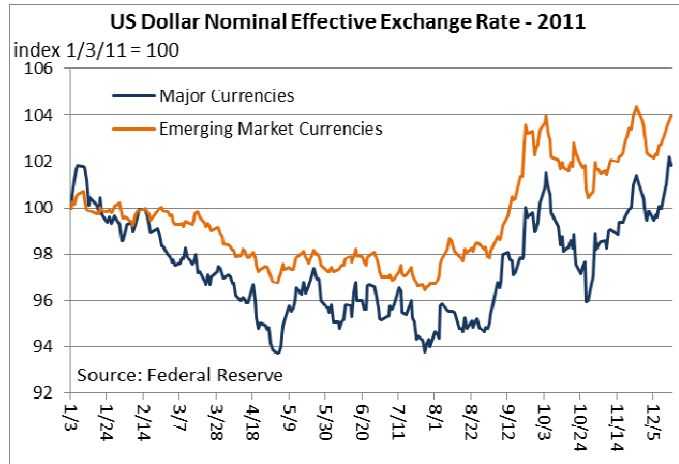
U.S. exports of goods and services have expanded strongly since the crisis, but imports have recovered more slowly. Exports surpassed their pre-crisis level in the fourth quarter of 2010 and, as of the third quarter of 2011, were 11.0 percent above pre-crisis levels. Imports, however, didn't surpass their pre-crisis peak until the second quarter in 2011 and by the third quarter were only 0.4 percent above pre-crisis levels.

### The Dollar in Foreign Exchange Markets

In 2011, the dollar's exchange rate has been affected by various factors including changes in interest rate policy expectations, and shifts in global risk appetite. On a nominal effective basis, it has depreciated by 1.1 percent against the major currencies, but is 3.4 percent stronger against the emerging market currencies.

In the first half of 2011, the dollar declined by 5.7 percent against the other major currencies and 3.2 percent against emerging market currencies. On a real effective basis, the dollar fell by 4.9 percent against other major currencies and 4.0 percent against emerging market currencies. By early August, the dollar began an upward trend that has continued through mid-December. The dollar appreciated by 6.8 percent against other major currencies between the end of June and mid-December 2011, and by 6.7 percent against emerging market currencies. On a real effective basis, the appreciation was 4.1 percent and 4.4 percent, respectively through November.

The shift in dollar sentiment can be seen more clearly by looking at its behavior against the other currencies covered in this Report during the two halves of the year. In the first half of 2011, the dollar depreciated against all the other currencies as a result of weaker growth prospects in the U.S. and as expectations for a slower pace of monetary policy normalization grew. At the same time, investors increased their expectations that the European Central Bank (ECB) would increase policy rates to combat rising inflation (e.g., the ECB had already increased its benchmark interest rate by 25 basis points in April and expectations were that future



increases were on the way), contributing to euro appreciation against the dollar despite ongoing concerns regarding the peripheral European sovereign debt crisis.

In the second half of the year, the dollar appreciated against all of the currencies discussed in this Report, with the exception of the Japanese yen and the Chinese renminbi. The reversal in the dollar's behavior from earlier in the year resulted from an increase in safe-haven demand in response to rising concerns of a global economic slowdown and ongoing stress in European debt markets.

By year's end, market participants were primarily focusing on the ongoing debt crisis in Europe and its potential to affect global economic growth as one of the key drivers of exchange rates.

## **Analyses of Individual Economies**

### *Asia*

#### **China**

The Chinese economy continued to expand rapidly in the first three quarters of 2011, growing by 9.4 percent year-to-date in real terms. Growth has slowed modestly over the course of the year. In the third quarter of 2011, China's economy expanded by 9.1 percent year-over-year in real terms, down from 9.7 percent growth in the first quarter. Most economic forecasters expect that growth will slow further, particularly if demand for Chinese exports weakens in advanced economies. In September, the IMF forecast Chinese real GDP growth of 9.0 percent for 2012, down from 9.5 percent in its June forecast, while the OECD now forecasts growth of 8.5 percent in 2012.

In 2010 and through much of this year, the increased policy priority China placed on controlling goods and property price inflation led China to tighten monetary and credit policy. The People's Bank of China (PBOC) increased the amount of reserves that large commercial banks were required to hold at the central bank, from 15.5 percent of total deposits at the beginning of 2010, to 21.5 percent as of November 2011, and provided guidance to banks to constrain the growth of lending. These measures were successful in reducing the rate of bank credit growth to 15.6 percent year-over-year by November 2011, from 19.9 percent in 2010. The inflation rate, however, remained high through much of 2011, reaching 6.5 percent in July – the highest rate since June 2008.

More recently, with inflation declining to 4.2 percent year-over-year in November, housing price increases in China tapering off, and external demand slowing, China has shifted toward loosening monetary policy. At the end of November, the PBOC announced a 50 basis point cut in the required reserve ratio for all banks, reducing the share of total deposits that large commercial banks are required to hold as reserves at the central bank to 21 percent.

The Chinese leadership has identified shifting away from growth driven by exports toward a greater reliance on domestic consumption as a critical goal for sustaining growth in the medium to long term. Actions by China, and other large surplus countries, to shift toward greater reliance



on domestic demand for growth are also fundamental to the success of the G-20 goal of assuring strong, sustainable, and more balanced global growth in the future.

China's 12th Five-Year Plan, adopted on March 14, 2011, and the Joint Fact Sheet of the U.S.-China Strategic and Economic Dialogue (S&ED) meeting in May 2011 also incorporated a number of specific and complementary targets to achieve the goals of increasing consumption and household incomes. At the S&ED, China committed to take steps to increase its domestic consumption, including raising household incomes at a pace faster than GDP growth, steadily increasing the minimum wage, and ensuring that wages keep up with increases in productivity.

