Report to Congress on International Economic and Exchange Rate Policies June 2007

This report reviews developments in international economic and exchange rate policies, focusing on the second half of 2006¹, and is required under the Omnibus Trade and Competitiveness Act of 1988 (the "Act")^{2,3}.

Major Findings:

- Global growth remains very robust. It increased to 5.4 percent in 2006, the fastest annual rate in over thirty years.⁴ The sustained increase in global growth primarily reflects the very strong performance in emerging market and developing countries.
- Global imbalances remain a key issue on the international agenda, and reducing these imbalances is a shared responsibility. Some rebalancing is underway and the U.S. current account deficit has fallen from its peak, but more needs to be done to rebalance global demand in a manner that sustains strong global growth.
- The U.S. economy is contributing to a healthy global economy. Growth is poised to pick up over the course of 2007. The fiscal deficit fell to 1.9 percent of GDP in FY2006, down from a recent peak of 3.6 percent in FY2004. The U.S. labor market remains healthy and core measures of inflation have stabilized or eased.
- Growth in Europe and Japan has been well above recent five-year averages. To rebalance global demand, Europe and Japan will need to implement further structural reforms and sustain and boost their respective paces of domestic demand growth.
- Several oil exporters have accumulated large current account surpluses. These countries can help sustain robust global growth by: (1) increasing expenditure on oil production capacity, (2) judiciously increasing spending to enhance potential growth and diversify economies, and (3) strengthening monetary policy management, where appropriate, by, among other things, moving toward more flexible exchange rates.
- China has achieved exceptionally rapid growth. However, its growth has become severely unbalanced dependent on exports and investment and characterized by very high savings, weak consumption, and an inflexible exchange rate.

¹ More recent significant developments are also discussed if information is available.

² The Act states, among other things, that: "The Secretary of the Treasury shall analyze on an annual basis the exchange rate policies of foreign countries, in consultation with the International Monetary Fund, and consider whether countries manipulate the rate of exchange between their currency and the United States dollar for purposes of preventing effective balance of payments adjustments or gaining unfair competitive advantage in international trade."

³ The Treasury Department has consulted with IMF management and staff in preparing this report.

⁴ See the IMF's *World Economic Outlook*, <u>http://www.imf.org/Pubs/FT/weo/2007/01/index.htm</u>. Forecasts of aggregate world GDP growth use purchasing power parity (PPP) weights.

- Heavy foreign exchange market intervention by China's central bank to manage the currency tightly has led to excessive accumulation of foreign exchange reserves and a quick increase in domestic liquidity. Rapidly expanding domestic liquidity increases the risks of overheating, a build-up of new non-performing loans leading to banking sector stress, and asset bubbles. These trends clearly increase the risk of a renewed boom-bust cycle, which would be quite harmful for the global economy.
- In addition to economic rebalancing within China, allowing the currency to adjust is a matter of international interest and responsibility, with critical implications for the smooth functioning of the world's trading system and the adjustment of global imbalances.
- China should not hesitate any longer to take far more vigorous action to rebalance its economy, promote immediate RMB movement to tackle the currency's undervaluation, and achieve far greater flexibility in the exchange rate regime.
- At the second session of the U.S.-China Strategic Economic Dialogue (SED) held on May 22 and 23, Chinese and U.S. officials discussed the Chinese government's reform agenda. Chinese officials emphasized the priority they place on continued implementation of reforms to address economic imbalances and to shift growth toward consumption and away from investment and exports. They also acknowledged the role of exchange rate reform in that process.
- The Department of the Treasury concluded that, although the Chinese currency is undervalued, China did not meet the technical requirements for designation under the terms of Section 3004 of the Act during the period under consideration. Treasury was unable to determine that China's exchange rate policy was carried out for the purpose of preventing effective balance of payments adjustment or gaining unfair competitive advantage in international trade.
- Even though the Treasury has not designated China pursuant to the Act, Treasury forcefully raises the Chinese exchange rate regime with Chinese authorities at every available opportunity and will continue to do so. China's exchange rate has been a prominent feature of the SED, G-7 discussions with China, and G20 and IMF Board deliberations.
- Treasury also concluded that no other major trading partner of the United States met the technical requirements for designation under the Act during the period.

U.S. Macroeconomic Trends

U.S. economic growth slowed in 2006 and early 2007, as the economy edged away from an unsustainably rapid rate of growth. The labor market remained broadly healthy with a low unemployment rate, steady job gains and solid real wage growth. Both headline and core measures of inflation stabilized or eased, in large part reflecting declining energy prices in the latter part of 2006, although headline inflation increased again as energy costs rose in early 2007. The Federal Reserve held its short-term interest rate target unchanged from July 2006 through May 2007 after having raised the federal funds rate at every previous policymaking meeting since mid-2004. With the economy moderating and inflation stabilizing, yields on longer-term securities declined. Most private forecasters predict that real GDP growth will remain below trend in 2007, with stable inflation and a modest increase in the unemployment rate.

Real GDP grew by 3.1 percent over the four quarters of 2006, matching the pace recorded during 2005. Growth slowed over the second half of 2006, however, to a 2.2 percent annual rate from a rapid 4.1 percent pace in the first half of 2006. Economic activity continued to moderate in the first quarter of 2007, with real GDP growth easing to 0.6 percent at an annual rate. Residential investment dropped sharply in the second half of 2006 and first quarter of 2007, accounting for a large portion of the moderation in overall GDP growth. Household consumption remained strong, however, rising by 3.8 percent at an annual rate between the second quarter of 2006 and first quarter of 2007, matching the pace averaged over the prior three years. Nonresidential investment declined at the end of 2006 but turned up slightly in the first quarter of 2007.

The decline in residential building activity has been holding down overall GDP growth since late 2005. Over the four quarters of 2006, residential investment fell by nearly 13 percent – the largest annual decline since 1990. Most of the drop occurred in the second half of 2006, subtracting 1.2 percentage points from annualized GDP growth in both the third and fourth quarters. In the first quarter of 2007, the housing sector reduced real GDP growth by nearly a full percentage point, slightly less than in the prior two quarters. Recent data suggest that the residential sector remains weak, but there are signs that the housing market is stabilizing. Housing starts have started to recover from the low levels recorded last fall, and sales of existing single-family homes (over 80 percent of the one-family market) edged higher in the first quarter. New single-family home sales also appear to have stabilized, but the overhang of all single-family homes for sale remains substantial. Private analysts expect that declining housing activity will continue to act as a damper on growth through late 2007.

Nonfarm payroll employment expanded by 88,000 in April 2007. Since the employment trough in August 2003, the economy has generated 7.9 million jobs, or 179,000 a month. The unemployment rate edged up in April to 4.5 percent but was still among the lowest jobless readings since mid-2001. Real hourly earnings for production workers rose by 1.2 percent during the twelve months ended in April. Real hourly earnings fell during 2004 and 2005.

Productivity growth has decelerated, reflecting slower output growth. Output per hour in the nonfarm business sector rose 1.7 percent at an annual rate in the first quarter of 2007 and was up just 1.1 percent over the past four quarters – notably less than the 2.8 percent pace since the business cycle peak in the first quarter of 2001. Growth of unit labor costs slowed to 1.3 percent over the latest four quarters from 3.4 percent during 2006.

Inflation eased at the end of 2006 as energy prices fell, and underlying price pressures remained relatively contained through the first four months of 2007, although energy prices rebounded. Headline consumer price inflation rose by 2.6 percent over the twelve months ended in April, down from a 3.6 percent gain in the year-earlier period. Energy prices increased 2.9 percent in the latest twelve-month period compared the 21 percent average year-over-year increase during the first half of 2006. Excluding both energy and food, core consumer prices advanced by 2.4 percent in the year ending April 2007, slower than the 2.9 percent gain posted over the year ending in September 2006.