China also pledged in its Five-Year Plan and at the S&ED to raise the share of the services sector in its economy by four percentage points over the next five years (an important element in expanding domestic consumption), and committed to further open its service sector to U.S. and other foreign participation. Finally, China committed to promote more market-based interest rates, which should raise household income and consumption. China's Five-Year Plan also aims to substantially expand the social safety net, continue price reform in the resource sector, and increase dividend payments by state-owned enterprises. These objectives all could contribute to the desired shift toward consumption-led growth, and could reduce China's dependence on exports and resource-intensive investment for growth.

Exchange rate adjustment is an inherent part of the rebalancing toward domestic demand growth that China hopes to achieve, something the Chinese acknowledge. At the November G-20 Leaders Summit, Chinese authorities stated, "These [rebalancing] actions will be reinforced by ongoing measures to promote greater exchange rate flexibility to better reflect underlying economic fundamentals, and gradually reduce the pace of accumulation of foreign reserves." G-20 members, including China, also stated, "We affirm our commitment to move more rapidly toward more market-determined exchange rate systems and enhance exchange rate flexibility to reflect underlying economic fundamentals, avoid persistent exchange rate misalignments and refrain from competitive devaluation of currencies," and that G-20 members, "welcome ... China's determination to increase exchange rate flexibility consistent with underlying market fundamentals." With the global economy continuing to face headwinds, it is important for China to follow through on these commitments effectively and promptly.

The close relationship between China's exchange rate policy and broader economic agenda also was highlighted by the IMF in their July 2011 "Article IV" consultation on China's economy. IMF staff indicated in the report that a stronger exchange rate was a key ingredient to accelerate the transformation of China's economic growth model. In a positive step, China agreed to publish the IMF's estimate of RMB undervaluation in the report. According to the IMF's three models, the RMB was estimated to be undervalued by 3, 14, or 23 percent depending on the model used.

China's current account surplus has fallen from 9.1 percent of GDP in 2008 to 5.2 percent in 2010. Preliminary data for the third quarter of 2011 indicated that in the first three quarters the current account surplus has narrowed to \$145.6 billion, equal to 3.0 percent of GDP, compared to \$203.3 billion and 5.1 percent of GDP in the first three quarters of 2010. Balance of payments data also indicate that, in the first three quarters of 2011, China experienced a merchandise trade

surplus of \$172.9 billion — slightly higher than last year in dollar terms, but falling from 4.3 percent of GDP in the first three quarter of 2010 to 3.5 percent of GDP this year.

Box: Costs of Rigid Exchange Rate Management

China's relatively inflexible exchange rate regime complicates efforts both to support growth and to rebalance and control inflation. Foreign exchange intervention to limit RMB appreciation increases the domestic money supply that the PBOC must absorb through sterilization to contain inflationary pressures. In addition to issuing bonds through open market operations, the PBOC has shifted some of the cost of this sterilization to the banking sector by requiring banks to hold a large share of their deposits as reserves paying negative real interest rates. The desire to compensate banks for the sterilization costs they bear as a result of China's currency policies has made it more difficult to liberalize deposit rates.

Low bank deposit rates mean that Chinese households earn very little on what is the largest component of their savings, and a declining amount in real terms, as interest earnings fail to keep up with inflation. This not only constrains the growth of household income, but forces households to save more to meet their financial goals. The IMF recently concluded that a rise in deposit rates would lead to an increase in Chinese household consumption, as Chinese households not only would see an increase in their income, but would be able to save less while still meeting their savings targets. The heavy reliance on administrative controls, combined with negative returns on household deposits, also encourages savings and credit to flow outside formal loan channels, complicating the PBOC's and banking regulator's tasks of managing financing conditions and strengthening financial supervision. Moreover the combination of low real lending rates and a quota on loans leads to an imbalance between the demand and supply of credit, with small and private companies largely bearing the brunt of credit rationing. As China pursues the rebalancing agenda in the 12<sup>th</sup> Five Year Plan, prompt progress on its stated objective of advancing interest rate liberalization could be particularly useful.

Weakness in demand from advanced economies and changing terms of trade have been significant contributors to the recent decline of China's current account surplus. Higher prices for commodity imports, for example, are an important reason why China's recent import price increases have outpaced export price rises, holding down the nominal trade surplus.<sup>3</sup> Weakness in demand in China's export markets has become more pronounced in recent months. Merchandise export growth slowed over the course of 2011 to 21 percent through November, compared to 31.3 percent in 2010, as export growth to China's major markets of the United States and the European Union fell to 14.8 percent and 15.1 percent, respectively. At the same time, China's imports rose by 38.7 percent in 2010 and by 26.3 percent in 2011 through November, reflecting continued high levels of Chinese investment in addition to rising commodity prices.

Despite these short-term forces reducing China's current account surplus, the underlying factors that distort China's economy and constrain global growth remain. China continues to increase

<sup>3</sup>The rise in the monthly average of import unit values was 13.7 percent year-over-year in 2010, accelerating to an average of 14.8 percent over the first ten months of 2011, while export unit values rose an average of 2.4 percent in 2010 and 10 percent through October in 2011.

its global export market share, it remains heavily dependent on exports, and it has made little progress in making the required shift to domestic consumption. Given that the OECD expects growth in domestic demand in many of China's major export markets to continue to be slower than in recent global recoveries, sustaining strong growth both at home and in the world will require China to take policy measures to increase the growth of household consumption, including measures that will raise household incomes and give China's households sufficient confidence to spend a greater share of their incomes. Allowing RMB appreciation is a critical part of this process. A stronger RMB directly raises the purchasing power of Chinese households, encouraging greater household spending. It encourages domestic investment and production to shift toward sectors – including services sectors – that focus on meeting Chinese household demand. While exchange rate reform may not be sufficient in itself to bring about a rebalancing of the Chinese economy, rebalancing cannot take place without it.