At its most recent meeting in May, the Federal Open Market Committee (FOMC) left the federal funds target rate unchanged at 5.25 percent. The FOMC has maintained that rate at its current level since August 2006, which is the highest since March 2001. The FOMC raised the fed funds rate in seventeen straight hikes of 25 basis points each from June 2004 through June 2006.

Despite monetary tightening during that two-year period, long-term interest rates remained relatively stable. The level of the Treasury ten-year yield fluctuated between four and five percent from mid-2004 to early 2006. The ten-year rate rose as high as 5.25 percent in late June 2006 but has since eased to about 4.85 percent as of late May 2007. Mortgage rates have generally moved with the 10-year Treasury yield, remaining in a fairly narrow band around 5.8 percent from 2003 through 2005. Low mortgage rates pushed home sales to record levels in 2004 and 2005. Mortgage rates jumped sharply between mid-2005 and mid-2006 but have since retreated in line with the 10-year Treasury rate. In late May, the average interest rate for a 30-year fixed-rate mortgage was close to 6.4 percent, down from a recent high of 6.8 percent in July 2006.

The federal budget situation has improved notably in the past two years, with the deficit shrinking by half of the FY2004 estimate a full three years ahead of the Administration's FY2009 goal. The FY2006 deficit was \$248 billion, \$70 billion less than in FY2005. As a share of GDP, the deficit amounted to 1.9 percent in FY2006, down from a recent peak of 3.6 percent in FY2004 and below the 40-year average of 2.3 percent. Strong receipts growth has been largely responsible for the improved near-term federal budget situation, with receipts up nearly 12 percent in FY2006. At the same time, growth in outlays has remained subdued. The FY2008 budget sees steady improvement in the U.S. government's fiscal situation over the next five years. The deficit is projected to shrink each year through FY2011, averaging 1.1 percent of GDP over the FY2007-FY2011 period. A small surplus is projected for FY2012.

The Administration's most recent economic forecast, prepared in May 2007, projects moderate growth and inflation and continued low unemployment for the remainder of 2007. Real GDP is expected to rise by 2.3 percent during the four quarters of 2007, down from 2006, and 0.6 percentage point below the 2007 growth prediction in last November's forecast. The growth reduction for the year reflects the low growth that has already occurred; GDP rose 0.6 percent in the first quarter of 2007. Going forward, growth is likely to accelerate back to near-trend rates (about three percent). Some recent private forecasts see a sharp rebound in growth in the second quarter of 2007. Overall, the Administration projections for growth, inflation, and the unemployment rate are very similar to the private consensus. The Administration is projecting

headline consumer price inflation of around 3.2 percent for 2007, a faster pace than predicted last November. The higher inflation forecast reflects the rebound in energy costs during the first four months of the year. The Administration sees a modest increase in the unemployment rate in 2008, averaging 4.7 percent for the year.

World Economic Conditions

The global economy expanded 5.4 percent in 2006, its fastest annual growth rate in over thirty years. The IMF projects strong growth to continue at 4.9 percent in 2007 and 2008.⁵ The sustained increase in global growth from 2003 to 2006 primarily reflects strong growth in emerging market and developing countries, which have grown 4.8 percent faster on average than advanced economies over this four-year period. Importantly, growth of output per capita in emerging market and developing countries have averaged over six percent per annum the last four years, far in excess of the 2.2 percent average growth rate from 1989 to 1998.

Overall, the growth rate in developing and emerging market economies averaged 7.9 percent in 2006, fueled by very rapid growth in China and India. However, strong growth has not been limited to China and India. In developing Asia, excluding China and India, the IMF expects economic growth to average six percent in 2007 and 2008. Moreover, the benefits of healthy global economic growth are spread widely across all regions, including Africa, Emerging Europe, Latin America, and the Middle East.

Economic growth in both the Euro-area and Japan is expected to be in the neighborhood of two and one-half percent for 2007. For the Euro-area that is double the average pace of growth of the five years (2001-05). At 7.3 percent, unemployment is at a 15-year low in the Euro-area. The pace of growth in Japan has picked up and, at 2.2 percent in 2006, was nearly one percent faster than the 2001-05 average. Unemployment in Japan is at a nine-year low of 3.8 percent in April.

Lower oil prices in the second half of 2006 helped to alleviate some global inflationary concerns. In the early part of 2007, however, oil prices have risen once again to above \$60 a barrel. Nonenergy commodity prices also remain at or near all-time highs, with metals prices rising by 41 percent in the year through May 2007.⁶ Short-term financial conditions have tightened over the last six months with the European Central Bank (ECB) raising its overnight interest rate by 75 basis points to 4.00 percent and the Bank of Japan (BoJ) raising its reference rate by 25 basis points to 0.50 percent. Recent data suggest market participants expect that both the ECB and the BoJ will raise their respective official interest rates at least once more in 2007. Still, both real and nominal long-term interest rates in the advanced economies are relatively low, while interest rate spreads for riskier markets and assets remain near historic lows. Lower spreads presumably reflect less perceived risk due to less overall government debt, higher reserve coverage ratios,⁷ and improved economic growth in many emerging market economies. The weighted-average

⁵ See the IMF's *World Economic Outlook*, <u>http://www.imf.org/Pubs/FT/weo/2007/01/index.htm</u>; forecasts of aggregate world GDP growth use PPP weights.

⁶ The Commodity Research Bureau (CRB) Metals Index (a sub-index of five markets of the overall CRB commodity index, including: copper scrap, lead scrap, steel scrap, tin and zinc).

⁷ According to the IMF, the reserves to import ratio will reach 79.1 percent in 2008, after rising from less than 50 percent at the end of 2001 to 71.4 percent at the end of 2006. See Table 35 on page 269 in the Statistical Annex of the IMF's most recent *World Economic Outlook*, <u>http://www.imf.org/Pubs/FT/weo/2007/01/pdf/statappx.pdf</u>

spread that large emerging market countries pay on their external debt over 10-year U.S. Treasuries fell to near 150 basis points in early June 2007 from around 190 basis points in early November 2006.⁸

An important contributing factor to the low level of spreads on emerging market foreign currency debt is the large amounts of foreign exchange reserves that emerging markets, especially China and the oil producing countries, have accumulated in recent years. IMF data show official reserve holdings of emerging market and developing countries rose from \$802.5 billion at end-2000 to about \$3 trillion at end-2006, a nearly four-fold increase in six years (see below).⁹ IMF projections show reserves of these countries rising to \$4.3 trillion by end-2008. This figure does not include asset holdings of sovereign wealth funds (i.e., government-owned or -controlled investment funds that are not part of official reserves). Private sector estimates put the size of sovereign wealth funds between \$1 and \$2.5 trillion at end-2006, and many expect that they will grow substantially in size, along with official reserves, over the next few years (see Appendix 3).



International Reserves of Emerging Market and Developing Countries¹⁰ (Billions of U.S. Dollars)

Source: IMF WEO statistical appendix, Spring 2007

⁸ As measured by JP Morgan EMBI+ spread.

⁹ See Table 35 on page 269 in the Statistical Annex of the IMF's spring 2007 *World Economic Outlook*, <u>http://www.imf.org/Pubs/FT/weo/2007/01/pdf/statappx.pdf</u>. Counting advanced economies, total global international reserves were about \$4.8 trillion at year-end 2006.

¹⁰ This IMF grouping does not include the newly industrialized Asian economies of Hong Kong, South Korea, Singapore, and Taiwan.

Global imbalances (i.e., large current account deficits and surpluses) stabilized somewhat in 2006, with the U.S. current account deficit falling to 5.8 percent of GDP in Q4 2006 versus 7.0 percent in Q4 2005. A key part of the international strategy to reduce global imbalances is the rebalancing of global demand. To some extent there has been some demand rebalancing as weaker but more sustainable domestic demand growth in the United States was partially offset by stronger domestic demand abroad, especially in the Euro-area. Domestic demand growth in the Euro-area was 2.5 percent in 2006 (on a calendar year basis) and 2.3 percent (on a Q4/Q4 basis). However, both rates were less than GDP growth rates in the Euro-area, suggesting net exports continued to supplement overall Euro-area growth. Domestic demand growth also strengthened in Japan, but less substantially than in the Euro-area, and recent quarterly patterns have been both bullish and bearish. Japan's Q1 2007 GDP growth number was 3.3 percent (annualized), with only 1.4 percent of that coming from domestic demand.

Further efforts will be needed to rebalance global demand. That more needs to be done can be seen from the table below, which shows changes in domestic demand for the United States and for that of G-7 partners of the United States. In 2006 the pace of the partners' demand expansion increased by a weighted average of 0.6 percent¹¹ while in the U.S. demand expansion declined by 0.2 percent. However, current forecasts for 2007 suggest no growth offset from partners despite a further slowing in the U.S. And in 2008, if forecasts are correct, the growth gaps could once again widen. Without offsetting demand-driven growth from elsewhere, the goal of ensuring sustained overall global economic growth might be in jeopardy. To be sure, other countries, including China and other large surplus countries, and not just the United States' G-7 partners, need to boost their reliance on domestic demand-driven growth.

	2006	2007F	2008F
U.S. Domestic Demand	3.1	1.7	2.7
Change	-0.2	-1.4	+1.0
G7 ex-U.S. Domestic Demand	2.1	2.1	2.1
Change	+0.6	0.0	0.0

Domestic Demand Growth in U.S. and G7 ex-U.S.

Source: IMF WEO statistical appendix, Spring 2007 and Treasury calculations

¹¹ PPP weights.

The United States International Accounts^{12,13}

• U.S. Balance	of Payments
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U.S. Balance of Pay	ments	and T	rade					
(\$ billions, seasonally adjusted unless otherwise indicated)								
(******,******,***,***,***,***,***,***,		2006		05	2006			
			Q3	Q4	Q1	Q2	Q3	Q4
Current Account:								
Balance on Goods	-782.7	-836.0	-198.7	-212.5	-208.2	-210.9	-218.9	-197.9
Balance on Services	66.0	70.7	17.0	17.7	16.6	17.2	17.5	19.4
Balance on Income 1/	11.3	-7.3	7.8	-2.2	-2.6	-2.2	-5.5	3.0
Net Unilateral Current Transfers	-86.1	-84.1	-9.5	-26.2	-19.5	-21.9	-22.5	-20.2
Balance on Current Account	-791.5	-856.7	-183.4	-223.1	-213.8	-217.7	-229.4	-195.8
Balance on Current Account as % of GDP	-6.4	-6.5	-5.8	-7.0	-6.6	-6.6	-6.9	-5.8
Major Capital Flow Components (financial inflow +)								
Net Bank Flows	-8.9	-21.6	-7.0	17.6	-48.4	41.1	-6.0	-8.4
Net Direct Investment Flows	100.7	-65.3	74.8	52.3	-16.2	-0.6	-3.8	-44.7
Net Securities Sales	669.2	650.6	186.3	213.8	203.6	116.1	188.4	142.5
Net Liabilities to Unaffiliated Foreigners by Non-banking Concerns	-14.1	132.1	-9.2	-55.1	28.8	-6.1	46.2	63.2
Memoranda:								
Statistical Discrepancy	10.4	141.4	-72.2	-19.1	44.3	65.1	0.2	31.8
Change in Foreign Official Assets in the United States	199.5	300.5	34.0	71.9	75.7	75.9	78.4	70.5
Trade in Goods								
Balance	-	-836.0		_		-210.9		
Total Exports	894.6	1023.7	224.9	232.9	243.7	252.1	261.3	266.6
of Which:								
Agricultural Products	64.9			16.5	17.2	18.1	18.8	18.7
Capital Goods Ex Autos	362.7	-	90.6	96.1	99.9	102.1	104.0	108.1
Automotive Products	98.6		25.2	26.1	26.2	26.0	27.7	27.2
Consumer Goods Ex Autos and Food	115.7		29.1	30.0	31.1	31.4		33.9
Industrial Supplies and Materials 2/	233.1			59.0	63.8	68.9	71.3	71.7
Total Imports	1677.4	1859.7	423.7	445.4	452.0	462.9	480.2	464.6
of Which								
Petroleum and Products	251.9	302.6	67.3	73.2	72.3	79.5	84.4	66.4
Capital Goods ex Autos	379.2	-	95.8	97.5	100.9	103.7	107.3	106.6
Automotive Products	239.5	256.7	60.3	62.6	64.4	64.4	63.3	64.6
Consumer Goods Ex Autos and Food	407.3	442.9	101.0	103.8	106.0	107.5	112.2	117.1

1/ Including compensation of employees

2/ Including petroleum and petroleum products

Source: BEA, Bureau of Census

The U.S. current account deficit was \$850 billion (at a seasonally adjusted annual rate, or "saar"), or 6.4 percent of GDP, in the second half of 2006, compared with \$863 billion, or 6.6 percent of GDP, in the first half of 2006. Viewed over a longer period, the U.S. current account deficit increased, as a percent of GDP, from around zero in 1991 to over four percent in the fourth quarter of 2000. Then, after a cyclically induced narrowing in 2001, it resumed increasing to reach 7.0 percent in the fourth quarter of 2005, before easing from this peak in 2006.

¹² The IMF annually reviews U.S. economic performance and policies through the IMF Article IV surveillance process. The last Article IV surveillance review took place in July 2006. The IMF Article IV Staff Report and the results of the IMF Executive Board's discussion of the U.S. Article IV review can be found at http://www.imf.org/external/pubs/ft/scr/2006/cr06279.pdf. In addition, the IMF discusses U.S. economic policies and performance in the context of its twice yearly World Economic Outlook reports. These can be found at http://www.imf.org/Pubs/FT/weo/2007/01/index.htm.

¹³ This report was prepared before the June 8, 2007 publication of the annual revisions of U.S. International Trade in Goods and Services statistics. These revisions are generally small and do not affect the analysis of the report.

Although services constitute around 30 percent of U.S. exports of goods and services and around 15 percent of U.S. imports of goods and services, the balance of trade in services is relatively small, being around a four to eight billion dollars month surplus over the past several years, and is relatively stable, showing a slight upward trend. As a consequence, movements in the balance of trade in goods and services reflect, in the main, movements in the balance of trade in goods.

In the second half of 2006, the United States exported \$1,056 billion (saar) in goods and imported \$1,889 billion, with a resulting \$834 billion deficit on trade in goods.¹⁴ Exports of goods increased 6.5 percent in the second half of 2006 compared to the first half of 2006, while imports increased 3.3 percent. Imports are sufficiently large relative to exports that the gap between imports and exports narrowed only marginally, even with weak growth in imports.

Non-automotive capital goods constituted 40.2 percent of merchandise exports in the second half of 2006. Consumer goods constituted 24.3 percent, and non-automotive capital goods constituted 22.6 percent of merchandise imports. Petroleum and petroleum product imports accounted for 16.0 percent of merchandise imports. The value of petroleum and petroleum product imports as a percent of total merchandise imports has risen from 10.4 percent in the second half of 2003. The rise in the U.S. oil bill has been an important factor in the growth in the U.S. trade and current account deficits.

Canada, Mexico, China, Japan, Germany, and the U.K. remain the largest trading partners of the United States. Canada purchased 21.4 percent of U.S. exports, Mexico 12.7 percent, Japan 5.8 percent, China 5.5 percent, and the U.K. 4.2 percent in the second half of 2006. China accounted for 16.8 percent of U.S. imports, Canada 15.5 percent, Mexico 10.5 percent, Japan 8.0 percent, and Germany 4.7 percent in the second half of 2006.