From June 2010, when China moved off of its peg against the dollar, through December 16, 2011, the RMB appreciated by a total of 7.5 percent against the dollar. Because inflation in China has been higher than in the United States, the RMB has appreciated more rapidly against the dollar on a real, inflation-adjusted, basis reaching nearly 12 percent since June 2010 and nearly 40 percent since China first initiated currency reform in 2005.

Even though the RMB has appreciated against the dollar, pressures for further appreciation – from China's current account surplus, foreign direct investment (FDI), and net capital inflows – remained strong in the first three quarters of 2011. According to China's balance of payments data, China accumulated \$373.1 billion in additional foreign exchange reserves in the first three quarters of 2011 — \$88.8 billion more than the \$284.3 billion accumulated in the first three quarters of 2010. The rate of reserve accumulation slowed to \$92.1 billion in the third quarter of 2011 from \$143 billion in the second quarter; even so, this indicates that third quarter accumulation averaged about \$1 billion per day. The PBOC held more than \$3.2 trillion in foreign reserves at the end of September 2011, equivalent to 54 percent of China's 2010 GDP, or about \$2,400 for every Chinese citizen.<sup>4</sup>

These pressures have abated in recent months, as developments in Europe spurred an increase in global risk aversion, capital flows to emerging economies fell or even reversed, and market expectations that Chinese authorities will continue to allow RMB appreciation under these circumstances have declined substantially. As firms have adjusted their behavior in response to changes in expectations and investment positions in the RMB have been unwound, there have been days in which the RMB fell to the bottom of its trading band, and PBOC foreign exchange accumulation likely has slowed significantly during the fourth quarter of 2011.<sup>5</sup> China's real effective exchange rate (REER) – 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

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<sup>4</sup>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 \$3.7 trillion in foreign currency assets.

<sup>5</sup>A slowdown in growth of offshore RMB deposits and changing incentives for settling export and import transactions in RMB, due in part to changed expectations about the extent to which Chinese authorities would allow the RMB to appreciate, also may have reduced the demand for China's currency in its own foreign exchange market.

logistics, and increased investment in its productive capacity all suggest that the RMB should have appreciated significantly on a real effective basis. Yet, after China joined the WTO in 2001 the RMB REER depreciated substantially, falling over 17 percent from December 2001 to January 2005. The REER gradually began to reverse this decline as China initiated currency reform in mid-2005, but was still at a similar level in early 2010 as it was at end-2001. Over the past few months, the REER has appreciated more rapidly, but further progress is needed.

China's long-standing pattern of foreign reserve accumulation, the persistence of its current account surplus and the incomplete appreciation of the RMB, especially given rapid productivity growth in the traded goods sector, indicate that the real exchange rate of the renminbi is persistently misaligned and remains substantially undervalued, though the degree of this undervaluation appears to have declined recently. China's large foreign reserve accumulation has prolonged the misalignment in its real effective exchange rate and hampered progress toward global rebalancing, including among economies that compete with China for exports. It is in China's interest to allow the exchange rate to continue to appreciate, both against the dollar and against the currencies of its other major trading partners. A lack of continued appreciation by China would prevent the exchange rate from serving as a tool to encourage consumption so as to maintain strong, sustainable growth, further complicate the adjustment needed for broader financial sector reform, and undermine China's stated goal of strengthening domestic demand.

In addition to promoting domestic demand-led growth in China, greater RMB flexibility also would reduce incentives for excessive reserve accumulation by other Asian economies that are trying to maintain trade competitiveness vis-à-vis China. Thus, greater RMB flexibility would further promote a strong and sustained global recovery and remove distortions from the international monetary system.

While rebalancing the Chinese economy away from production of exports to provision of domestically consumed goods and services may create challenges in the short run for manufacturers that rely excessively on external demand, it is important to recognize that the longer the currency remains undervalued, the greater will be the misallocation of resources that will eventually have to be corrected.

## **Japan**

The yen foreign exchange market is one of the largest and most liquid in the world, accounting for about 19 percent of the roughly \$4 trillion in daily global foreign exchange transactions, according to surveys by the Bank for International Settlements (BIS). Japan maintains a floating exchange rate regime, but its authorities have intervened unilaterally on two occasions this year to limit yen appreciation. Since a joint G-7 intervention in March 2011 to steady disorderly market conditions following the Tohoku earthquake and tsunami, the yen has appreciated against the U.S. dollar and other currencies on repatriation flows and some renewed investor appetite for safe-haven assets, including the yen. Japanese authorities intervened on August 4, 2011, citing speculative and disorderly exchange rate movements, buying \$59 billion in foreign exchange. The yen depreciated by 3.5 percent against the dollar on the day of the intervention but quickly resumed its appreciation as investor demand for safe-haven assets continued, reaching a high of ¥/\$75.31 on October 31. The authorities intervened again on October 31, and monthly data released by the Japanese finance ministry for the period October 31 through November 28

indicates that Japan bought approximately \$116 billion in foreign exchange assets. The yen depreciated to ¥/\$79.5 on October 31 and has appreciated to ¥/\$77.9 as of December 15.

In 2011, through mid-December, the yen appreciated by 4.1 percent against the dollar. On a real trade-weighted basis, the yen has appreciated by 2.8 percent in 2011 through November, and by 5.1 percent since June. Despite this appreciation, the real value of the yen remains near its 15-year historical average. In its Article IV Report for Japan (June 2011), the IMF assessed the yen's real effective exchange rate to be broadly in line with economic fundamentals. Japan's foreign currency reserves increased by \$189 billion in 2011 through November. Reserves are now at \$1.22 trillion – the second-largest stock of reserves in the world behind China's \$3.2 trillion – as a result of valuation changes on existing reserve holdings, interest earnings, and foreign exchange intervention.