Country	Exports Jul06-Dec06	Country	Imports Jul06-Dec06		
Total, All Countries (\$Bil)	531.0	Total, All Countries (\$Bil)	953.9		
	Percent of		Percent of		
	Total		Total		
Canada	21.4	China, Mainland	16.8		
Mexico	12.7	Canada	15.5		
Japan	5.8	Mexico	10.5		
China, Mainland	5.5	Japan	8.0		
United Kingdom	4.2	Germany	4.7		
Germany	4.1	United Kingdom	2.9		
Republic of Korea	3.1	Republic of Korea	2.4		
Netherlands	3.0	Taiwan	2.1		
Singapore	2.5	Malaysia	2.0		
Taiwan	2.2	France	2.0		
France	2.2	Venezuela	1.9		
Memo		Memo			
Euro-area	14.9	Euro-area	13.1		
OPEC	4.0	OPEC	7.8		

Source: Bureau of the Census

Prices of imported goods, not seasonally adjusted or "nsa", increased 0.9 percent in the year through the fourth quarter of 2006. Non-petroleum import prices rose 1.3 percent over this

¹⁴ Sums may not be exact due to rounding.

period, while petroleum import prices decreased 0.4 percent. Export prices rose 3.7 percent over this period. The most recent trough in import and export price inflation occurred roughly at the beginning of 2002. Since then non-petroleum import prices have risen 9.6 percent and export prices 14.8 percent.

Foreign demand for U.S. financial assets remains strong. A major item financing the U.S. current account deficit has been net private foreign purchases of long-term U.S. securities, which totaled \$950.5 billion in the twelve months ending March 2007.

Foreign investors owned \$2.1 trillion of Treasury securities at the end of 2006, or 51.9 percent of the public debt not held in Federal Reserve and U.S. Government accounts. This compares with \$2.0 trillion, at the end of December 2005. Foreign official institutions held \$1.3 trillion in Treasury securities at the end of June 2006, as they did at the end of June 2005. There are around \$20 trillion in U.S. securities of all kinds outstanding.

• Net International Investment Position

The U.S. net international investment position (NIIP) widened (with direct investment valued at the market value of owner's equity) to a minus \$2.5 trillion (20.4 percent of GDP) at the end of 2005, the latest date for which data are available, from \$2.4 trillion (20.9 percent of GDP) at the end of 2004. A \$1.1 trillion valuation adjustment, reflecting strong appreciation of foreign stocks relative to U.S. equity, offset almost all the \$785 billion widening attributable to financial flows and the \$394 billion widening due to exchange rate changes. The NIIP (with direct investment valued at current cost) was a negative \$2.7 trillion (21.6 percent of GDP) at the end of 2005 compared to a negative \$2.4 trillion (20.2 percent of GDP) position at the end of 2004.

The United States currently earns approximately the same amount on its foreign investments that it pays out on foreigners' investments in the United States, even though the value of foreigners' U.S. assets is around \$2.5 trillion greater than the value of the U.S.-owned foreign assets. Net earnings on direct investment have been large enough for many years to offset outflows of income payments on other forms of international investment, but the difference between the two has been narrowing and in 2006 net investment income turned into a marginal outflow. U.S. residents earned \$0.8 billion less on their investments abroad than they paid out on foreign investments in the United States in 2006; in 2005 they earned \$18 billion more on their investment abroad than they paid out on foreign investments in the United States.

The NIIP is a critical measurement in analyzing the sustainability of the current account deficit. A growing negative NIIP must stabilize as a percent of national output in the long-run, or it will become impossible to service the external debt out of current or future production. It is generally believed that a stable NIIP as a percentage of GDP requires that the balance on trade in goods and services be close to zero.¹⁵

¹⁵ The magnitude of the balance depends, among other things, on relative rates of return. For example, U.S. residents earn a higher rate of return on their foreign assets than residents of foreign countries earn on their U.S. assets. If this were to remain the case through the indefinite future, then the NIIP could stabilize with the United States running a deficit on trade in goods and services. There is, however, no clear reason for this advantage to

• Financial Markets and the U.S. Current Account Balance

A surplus on the capital and financial accounts is, by balance of payments accounting definition, the counterpart of a current account deficit. These flows finance that part of net capital formation that is equal to the excess over domestic saving. The growth of the U.S. current account deficit over more than a decade has been linked to high levels of domestic U.S. capital formation compared to domestic U.S. saving. There are counterpart developments throughout the world that are necessarily linked to this process, since the rest of the world must be running an aggregate current account surplus, or a deficit on their capital and financial accounts, when the United States is running a deficit on its current account.

A key feature in discussing global imbalances is the emergence, in the last decade, of a global saving glut, by which is meant that saving outside the United States has grown relative to investment¹⁶. Saving rates in many emerging market economies, especially those in Asia, are very high compared to investment rates, resulting in correspondingly large current account surpluses. These high saving rates, in turn, may be partly associated with the demographic consequences of aging and the need to save for retirement in the absence of well developed public pension systems, and also with the lack of well developed financial systems allowing consumers to diversify and hedge against risks (including through insurance products) or to borrow (for example, mortgages). With rising oil prices, large current account surpluses of oil exporting countries have reemerged. Ten major oil exporters¹⁷ had a combined current account surplus of over \$400 billion in 2006.

Investment rates across the globe have been dampened by a range of factors over the last decade, including low growth in some economies, the emergence of large service sectors which are less capital intensive than many industries, excess capacity after the Asia crisis and the bursting of the IT bubble, more efficient financial intermediation, and strong corporate profitability coupled with a low propensity to reinvest earnings.

An increasingly efficient and supportive international financial system permits those countries with an excess of saving to place the excess saving profitably in foreign assets, rather than forcing adjustments to bring saving and investment into closer equilibrium in individual countries. The pronounced tendency, over many years, of investors to prefer to invest in their home country has weakened significantly over the past decade.¹⁸

Financial markets have an indirect, but powerful, effect on current account balances. For example, if foreign demand for U.S. assets increases suddenly, asset prices – exchange rates, interest rates, equity prices, etc. – will change to ensure asset market equilibrium. At that point, the current account will not have changed and there will be no increased net transfer of assets to

continue indefinitely. The conclusion also depends on a number of technical assumptions, such as the rate of nominal growth of GDP being equal to the nominal rate of interest.

¹⁶ Described in Bernanke, Ben S., *The Global Saving Glut and the U.S. Current Account Deficit*, Remarks at the Homer Jones Lecture, St. Louis, Missouri, April 14, 2005.

¹⁷ Iran, Kuwait, Libya, Nigeria, Norway, Qatar, Russia, Saudi Arabia, United Arab Emirates, and Venezuela.

¹⁸ As described by former Federal Reserve Board Chairman Alan Greenspan in his speech, *Current Account*, to the Economic Club of New York March 2, 2004.

foreign investors¹⁹. However changes in these asset prices will affect imports, exports, saving and investment so that the current account balance will be reduced over time²⁰. As a current account deficit widens, there will be an increase in the net transfer of assets to foreign investors.

In practical terms, perceived high rates of return on U.S. assets, based on sustained strong productivity growth especially relative to that of the rest of the world, sound U.S. economic performance, a welcoming U.S. investment climate, and the deepest and most liquid capital markets in the world have all combined to attract foreign investment. In turn, sustained external demand for United States assets has allowed the United States to achieve levels of capital formation that would have otherwise not been possible, and robust growth in investment has been critical to non-inflationary growth of production and employment.

The U.S. Dollar

In the second half of 2006, the dollar depreciated vs. the euro by 3.2 percent to \$1.32, but appreciated vs. the yen by 3.9 percent to \$ 119. Until late November, the dollar traded in a \$1.25-1.28 range vs. the euro and gradually appreciated from \$114 to \$118.

The key factors in exchange rate movements in this period were shifts in market views regarding the relative outlook for economic growth and the monetary policy cycle in the United States and in other countries and a downward adjustment in market expectations regarding returns on U.S. assets relative to foreign assets. Capital outflows from Japan weighed on yen exchange rates, as did an increase in short-yen positions used to finance risk positions in other currencies and other asset classes. Geopolitical tensions were also a factor at times, but this was more evident in oil and gold prices than in exchange rates.

- The Federal Reserve raised the Fed funds target rate to 5.25 percent in June 2006 but did not adjust its policy stance further for the rest of 2006 and thus far in 2007. Subsequent U.S. economic data releases confirmed, on balance, that U.S. economic activity had moderated and that declines in housing construction and some manufacturing were pronounced. After a marked depreciation in the fall, the dollar was supported toward the end of the year when strong sales and manufacturing data prompted an improvement in investors' outlook for U.S. growth and a reversal of expectations for declines in dollar interest rates.
- The Bank of Japan (BOJ) raised its official policy rate to 0.25 percent in July 2006. At that time and for a while thereafter, Japanese economic data supported a view in the market that further rate increases were likely by year-end. However, market expectations regarding the extent and timing of BOJ rate hikes changed after several disappointing Japanese economic data releases late in the year, and the BOJ did not hike the rate again until February 2007. Yields on yen-denominated claims remained quite low relative to yields in other currencies and encouraged Japanese investors' demand for foreign assets. Evidence of increased use of short yen positions to finance long positions in other currencies accumulated throughout most of the third quarter of 2006. But in subsequent weeks there were signs that such positions

¹⁹ Or, if the U.S. current account were in surplus, there would be no decrease in the rate of foreign acquisition of U.S. assets.

²⁰ That is a current account surplus would narrow and a current account deficit would widen.

were being closed out amid reports of foreign central banks' interest in increasing their yen reserves and of increased Japanese official interest in monitoring yen-financed "carry trades."²¹

- After a sharp increase in May and June 2006, implied volatilities in major currencies and other asset classes eased to or near historical lows in the latter half of the year, and the low volatility environment favored risk positions financed in low interest rate currencies, notably the yen. Volatilities briefly turned higher in late November and early December before settling down again until late February. In late February and early March 2007 they again rose sharply as market participants became concerned, *inter alia*, about the risk of a rapid liquidation of yen-financed carry positions.
- The European Central Bank (ECB) raised its re-financing rate to 3.00 percent in August 2006 and indicated that further increases would be needed to forestall inflation risks in the Euroarea. There were hikes to 3.25 percent in October 2006, 3.50 percent in December 2006, 3.75 percent in March 2007, and subsequently 4.00 percent in June 2007. In fall 2006, Euroarea economic data, notably Germany's IFO business climate survey and Q3 GDP, allayed the market's summertime concern that Germany's impending corporate and consumer tax increases would hurt economic growth. Interest differentials between the United States and the Euro-area narrowed substantially throughout the second half of 2006.
- After mid-summer 2006, a number of other foreign central banks raised their interest rates one or more times before the end of 2006 and in some cases continued to do so in 2007. These interest rate increases tended to reinforce the market's sense that the monetary policy cycles in the United States and in other countries were diverging.



²¹ The "carry trade" is roughly the practice of borrowing in low nominal interest currencies to invest in the assets of currencies with higher nominal interest rates.

Country Analyses

Argentina

Argentina intervenes frequently in the foreign exchange market to manage the value of the peso and build international reserves. Since repaying Argentina's entire \$9.9 billion in IMF obligations in January of 2006, the central bank has more than rebuilt its stock of foreign reserves. At end-December 2006, reserves stood at \$32.0 billion, up \$13.5 billion from the post-IMF repayment reserve level of \$18.5 billion.

During the second half of 2006, the peso appreciated 0.6 percent in nominal terms, from 3.084 to 3.066 to the dollar. For the entire 2006 calendar year, the peso depreciated 1.3 percent, from 3.026 to 3.066 to the dollar. Argentina's real effective exchange rate depreciated 0.3 percent during the second half of 2006, due to depreciation of the peso against its non-U.S. trading partners.

The central bank continues to buy dollars actively in the foreign exchange market. It then partially sterilizes these purchases through the issuance of central bank paper. In order to rebuild reserves following its large repayment to the IMF, the central bank stepped up intervention in the second half of 2006, accumulating \$6.5 billion, a 17.7 percent increase, over the last six months of 2005. The increased dollar purchases in the second half of 2006 reflect changes in monetary policy that give the central bank greater freedom for intervention. In particular, the monetary program rules allow the central bank to target M2, instead of the monetary base. Despite the central bank's sterilization measures, M2 growth accelerated to nearly 14 percent in the second half of 2006 from just four percent over the first half of last year. Nominal interest rates on central bank repo transactions rose by 25 basis points in the second half of 2006 to 8.25 percent from 8.0 percent in the first half of 2006, but real interest rates remained negative with inflation at 9.8 percent in 2006.

Argentina's economy continued its rapid expansion in 2006, driven by strong growth of private investment in construction and durable equipment. Real GDP increased at a seasonally adjusted annual rate of 8.6 percent during 2006, down slightly from 9.1 percent in 2005. Growth in real GDP slowed to 7.5 percent in the fourth quarter of 2006 (saar) from 11.8 percent in the third quarter, principally due to a drop in investment in construction near the end of 2006. Strong growth and an accommodative monetary policy continued to put upward pressure on annual inflation rates, although inflation moderated to 9.8 percent at year-end 2006 compared to 12.3 percent at year-end 2005. Administrative price controls on 70 percent of the items in the CPI basket were the main reason for the decline in inflation.

Argentina's trade surplus increased by 7.1 percent in 2006 to \$14 billion due to primarily to higher world commodity prices and improved terms of trade (up 6.3 percent y/y in the fourth quarter of 2006). As a result, Argentina's current account surplus expanded to \$8.1 billion (3.7 percent of GDP) in 2006, versus \$5.6 billion (3.0 percent of GDP) in 2005. Lower interest payments on external sovereign debt and higher tourism revenue also contributed to a higher current account surplus. On an accumulated basis, foreign direct investment into Argentina fell 4.0 percent year-on-year to \$4.8 billion during 2006. In 2006, the U.S. trade balance with

Argentina shifted into a surplus of \$800.7 million, from a deficit of \$461.7 million the prior year, a net positive change of \$1.26 billion.

Capital controls remain in effect on both local and foreign U.S. dollar inflows. Residents of Argentina are limited in the amount of dollars they can bring freely into the country and foreigners are required to keep dollar inflows in the country for a minimum of one year, with 30 percent held on deposit in an interest-free account at the central bank. Foreign direct investment is required to remain in Argentina for 365 days.

Brazil

Brazil has a flexible exchange rate regime and relies on inflation targeting to guide monetary policy. The real continued to strengthen during the second half of 2006, appreciating 1.4 percent in nominal terms, from 2.16 to 2.13 reals to the dollar (while the real effective exchange rate appreciated 5.1 percent). The real has appreciated by 85 percent relative to the dollar since reaching a low in October 2002, likely reflecting the downward overshooting during the 2002 crisis, structural improvement in export competitiveness, and, more recently, the six percent improvement in the terms of trade in the last six months of 2006.

Brazil's external accounts have remained remarkably robust considering the strong recovery of the real. On a seasonally adjusted basis, Brazil's current account surplus was \$8.8 billion (1.6 percent of GDP) in the second half of 2006, up from \$4.5 billion (0.9 percent of GDP) in the first half of the year, while the trade surplus rose from \$21.7 billion (4.2 percent of GDP) to \$24.4 billion (4.4 percent of GDP) over the same period. The U.S. trade deficit with Brazil narrowed from \$3.8 billion in the first half of 2006 to \$3.3 billion in the second half of the year.

The strong real has supported the reduction of inflation in Brazil. The inflation outlook has continued to improve over the past year, with year-on-year inflation at 3.3 percent in December 2006, down from 4.0 percent in June and below the central bank's 4.5 percent midpoint target for 2006. The central bank has stated it will maintain its same target range in 2007. Net international reserves have increased rapidly since Brazil repaid its \$15.5 billion obligation to the IMF in December 2005. Gross reserves increased to \$85.8 billion by December 2006 from \$53.8 billion a year before, and have continued to accumulate at a rapid pace – reaching \$109.5 billion in March of 2007 – as the central bank purchased dollars in the spot market. The government's goal of reserve accumulation is to smooth out exchange rate fluctuations and to improve the country's external sovereign position. Gross reserves covered about 50 percent of gross external debt in the fourth quarter of 2006, compared to 32 percent in the fourth quarter of 2005. The central bank has a broad objective of increasing reserves in the medium run, but has not committed to a specific numerical target in terms of a reserve coverage ratio.