On October 21, the Noda Cabinet announced a package of measures to adjust to or take advantage of, rather than resist, yen appreciation, with a headline figure of ¥23.6 trillion (\$306 billion, or 5.0 percent of GDP). This overall figure comprises ¥2.0 trillion in fiscal spending measures and ¥21.6 trillion in financing measures such as loans provided by government-affiliated financial institutions. The package includes measures such as employment subsidy programs, SME credit guarantees, and the establishment of “special international strategy zones” designed to offer tax breaks and relaxed regulations to high-growth industrial sectors. It also proposes to use foreign reserves in expanding a recently-announced dollar lending facility through the Japan Bank for International Cooperation (JBIC) to promote overseas mergers and acquisitions.

The Japanese economy is recovering from the earthquake, tsunami, and nuclear power plant disasters in March. After consecutive declines in the first and second quarters of 2011, Japan's real GDP grew by 5.6 percent on a seasonally-adjusted annualized basis in the third quarter, driven by pent-up personal consumption and a recovery in exports with the restoration of earthquake-damaged supply chains. Reconstruction efforts are likely to provide a boost to growth in the fourth quarter and in 2012. Private consensus forecasts indicate that the economy will contract by 0.4 percent in 2011 and then grow by 2.1 percent in 2012.

Japan's fiscal outlook is highly strained. Since the earthquake, the Japanese Diet has passed roughly ¥15 trillion in spending (about 3 percent of GDP) in three supplemental budgets to fund earthquake reconstruction. Japan's government deficit widened from 3.2 percent of GDP in FY 2009 (April-March) to 8.0 percent of GDP in FY 2010. The deficit is expected to increase further in FY 2011 as a result of reconstruction spending. The IMF projects that the government's gross debt will reach 233 percent of GDP in 2011. 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 will be key to meeting Japan's commitment to contribute to the G-20 objective of strong, sustainable, and balanced global growth.

On the monetary side, deflation remains a serious concern. Core consumer prices (excluding food and energy) declined by 1.2 percent year-over-year in 2010, and have continued to decrease in 2011. In October 2010, the Bank of Japan (BOJ) committed to maintaining a “virtual zero

interest rate policy” until “price stability is in sight,” defined by the BOJ as a year-over-year increase in headline consumer prices ranging from 0 to 2 percent. On October 27, the BOJ expanded an asset purchase program established in October 2010 to “encourage the decline in longer-term interest rates and various risk premiums” from ¥15 trillion to ¥20 trillion. Headline consumer prices have been mostly negative since early 2009.

In the second quarter of 2011, Japan’s merchandise trade balance fell into deficit for the first time since the first quarter of 2009, at -\$15.6 billion, as exports slowed following production disruptions while imports increased due partly to higher commodity prices and demand for reconstruction materials. In the third quarter, the trade deficit narrowed to \$5.4 billion, as exports recovered from their post-earthquake drop in March and April. Japan’s current account balance has remained in surplus in 2011 to date, at 1.6 percent of GDP in the second quarter and 2.2 percent of GDP in the third quarter, due to relatively stable income from overseas investments. Japan’s bilateral trade surplus with the United States totaled \$49.9 billion in 2011 through September, up slightly from \$48.3 billion over the same period in 2010.

The unilateral Japanese interventions were undertaken when exchange market conditions appeared to be operating in an orderly manner and volatility in the yen-dollar exchange rate was lower than in, for example, the euro-dollar market. In contrast to the G-7 joint post-earthquake intervention in March, the United States did not support these interventions. It is worth noting that these operations took place at a time when foreign exchange market activity and risk aversion were being predominantly influenced by financial developments elsewhere in the global economy that were impacting all of the major currencies. Although the yen depreciated at the point of intervention, the exchange rate retraced its steps subsequently, leaving the yen dollar rate over four percent stronger than it was at the start of the year. Rather than reacting to domestic “strong yen” concerns by intervening to try to influence the exchange rate, Japan should take fundamental and thoroughgoing steps to increase the dynamism of the domestic economy, increase the competitiveness of Japanese firms – including those in utilities and services – and raise potential growth.

### **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 global financial crisis, the Korean authorities intervened heavily to support the won, which by the fourth quarter of 2008 had depreciated by 45 percent against the dollar from its 2007 peak. From early 2009 through 2010, as global risk sentiment improved and capital flowed back into emerging markets, Korean authorities intervened in the other direction to slow won appreciation, as well as to rebuild reserves, and the won remained well below its pre-crisis levels despite Korea’s strong economic recovery and the rebound in its current account as exports recovered faster than imports.

During 2011, Korean authorities have intervened on both sides of the market. During the first eight months of 2011, Korea’s foreign currency reserves rose by \$18 billion as the Korean authorities were net buyers of foreign exchange, except in March and June. In September, the authorities intervened to support the won, which had depreciated by 10 percent against the dollar and by 3.1 percent on a real trade-weighted basis in that month alone. The won’s sharp depreciation was due in considerable part to generally increasing risk aversion among global

investors and the unwinding of investment positions in emerging market currencies. In October, the won strengthened as capital inflows returned, appreciating by about 6 percent against the dollar.

Over the course of this year, through mid-December, the won has depreciated by 3.2 percent against the dollar. Compared to its 2006-2007 average, the won remains 21 percent weaker on a nominal basis against the dollar, as of mid-December, and 28 percent weaker on a real effective basis, as of November. According to estimates from the July 2011 IMF Article IV consultation with Korea, the won was undervalued by about 10 percent relative to its equilibrium level on a real trade-weighted basis.

After falling by about \$60 billion during the crisis, Korea's foreign exchange reserves have increased by about \$100 billion since the end of 2008 to \$301 billion in November 2011. The Bank of Korea (BOK) continues to be active in the forward market, and Korea's net long foreign currency/short domestic currency forward position reached \$62 billion in April 2011, compared to -\$11.1 billion in February 2009, and stood at \$38 billion in November. In the last few months, Korea has expanded swap facilities with Japan and China. On October 19, the BOK expanded an existing won-yen swap line with the Bank of Japan to \$30 billion and established a new \$30 billion swap line with Japan's finance ministry. On October 26, the BOK and the People's Bank of China agreed to double their existing RMB-KRW swap agreement to RMB 360 billion (\$56.7 billion), effective for three years.

Korea's current account surplus was \$5.4 billion (1.8 percent of GDP) in the third quarter of 2011, up from \$3.9 billion in the second quarter, as surpluses in goods trade and income widened. In 2011 through November, Korea's exports totaled \$509 billion, compared to \$422 billion over the first eleven months of 2010 and \$338 billion over the same period in 2007. Korea's imports are also at record highs on a nominal U.S. dollar basis, at \$479 billion in 2011 through November. Korea's trade surplus with the United States totaled \$11.4 billion in the first ten months of 2011, up from \$7.8 billion in the same period in 2010.

The Korean banking system entered the crisis heavily dependent on wholesale funding, much of which was borrowed externally. Korea's short-term external debt reached \$189.5 billion in the third quarter of 2008, before sharply declining to \$149.9 billion in the fourth quarter of 2008 as capital inflows reversed. Short-term external debt has declined further to \$138 billion as of the third quarter of 2011, and reserves are now more than double short-term external debt. Since late 2008, the Korean authorities have taken a number of measures to reduce short term external debt and the foreign exchange exposure of the financial system, including imposing caps on banks' issuance of foreign currency derivatives contracts; reinstating a withholding tax on foreigners' profits from Korean government bonds; and levying a tax on banks' overseas borrowing, with higher rates on short-term maturity debt. In July, the authorities banned firms from purchasing foreign currency-denominated bonds in the domestic market that would be converted to won. Most recently, the authorities have proposed taxes on foreign investors' profits from such bonds as well as from derivative products.

The South Korean economy has recovered strongly from the global financial crisis. Although GDP growth slowed to 3.6 percent year-over-year in the first half of 2011 and 3.4 percent in the

third quarter because of sluggish domestic demand, due to base effects and the strong expansion during 2009, Korea's real GDP has rebounded from its 2008 decline and is currently 9.4 percent higher than its pre-crisis level. Net exports and investment have been the main contributors to the Korean recovery. The government largely withdrew fiscal stimulus in 2010 and is targeting a return to fiscal balance by 2013. Meanwhile, the Bank of Korea has been cautious in tightening monetary policy, despite relatively strong inflationary pressures. Headline consumer price inflation has been at the upper range of or exceeded the BOK's 2-4 percent target range in the first three quarters of 2011, and most households expect inflation to remain above 4 percent over the next twelve months. Citing increased external risks, the BOK has put on hold further increases in the monetary policy rate, which now stands at 3.25 percent.

Over the past two years, the Korean authorities have been active in the foreign exchange market, and the won remains weak compared to its pre-crisis levels. The Korean authorities should limit their foreign exchange interventions to the exceptional circumstances of disorderly market conditions and adopt a greater degree of exchange rate flexibility.

### **Taiwan**

According to its 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 was little changed against the U.S. dollar in the first eight months of 2011, appreciating by 0.5 percent. Along with other emerging market currencies, the Taiwan dollar depreciated in September, falling by 5.0 percent against the dollar, and as of mid-December was 4.1 percent weaker against the dollar since the start of the year. The real effective exchange rate of the Taiwan dollar depreciated by 4.6 percent in the first 11 months of 2011.

Taiwan's real economic growth has begun to decelerate from 2010's rapid pace of 10.8 percent. Real GDP rose by 9.8 percent at an annual rate in the first quarter of 2011 but growth slowed to 2.4 percent in the second quarter before turning negative in the third quarter, when the economy contracted by 0.6 percent, as investment declined and export growth weakened. Monthly indicators suggest that a further slowdown in manufacturing, exports, and consumption is likely, with exports growing by just 1.3 percent year-on-year in November. On December 1, the authorities unveiled a fiscal stimulus plan to increase investment in public infrastructure projects and boost employment. The authorities expect real growth of 4.5 percent overall in 2011.

Headline inflation remains low; consumer prices increased by 1.0 percent year-over-year in November. Government price and administrative controls have partially offset rising imported commodity and fuel prices. On June 30, the central bank raised its target rediscount rate by 12.5 basis points to 1.875 percent, the fifth hike since June 2010. The central bank cited rising inflation expectations and high global commodity prices for its decision, while noting uncertainties about U.S. growth and the debt crisis in Europe as downside risks. On September 29, the central bank made the decision to keep its target rate unchanged. 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 in the first half of 2011 to 7.4 percent of GDP from 9.4 percent in 2010, due in part to higher commodity import prices. The current account surplus increased to 9.9 percent of GDP in the third quarter as imports declined by more than exports and the services surplus rose. The financial account recorded outflows of \$19.2 billion in the first three quarters of 2011, including an outflow of \$11.6 billion in the third quarter driven by a large-scale shift out of domestic stocks by foreign investors. Taiwan's foreign exchange reserves increased by \$18 billion to \$400 billion during the first six months of 2011, before declining by \$12.4 billion to \$388 billion at the end of November. Taiwan's foreign exchange reserves amount to more than 83 percent of GDP, 17 months of imports, and 3.7 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, as risk aversion associated with financial stresses in the euro area ebbs and flows. Attractive interest rate differentials drove the euro higher against the dollar in the first four months of 2011, with the euro appreciating 9.7 percent. Amid heightened concerns about sovereign debt sustainability, the appreciation has been reversed, with the euro recording a 7.8 percent appreciation against the dollar in the first half of the year but an 11.4 percent depreciation in the second half of the year through mid-December. On a real effective basis, the euro appreciated by 3.4 percent in the first half of 2011, but depreciated by 2.1 percent in the second half of 2011 through November.