Strong export growth and investment contributed to a recovery of the Brazilian economy during the second half of 2006 after a disappointing second quarter. A slowdown in export volumes and consumption growth and continued strong growth of imports had resulted in lackluster real GDP growth of 3.4 percent at an annualized rate in the first half of 2006 compared to the second half of 2005. But a strong resumption of export and consumption growth in the second half of 2006, together with continued robust investment growth, resulted in GDP growth of 5.7 percent over

the second half of the year and 3.7 percent growth for all of 2006, compared to 2.9 percent in 2005.

Brazil took several steps last year to liberalize its foreign exchange market. In July of 2006, Brazil loosened its repatriation requirements for exporters, enabling them to keep up to 30 percent of their export revenue abroad and to hold the rest for up to a year. Previously, exporters were required to repatriate all of their foreign currency earnings within seven months of their receipt. Brazil now also allows the registration of foreign capital not previously eligible for registration.

Mexico

Mexico has a flexible exchange rate regime. During the second half of 2006 the Mexican peso appreciated 4.5 percent in nominal terms, from 11.4 to 10.9 pesos to the dollar. The broad real trade-weighted effective exchange rate appreciated by 5.2 percent during the same period. The real appreciation reflected, in part, increased market confidence in the new administration following the close presidential elections of July 2, an improved outlook for advancing key structural reforms, and relatively contained inflation.

Heavy external debt repayments during the second half of 2006 resulted in an \$11.1 billion drop in foreign exchange reserves from \$78.7 billion at the end of June to \$67.7 billion by the end of December. Pemex, the state-controlled Mexican oil company, is obligated by law to sell its foreign currency earnings to the Bank of Mexico to service the country's foreign debt. Reserves accumulate, therefore, when the foreign currency obtained by the Bank of Mexico is greater than foreign debt payments. The Bank of Mexico follows a transparent rule for selling these reserves. Every 13 weeks, the Bank of Mexico retains half of the reserves accumulated during that period and sells the other half evenly over the ensuing three months. This procedure is designed to prevent uncertainty in the financial markets and minimize discretionary actions by the financial authorities.

Mexico's seasonally adjusted current account deficit was \$2.1 billion in the second half of 2006 compared to a surplus of \$368.5 million in the first half of 2006. The \$2.5 billion reversal in the current account balance reflects the fall in oil prices in the second half of 2006. Mexico's trade surplus with the United States for the second half of 2006 was \$32.8 billion, up slightly from \$31.3 billion in the first half of 2006. Mexico is the second largest supplier of oil to the United States.

Also, the slowdown in the U.S. economy in the second half of the year contributed to a deceleration of economic growth to a more moderate pace in the second half of the year. Real GDP increased at seasonally adjusted annual rates of 2.7 percent and 1.9 percent during the third and fourth quarters, respectively. At the same time, supply shocks on certain key food items (mainly corn and tortillas) caused a temporary spike in inflation, resulting in price levels above the Bank of Mexico's three percent target. Year-on-year headline inflation was 4.1 percent in December, compared with 3.2 percent in June.

Mexico does not maintain controls against most external capital inflows and outflows. It does, however, maintain some restrictions against certain types of foreign investment, such as the establishment of foreign bank branches within Mexico.

Venezuela

Venezuela maintains a pegged exchange rate. The official nominal exchange rate was 2,147 bolivars to the dollar at end-December 2006, unchanged since end-December 2005. The J.P. Morgan trade-weighted real effective exchange rate appreciated by 4.4 percent during the second half of 2006, largely due to Venezuela's high inflation rate.

The high inflation rate is largely the result of an accommodative monetary policy stance, with real interest rates that are significantly lower than elsewhere in the region. In particular, unsterilized reserve accumulation is contributing to monetary expansion and inflationary pressures. The stock of central bank reserves increased to \$36.6 billion at end-December 2006 compared to \$31.2 billion at end-June 2006 and \$29.6 billion at end-2005. The monetary base expanded by 67 percent to end-December 2006 from the end-June 2006. Annual inflation increased to 16.9 percent year-on-year at end-December 2006 from 11.8 percent year-on-year at end-June 2006, significantly above the 90-day deposit rate of 10 percent seen through most of 2006. The combination of high inflation and a fixed exchange rate, which have contributed to real exchange rate appreciation, has eroded Venezuela's competitiveness as evidenced by strong import growth and falling non-oil exports in 2006.

Venezuela has a large current account surplus, equal to 14.9 percent of GDP in 2006. Higher oil prices account for much of the recent strong growth performance, the large current account surplus, and foreign reserve accumulation, although oil prices did ease somewhat in late 2006. Oil accounts for about one third of Venezuelan GDP, 90 percent of the country's exports and close to half of government revenues. Real GDP rose by 10.3 percent in both 2005 and 2006, driven primarily by strong growth in government expenditure exclusive of interest payments (about 40 percent real growth) and private consumption (18.8 percent real growth) in 2006 as the government sought to disperse the benefits of additional oil revenue.

The willingness of the government to spend quickly its extra oil revenue led to strong import growth in 2006, which caused the current account surplus to shrink as a percent of GDP in 2006. The current account surplus did rise in dollar terms to \$27.2 billion (14.9 percent of GDP) in 2006 compared to \$25.5 billion (17.6 percent of GDP) in 2005, but this growth did not keep pace with nominal GDP growth. Also, while petroleum exports rose by \$10.4 billion to \$58.4 billion in 2006, this increase was largely offset by an \$8.5 billion increase in goods imports in 2006. The bilateral U.S trade deficit with Venezuela fell to \$13.6 billion during the second half of 2006, down from \$14.5 billion in the first half of 2006. The slightly lower bilateral trade deficit primarily reflects increased U.S. exports to Venezuela, rather than lower oil prices.

Venezuela maintains extensive controls on capital inflows and outflows. These controls require exporters to surrender their foreign exchange earnings to the government at the official exchange rate.

The Euro-area

The value of the euro is market-determined, and the European Central Bank (ECB) has not intervened in the foreign exchange market since November 2000 when it defended the euro against further depreciation. The Euro-area's international reserves increased by \$15 billion between June 2006 and December 2006 reaching \$184 billion.

Citing inflationary pressure, the ECB has continued to raise its main refinancing rate, currently 4.00 percent. The ECB's primary monetary policy target is an annual rate of inflation of less than 2.0 percent. In the wake of ECB interest rate hikes and a narrowing of the dollar/euro interest rate spread, the euro appreciated 3.3 percent in nominal terms against the dollar during the second half of 2006, from \$1.28 per euro to \$1.32. Over the same period, the euro appreciated 1.2 percent in real effective terms²². Thus far in 2007 the euro appreciated a further 1.8 percent against the dollar, reaching \$1.34 on May 24.

The Euro-area's current account balance increased to a \$8.6 billion surplus (0.2 percent of GDP) in the second half of 2006 compared to a \$13.2 billion deficit (0.3 percent of GDP) in the first half. The Euro-area's trade surplus with the U.S. declined during the second half of 2006 compared with the same period in 2005, to \$46.2 billion from \$48.7 billion.

CPI-measured inflation reached 1.9 percent (y/y) in March 2007, relatively stable since December 2006 despite a three percentage point VAT hike in Germany at the beginning of the year. Euro-area growth increased to 2.8 percent in 2006, up from 1.5 percent in 2005. Growth is broad-based with net exports, investment and private consumption all making significant contributions. Unemployment has been falling since 2004, reaching a 15-year low of 7.3 percent in April. Expanding employment should support private consumption in the medium term.