The euro area economic recovery continued in the first quarter of 2011, as the economy expanded by 3.1 percent on an annualized basis, with private consumption, government consumption, and net exports all contributing to growth. The rebound proved short-lived, however, as growth slowed in the second and third quarters to 0.6 percent on an annualized basis. While the recession in several of the euro area program economies has been a drag on the Europe's growth for some time, the recent loss in momentum has been more broad-based: French growth averaged an annual rate of 0.7 percent over the past two quarters, Italy mustered only a 0.9 percent annual rate, and Germany a modestly-better 1.5 percent. Growth in the euro area in the fourth quarter of 2011 is now expected to be negative, as risk aversion has risen, and strains in Europe's sovereign debt and financial markets have deepened. The European Commission forecasts euro area GDP to contract by 0.1 percent on a quarter-on-quarter basis in the fourth quarter and to register an anemic 1.5 percent growth rate for 2011 overall.

The euro area's current account has been close to balance over the past two years. The current account deficit averaged 0.5 percent of GDP in 2010 and through the first three quarters of 2011. Despite the near balance in the euro area current account, substantial imbalances remain among euro area countries. The Netherlands and Germany continued to run substantial current account surpluses in 2011, while 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 to reduce imbalances in the euro area.

Europe's crisis shifted the focus of fiscal policy to deficit reduction, even in those countries with moderate debt-to-GDP levels. Most of the major euro area economies have committed to reducing their general government budget deficits to less than 3.0 percent of GDP by 2013, and the German government announced that it would meet that target this year.

The EU Summit agreement on October 27 required banks to meet temporarily a higher minimum capital ratio. The Summit agreement on December 8-9 created a new fiscal compact and moved forward Europe's permanent crisis response vehicle, the European Stabilization Mechanism (ESM). The recent Summit agreements represent important steps forward. Continued financial market tensions and the scope of the related problems, however, signal that a stronger firewall is needed to provide a credible backstop for large, vulnerable countries and the financial sector.

The European Central Bank (ECB) continues to provide full allotments of liquidity against eligible collateral to euro area financial institutions. The ECB also has announced measures to enhance these efforts, including the re-activation of dollar swap lines with foreign central banks, the provision euros and U.S. dollars at longer maturities, a €40 billion covered bond purchase program, renewed purchases of sovereign bonds through its Securities Markets Program (SMP), and loosening eligibility criteria on collateral. Between the resumption of SMP activity in August and the middle of December, SMP purchases totaled €138 billion and are believed to be mostly Spanish and Italian sovereign bonds. After raising its main refinancing rate by 50 basis points earlier this year to 1.5 percent, the ECB's early-November policy meeting (the first under new ECB President Mario Draghi) led to a 25 basis point cut. Citing intensified risks to growth, the ECB reduced the main refinancing rate by an additional 25 basis points to 1.0 percent on December 8.

## **Switzerland**

The Swiss franc usually has been a freely floating currency, and the Swiss National Bank (SNB) sets monetary policy to keep inflation stable at around 2 percent. Appreciation of the franc, particularly against the euro, became an urgent concern for the SNB during the second quarter of 2011. The franc depreciated by 5.2 percent against the euro through early April, but reversed course thereafter, appreciating by 8.7 percent from April 8 to the end of June. Against the dollar the franc appreciated by 10 percent in the first half of 2011, and it appreciated by 7.0 percent on a real effective basis. The pace of appreciation of the franc against the euro accelerated in the third quarter, particularly as concerns about the crisis in Europe rose and risk aversion increased. Between the end of June and August 11, the franc appreciated very sharply, by 16.9 percent against the euro.

The SNB expressed increasing concern that the appreciation against the euro was having negative effects on the economy and raising deflation risks. Inflation was 0.2 percent in August, on a year-over-year basis, well-below the SNB's 2 percent target. The SNB responded to the appreciation by flooding the market with liquidity and driving interest rates to near zero. On August 3, the SNB lowered the upper limit of its target range for the three-month Libor to 0-0.25 percent (from 0-0.75 percent). On August 10, the SNB announced additional measures to increase liquidity and reduce the appreciation of the franc. These included pumping more liquidity into the Swiss money market and conducting foreign exchange swap transactions (a policy last used in late 2008). The franc nonetheless continued to strengthen.

On August 11, an SNB official said that a temporary peg to the euro was within the range of options that policy makers could use to stem the appreciation of the franc. These comments resulted in a 4.5 percent depreciation of the franc against the euro the following day. The franc continued to depreciate through August, but by early September started moving upward again. As a result, on September 6, the SNB announced that it was establishing a ceiling on the euro/franc exchange rate. The franc would not be allowed to appreciate beyond 1.20 francs per euro. The SNB said it was "... aiming for a substantial and sustained weakening of the Swiss franc," and was prepared to buy foreign currency in "unlimited quantities" to enforce the ceiling. Following the September 6 announcement, the franc depreciated by 7.9 percent against the euro, the largest one-day depreciation of the franc since the creation of the euro. Through mid-December, the franc had depreciated by 9.8 percent against the euro and 17.7 percent against the dollar, and the exchange rate had not breached the 1.20 franc threshold despite the lack of intervention indicated by Swiss foreign exchange reserves.

The circumstances prompting the actions by the SNB are unique to Switzerland. It is a small open economy that has been disproportionately affected by the financial stresses in Europe, resulting in disorderly movements in the exchange rate.

Switzerland's foreign exchange reserves rose by 6.9 percent (\$15.1 billion) in the first six months of 2011. In August, reserves rose by 35.5 percent to \$317 billion, reflecting the implementation of currency swaps and possibly direct intervention. Reserves subsequently declined during the next three months to reach \$252 billion by the end of November. The decline reflects the unwinding of currency swaps and the depreciation of the euro and is consistent with a lack of intervention to prevent the appreciation of the franc. The SNB typically does not sterilize its interventions.

Slower global growth, events in the euro area, and appreciation of the franc are beginning to take their toll on the usually robust export and services-driven economy. After posting 3.1 percent GDP growth in 2010, growth slowed steadily from an annual rate of 2.3 percent in the first quarter of 2011 to 1.3 percent in the third quarter, and a worse performance is forecast for the fourth quarter. GDP growth for the full year is forecast to be about 1.7 percent. Deflation remains a threat. Consumer prices fell by 0.1 percent in October on a year-over-year basis and by 0.5 percent in November.

### **United Kingdom**

The United Kingdom (UK) has a freely floating market-determined exchange rate. The pound was unchanged against the dollar in 2011 through early December. However, the currency appreciated by 6.6 percent through the end of April before giving up much of these gains to finish the first half of the year up 2.8 percent against the dollar. Since then, the pound has continued to depreciate against the dollar, falling by 3.5 percent in the second half of the year through mid-December, as recent surveys and data indicate that growth is weakening. On a real effective basis, the pound depreciated by 1.7 percent in the first half of 2011, but appreciated by 2.8 percent in the second half through November, reflecting the pound's nominal depreciation against other currencies excluding the dollar, notably the euro, and a continued positive inflation differential.

After contracting by 2.0 percent on an annualized basis in the fourth quarter of 2010 – due in part to the temporary effects of bad weather – real GDP rebounded in the first quarter of 2011, growing by 1.6 percent. Growth slowed to 0.4 percent on an annualized basis in the second quarter, before recovering in the third quarter to 2.0 percent. The recovery has been weighed down this year as consumption, investment, and exports – which previously buoyed the economy – have fallen sharply. As a result, the UK’s Office of Budget Responsibility (OBR) recently lowered its growth forecasts from 1.7 percent to 0.9 percent for 2011, and from 2.5 percent to 0.7 percent for 2012. The UK’s current account deficit narrowed to 0.5 percent of GDP in the second quarter of 2011, down from 1.1 percent of GDP in the first quarter and 2.5 percent of GDP in 2010, as falling imports improved the trade deficit.

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 2010, was originally projected by 2014-15 to: 1) bring the cyclically adjusted current budget into balance; 2) reduce the budget deficit to 3.0 percent of GDP; and, 3) put the gross debt-to-GDP ratio on a declining path. Under updated OBR growth forecasts, the government will not meet the first two objectives until 2016-17, and debt-to-GDP will not start to fall until 2015-16.

Monetary policy remains accommodative. The Bank of England (BOE) has maintained its historically low policy rate at 0.5 percent and, at its October meeting, increased the size of its quantitative easing program to £275 billion from £200 billion, citing the weaker global environment, renewed bank funding strains, and ongoing drag from both weak real household incomes and fiscal tightening. Inflation has remained above the BOE’s 2.0 percent target for close to two years and has been driven primarily by rising energy and import prices and increases in the value-added tax in 2010 and 2011. The BOE expects inflation to decline next year as these effects diminish.

## ***Western Hemisphere***

### **Brazil**

Brazil operates under a floating exchange rate regime, although the central bank intervenes regularly and controls on capital inflows became increasingly important in the first half of the year as the authorities attempted to contain appreciation of the *real*. The *real* appreciated by 5.4 percent against the dollar in the first half of 2011 and reached its highest level against the dollar in over a decade at the end of July before a sharp depreciation in September. For the second half of the year, through early December, the *real* has depreciated by 19.5 percent against the dollar. The real effective exchange rate followed a similar pattern, with the *real* appreciating by 4.8 percent in the first half of the year but declining by 8.1 percent in the second half through November. In its fall 2011 World Economic Outlook (WEO), the IMF indicted that the real effective exchange rate of the *real* was overvalued relative to its medium-term equilibrium value. The subsequent depreciation likely has lessened the overvaluation.

Preventing significant appreciation of the *real* was a priority for the Brazilian government in the first three quarters of this year. Central bank intervention focused heavily on purchases of

dollars in spot markets for foreign exchange. Through the end of September, the central bank's purchases of dollars in spot markets averaged \$5.3 billion per month. Subsequently, in response to the significant depreciation of the *real* in September, the central bank sold dollars in the forward market for the first time in over two years. The central bank made only limited spot dollar purchases in September and did not intervene in the spot markets at all in October and November. Foreign exchange reserves increased by \$68.1 billion in 2011 through August but fell \$2.4 billion over the next three months. At the end of November, reserves were \$342 billion.

Brazil implemented a series of measures to limit capital inflows and upward pressures on the exchange rate in the first half of the year, which are starting to be unwound given the economic slowdown and recent weakening of the *real*. Through July 2011, the authorities repeatedly broadened the scope of the six percent financial operations tax (IOF) on capital inflows and introduced additional measures to limit short U.S. dollar positions. Net financial inflows remained large for much of the year (averaging \$12.2 billion per quarter through September), but have decreased in the fourth quarter. In light of reduced inflows and *real* depreciation, the government removed the IOF (Imposto sobre Operações Financeiras) tax on equity inflows and long-term bond purchases in early December.

Strong economic growth of 7.5 percent in 2010 closed the remaining estimated output gap from Brazil's sharp but short recession in 2008-2009. Local analysts surveyed by the central bank now expect growth to be 3.1 percent in 2011. Strong growth in the first half of the year was led by household consumption growth, as a tight labor market has led to higher real wages. Growth slowed in the second half of the year, however, due to the lagged effects of monetary policy tightening and weakness in the industrial sector (partly explained by imports from abroad meeting an increasing share of private sector demand).

Inflation declined from 7.3 percent on a year-over-year basis in September to 6.6 percent in November, but remains above the upper limit of the central bank's target band of 4.5 percent  $\pm$  2 percent. High core and services inflation (7 percent and 9 percent, respectively) indicate excess demand and potential overheating. Nonetheless, after tightening monetary and fiscal policy during the first half of 2011, the central bank began cutting its policy rate in August by 50 bps for three consecutive months, bringing it to 11.0 percent in November, noting that the adverse global environment is likely to create significant external headwinds and disinflationary pressures.