The ECB has expressed concern about the pace of M3 growth rate (the growth of the threemonth centered moving average, which reached 10 percent in February 2007). This is significantly higher than the ECB's comfort zone of four percent, a fact that underpinned the market's correct expectations of a 25 basis point hike to four percent of the minimum bid for the main refinancing rate in June 2007.

Germany

Germany's current account surplus increased from \$57.4 billion (or 4.1 percent of GDP) in the first half of 2006 to \$90.7 billion (or 6.1 percent of GDP) in the second half, largely due to strong import demand from Russia and Asia. For all of 2006, Germany's current account surplus was \$148.0 billion (5.1 percent of GDP) as real exports of goods and services expanded 13.4 percent and real imports of goods and services increased 11.9 percent. Germany ran a \$23.3 billion bilateral merchandise trade surplus with the United States in the second half of 2006, compared to a \$26.3 billion bilateral surplus in the second half of 2005.

Strong export growth helped propel strong German annual growth, which for 2006 almost tripled to 3.0 percent from 1.1 percent in 2005. While net exports continue to drive growth, economic

²² Source: ECB. The index is based on producer price indices.

expansion did become more broad-based in 2006, with both investment (up five percent from one percent in 2005) and private consumption (up 0.9 percent from 0.3 percent in 2005) improving. Domestic demand growth increased to 1.5 percent during the second half of 2006 from 0.8 percent during the same period in 2005.

Spain

Although the stronger euro and declining net exports have restrained Spain's growth rate, it has still been reasonably robust. Growth was an annual 3.8 percent in the second half of 2006 after expanding at a 4.0 percent rate in the first half of the year. Growth has been driven by domestic demand, in particular investment. Annualized consumption and investment growth were 5.1 percent and 6.3 percent, respectively, in the second half of 2006. Strong growth helped unemployment to fall to 8.4 percent in the fourth quarter of 2006, down from 8.6 percent in the second quarter of the year.

Inflation fell to 2.7 percent y/y in December 2006, down from 3.9 percent y/y in June. There are concerns about overheating given the concentration of economic activity in the housing sector and cost pressures resulting from record-low (for Spain) unemployment. Fiscally, the government ran a budget surplus of 1.8 percent of GDP in 2006.

The principal factor behind Spain's widening current account deficit has been Spain's high level of investment; gross fixed capital formation was 29.2 percent of GDP in the second half of 2006. The current account deficit reached \$60.6 billion (9.5 percent of GDP), up from \$45.4 billion (7.7 percent of GDP) in the first half of the year. Goods imports increased 9.6 percent y/y, while goods exports increased 8.4 percent y/y. Spain's bilateral surplus with the United States on trade in goods was \$1.3 billion in the second half of 2006, an increase of \$366 million over the same period in 2005. Spain's increasing trade surplus with the U.S. is largely related to higher exports, in dollar terms, of refined fuel products to the United States.

The Netherlands

The Netherlands continues to post large current account surpluses. Its current account surplus was \$27.1 billion (7.9 percent of GDP) in the second half of 2006, up \$6.3 billion from \$20.8 billion (6.8 percent of GDP) during the second half of 2005. The Netherlands has trade and services surpluses as well as a surplus on net income flows that more than offset a deficit in transfers. Both the trade and income balances are influenced heavily by the large number of international companies based in the Netherlands (*e.g.*, Shell, Unilever, Phillips, and Mittal) that have transformed the Netherlands into a major processing and trans-shipment point for Europe. For the full year in 2006, the current account surplus was 8.7 percent of GDP, up from 7.7 percent in 2005. The Netherlands had a bilateral trade deficit with the United States, which grew to \$6.9 billion in the second half of 2006, up \$1.8 billion from the same period in 2005, due largely to aircraft sales.

GDP grew 2.9 percent (annualized) over the second half of 2006, driven largely by investment, which increased 11.3 percent. Both private and public investment grew rapidly (12.7 percent and 4.2 percent, respectively) due to several one-off factors (e.g., updating computer equipment,

vehicle purchases due to changes in subsidies, and airplane purchases). Headline inflation was 1.7 percent in December (y/y) while core inflation was 1.2 percent.

Norway

Norway has a freely floating exchange rate and a monetary framework targeting inflation. The Norwegian kroner depreciated 0.3 percent against the dollar during the second half of 2006 while the JP Morgan index of the real value of the kroner was unchanged over the period.

Norway is a major oil and gas exporter and a key player in the oil services industry. Its current account surplus during second half of 2006 was \$28.5 billion (16.8 percent of GDP), up a nominal \$5.0 billion from \$26.1 billion (17.0 percent of GDP) in the second half of 2005. Merchandise exports in the second half of 2006 were up 8.5 percent over the same period in 2005 while imports increased 14.8 percent. Norway had a bilateral trade surplus of \$2.3 billion with the United States in the second half of 2006, up \$8.4 million from the corresponding period in 2005. Foreign exchange reserves grew \$7.4 billion to \$56.8 billion during the second half of 2006.

Norway's central bank reserves the right to intervene in foreign exchange markets to influence the kroner but has not done so since January 1999; however, management of the Government Pension Fund (GPF) – the custodian of Norway's oil and gas wealth portfolio – influences currency developments. By investing the GPF's resources overseas, Norway reduces the influence that oil and gas-related earnings inflows might have on the exchange rate. At the end of 2006, the GPF's market value was \$284.9 billion (83 percent of total 2006 GDP, or 114 percent of non-oil and gas GDP) and growing rapidly. By law, the return on the GPF's investments abroad can be used for current government consumption while the principal remains as a retirement fund for future generations. However, some of the GPF is already being used to service retirement benefits through the current government budget. Oil and gas production is expected to peak in 2008 and halve by 2030, and revenue accruing to the GPF is inadequate to meet the needs of a rapidly aging population. Consequently, there is increasing pressure to reform the pension system to avoid the need to draw down GPF principal.

GDP increased 3.1 percent (at an annual rate) during the second half of 2006 compared to the second half of 2005. Consumption grew by 4.6 percent during the same period while fixed investment increased 12 percent, reflecting strong activity in the construction, machinery and equipment and oil drilling sectors. Headline inflation was 2.2 percent (annualized) during the period while core inflation was 1.1 percent. Monetary policy was gradually tightened during the second half of 2006 as the key policy interest rate was raised from 2.75 percent to 3.5 percent due to concerns about economic overheating.

Switzerland

Switzerland has a freely floating exchange rate and an inflation targeting monetary regime. The Swiss franc appreciated one percent against the dollar and depreciated 2.9 percent against the euro during the second half of 2006. The JP Morgan index of the real value of the Swiss franc depreciated 2.2 percent during the same period.

Switzerland's large and persistent current account surplus is supported by robust exports, services income (mostly banking fees derived from its role as an international banking center) and income from overseas investments that support the financial sector.

According to the Swiss central bank, Switzerland posted a \$33 billion current account surplus (16.6 percent of GDP) in the second half of 2006, up from \$27.1 billion (15 percent of GDP) in the same period in 2005. The trade surplus increased \$1.8 billion (from \$700 million to \$2.5 billion) in the second half of 2006 compared to the corresponding period in 2005, while the surpluses in the services and income accounts increased \$1.3 billion (to \$13 billion) and \$1 billion (to \$21.5 billion), respectively, during the same period. The surplus on trade in goods accounted for 7.6 percent of the total current account surplus in the second half of 2006 while surpluses on services and income accounted for 40 percent and 65 percent, respectively. The net transfers balance deficit over the period accounted for -12.7 percent. Goods exports increased by 14 percent in the second half of 2006 over the corresponding period in 2005, while imports grew by 11.4 percent. The U.S. trade surplus vis-à-vis Switzerland was \$63.2 million in the second half of 2006, up from a deficit of \$1.1 billion from the corresponding period in 2005. The counterpart to the current account surplus is largely direct investment outflows, which are estimated to have been \$27.6 billion in the second half of 2006.