Brazil's current account deficit narrowed from 2.2 percent of GDP in 2010 to 2.0 percent of GDP in the third quarter of 2011. Brazil's trade deficit with the United States rose to \$6.0 billion in the first half of 2011 from \$5.0 billion in the same period of 2010.

## **Canada**

Canada maintains a flexible exchange rate. The Canadian dollar appreciated by 3.4 percent against the U.S. dollar in the first half of 2011 but depreciated by 7.4 percent against the dollar in the second half of the year through mid-December. On a real effective basis, the Canadian dollar appreciated by 0.7 percent in the first half of the year but depreciated by 3.1 percent in the second half through November. The appreciation of the Canadian dollar during the first half of the year was supported by high commodity prices as well as the expectation that the Bank of

Canada would raise interest rates well ahead of the Federal Reserve. The recent depreciation reflects a reversal of commodity prices as well as a deterioration in Canada's economic outlook, driven largely by external factors.

The Canadian economic recovery continued in the first half of 2011. Real GDP expanded by 3.5 percent in the first quarter but fell by 0.5 percent in the second quarter. In the second quarter, domestic demand growth remained positive but Canada experienced a sharp decline in net exports, driven in large part by increased imports of capital goods. Exports to the United States, Canada's main trading partner, fell in the second quarter but rebounded in the third quarter. Overall growth was 3.5 percent in the third quarter and Canada's economic outlook is expected to track the U.S. economy in the near-term. The Bank of Canada forecasts growth to moderate to 2.1 percent in 2011 and 1.9 percent in 2012. In 2011, investment has been the main driver of domestic demand, as historically high commodity prices encourage greater production in Canada's resource-rich provinces. Personal consumption growth stalled in the first quarter but picked up again (modestly) in the second and third quarters. Going forward, authorities expect relatively high household debt levels to limit the pace of growth in personal consumption.

Exports were supported in the first half of 2011 by strong commodity prices, despite the second quarter decline in exports to the United States. Exports declined due to lower commodity prices in the third quarter. Imports have strengthened throughout the first three quarters of the year, as the rising Canadian dollar boosted purchasing power and as firms increased their purchase of capital goods to support rising investment. Canada's current account deficit widened to 3.6 percent of GDP in the second quarter and was 2.8 percent of GDP in the third quarter.

The government has continued fiscal consolidation in pursuit of overall fiscal balance by the end of FY2014, from a 2.7 percent deficit in FY2010. The Bank of Canada has maintained its policy rate at 1.0 percent since September 2010, citing subdued core inflation and, more recently, growing concern about the external outlook. The Bank of Canada's target for inflation is 2 percent. Headline inflation has decelerated to 2.9 percent on a year-over-year basis in October 2011, down from 3.7 percent in May, with core inflation of 2.1 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 0.5 percent during the first half of 2011 but declined by 11.1 percent in the second half of the year through November. Against the dollar, the peso appreciated by 5.1 percent during the first half of 2011 but fell by 18.8 percent during the second half of 2011 through mid-December on rising risk aversion.

Mexico's foreign reserves increased by 6.7 percent to \$123 billion in the first half of 2011. Most of this increase was driven by foreign exchange inflows from the state-owned oil company, Pemex. Mexico also continued its explicit strategy of reserve accumulation whereby the central bank auctions up to \$600 million in options per month to banks, which allows 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. On November 29, 2011, citing international developments and the need

to maintain the orderly functioning of the foreign exchange market, Mexico temporarily suspended its monthly option auctions. Mexican authorities also announced a temporary policy of auctioning \$400 million in foreign exchange on any day in which the peso depreciates by more than 2 percent from the previous day's close. 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 October 2011, Mexico had not drawn on this line.

Real GDP expanded by 2.3 percent in the first quarter of 2011 and by 5.2 percent in the second quarter. Private consumption and investment drove economic growth in the first half of 2011. Third quarter growth was 5.5 percent. Oil production was flat in 2010 and the first half of 2011, while manufacturing production has shown strong growth throughout most of 2011 (excluding the short-lived supply disruptions following Japan's earthquake).

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 was 3.5 percent in October on a year-over-year basis, in the upper part of the central bank's target band (2.0-4.0 percent). Core inflation was 3.3 percent in October, but is down somewhat from the previous year.

Mexico's current account deficit was 0.8 percent of GDP in the second quarter and 1.0 percent of GDP in the third quarter. 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 by 9.1 percent during 2011 through October, while imports from the United States grew by 18.7 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. Current weights are given in the table to the right. For weights in all years see: <http://www.federalreserve.gov/releases/H10/Weights/>

**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, Special Drawing Rights (SDRs), and foreign currency (most of which is held in short-term government securities). The latter are used for intervention in the foreign exchange markets.

2011 Weights in the Federal Reserve Dollar Indexes			
Currency of	Broad Index	Major Index	OITP Index
Euro area	16.36	36.54	
Canada	13.23	29.56	
Japan	7.80	17.41	
Mexico	11.45		20.73
China	19.76		35.77
United Kingdom	3.54	7.91	
Taiwan	2.60		4.71
Korea	3.86		6.99
Singapore	2.04		3.69
Hong Kong	1.31		2.37
Malaysia	1.84		3.32
Brazil	2.07		3.74
Switzerland	1.68	3.76	
Thailand	1.45		2.63
Philippines	0.60		1.09
Australia	1.31	2.94	
Indonesia	1.11		2.01
India	1.78		3.21
Israel	1.09		1.97
Saudi Arabia	0.81		1.46
Russia	1.12		2.02
Sweden	0.84	1.88	
Argentina	0.57		1.03
Venezuela	0.40		0.72
Chile	0.78		1.42
Colombia	0.62		1.12

Source: Federal Reserve Board



**Intervention** – The purchase or sale of a country’s currency in the foreign exchange market by a government entity (typically a 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, and is, 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.