As a small open economy, Swiss economic conditions are heavily influenced by conditions in the Euro-area, Switzerland's largest trading partner. Monetary tightening continued during the second half of 2006 with the policy interest rate rising to 2.1 percent at the end of 2006, from 1.4 percent in June 2006 – which mirrored rate increases by the ECB. Nonetheless, Swiss interest rates are low relative to those of other major currency countries including the euro. As a result, the Swiss franc continues to be a significant funding source for "carry trades" in the region. This tends to place downward pressure on a currency and helps explain the franc's depreciation despite robust fundamentals. At the same time, countervailing forces that have traditionally supported the franc have weakened. According to the IMF, the franc's status as a "safe haven" currency has lessened and it has lost market share as an official reserve currency following central bank's gold sales in 2005. Foreign exchange reserves rose from \$36.2 billion to \$38 billion during the second half of 2006.

GDP growth was estimated to be 1.9 percent (annualized) during the second half of 2006. Consumption and fixed investment grew 2.1 percent and 5.6 percent, respectively, on an annualized basis during the same period, while net exports grew 4.9 percent during the second half of 2006 compared to the second half of 2005. During the second half of 2006, headline inflation was 0.6 percent y/y, while core inflation was 0.8 percent y/y.

Russia

The exchange value of the Russian ruble is managed by the Central Bank of Russia against a reference basket of the US dollar and euro. The U.S. dollar's and euro's shares in the basket are 55 percent and 45 percent, respectively. The central bank continues to manage closely the exchange rate in an effort simultaneously to meet inflation targets and to limit real exchange rate appreciated two percent against the dollar during the second half of

2006. However, as a result of the strength of the euro, the Central Bank's nominal tradeweighted index of the ruble depreciated 0.5 percent in the second half of 2006 while its real trade-weighted index appreciated by 0.5 percent. The ruble has continued to appreciate against the dollar since the end of 2006, firming an additional 2.4 percent in 2007. The appreciation of the real exchange rate also accelerated to 2.6 percent in the first quarter of 2007 as Russia's inflation rate remains above that of its major trading partners.

The Central Bank of Russia's intervention to moderate exchange rate appreciation boosted total international reserves to \$303 billion at the end of 2006 from \$182 billion at the end of 2005. Net of valuation changes, Central Bank of Russia reserves rose \$107.5 billion during 2006, compared with an increase of \$61.5 billion during 2005. In addition, the balance of Russia's oil stabilization fund rose to \$89 billion at the end of 2006 from \$43 billion at the end of 2005.

A decline in oil prices, coupled with strong growth in imports, resulted in a decline in Russia's current account surplus to \$39.5 billion (not seasonally adjusted, or "nsa"), or 7.1 percent of GDP, in the second half of 2006 compared to \$41.7 billion, or 10.0 percent of GDP, in the second half of 2005. Russia's bilateral trade surplus with the United States increased to \$7.6 billion in the second half of 2006 compared to \$5.4 billion in the second half of 2005. The net inflow of private sector capital that began in the second half of 2005 continued in the second half of 2006, as international bank lending to Russian enterprises helped to compensate partially for a year-end fall off in direct and portfolio investment flows. As a result, the financial accounts in the balance of payments, exclusive of changes in reserves, posted a surplus of \$1.7 billion during the second half of 2006 compared to a \$3.4 billion surplus in the second half of 2005.

In addition to Russia's current and financial account surpluses, declining demand among Russian households for foreign exchange, or "de-dollarization", also contributed to increased demand for rubles in the foreign exchange market. Like most of the former Soviet Union, Russia has been heavily dollarized and the domestic money supply can be thought of as having, in effect, ruble and foreign denominated components. Fluctuations in the exchange value of the dollar can cause Russian residents to buy or sell rubles, impacting the ruble-denominated portion of the domestic money supply.

Indeed, "de-dollarization" partially explains the dissimilar behavior of inflation and the growth in the large ruble monetary aggregate, M2. The increase in the CPI slowed from 10.9 percent y/y in December 2005 to 9.0 percent y/y in December, compared to an end-2006 Central Bank of Russia inflation target of 9.0 percent. Growth in M2, by contrast, accelerated to 48.8 percent in the 12 months through December compared with growth of 38.6 percent in 2005. While the fall in inflation is largely attributable to a sharp deceleration in the growth of administered prices which make up approximately 20 percent of Russia's CPI basket, the acceleration of M2 growth over the period can be explained by continued foreign exchange sales by Russian residents, the limited effectiveness of Central Bank of Russia sterilization efforts and a strong increase in bank credit to the real economy.

Real GDP growth accelerated to 6.7 percent y/y during the first half of 2006, little changed from 6.4 percent in 2005. Output growth has been supported by strong household spending and fiscal

easing as the government is spending a larger share of oil revenues ahead of the 2007-2008 election cycle.

South Africa

The South African Reserve Bank's overall monetary policy framework is based on inflation targeting and a floating exchange rate. It has, nevertheless, been operating in the market, since March 2003, to purchase foreign exchange with the aim of building its foreign exchange reserves. The Reserve Bank seeks to purchase foreign exchange when the market is active, while not explicitly seeking to set any level for the rand, or to resist market movements. All purchases of foreign currency for reserves are fully sterilized.

Although overall the rand appreciated 1.8 percent from end-June to end-December, it experienced wide swings over the period, depreciating 11.9 percent from the middle of August to the first of October then appreciating 9.7 percent though the end of the year. Commodity price fluctuations and shifting investor sentiment pushed the rand to a three-year low at the start of the fourth quarter, as they had done during the May-June 2006 period, in which the rand depreciated 16.3 percent against the dollar. The rand strengthened by end-December with improved commodity prices, South African interest rate hikes, and renewed investor interest in emerging markets.

Domestic demand continued to strengthen, supported by an 11 percent increase in private sector credit expansion in the second half of 2006, and the current account deficit reached 6.4 percent of GDP in 2006 (annualized 5.7 percent in Q3 and 7.8 percent of GDP in Q4). Growing capital equipment imports and exceptionally high oil imports²³, combined with moderate export levels in the final quarter of 2006, widened the deficit. Net financial inflows comfortably financed the current account deficit and the central bank continued to increase its foreign reserves, which increased seven percent to \$25.6 million by end-December from end-June. Reserve levels represent about five months import cover.

Robust demand also contributed to annualized 4.5 and 5.6 percent real GDP growth in Q3 and Q4, respectively, and five percent for the year. Responding to perceived inflationary pressure, fueled by private sector consumption growth, rising fuel prices, and rand depreciation, the central bank raised interest rates 200 basis points to nine percent in the second half of 2006. Although the full impact of the interest rate hikes will likely reach into 2007, Q3 and Q4 inflation remained within the bank's official 3-6 percent target band, at five percent,²⁴ while consumer prices were 4.6 percent higher in 2006 than in 2005.

South Africa's imports from the United States increased 15 percent in 2006 over 2005 (to a total of \$4.5 billion) while South Africa's exports to the United States were up 28 percent to \$7.5 billion.

²³ The South African Reserve Bank attributed the current account deficit spike in 4Q06 to oil import timing, predicting that the deficit would return to the five percent range in 2007.
²⁴ The South African Reserve Bank's inflation target corresponds to CPIX inflation, which is CPI minus mortgage

²⁴ The South African Reserve Bank's inflation target corresponds to CPIX inflation, which is CPI minus mortgage interest.

South Africa ran a small fiscal surplus (0.8 percent of GDP) in FY06/07 (year-ending March 31) – the country's first budget surplus since the 1994 transition. The FY07/08 budget calls for another surplus, followed by modest deficits the following two years as the country ramps up infrastructure expenditure. Better revenue collection and a favorable economic backdrop fueled the fiscal improvement. The budget includes further capital control liberalization, continuing the policy of gradually removing capital flow constraints. South African firms may now enter into joint ventures outside Africa with a 25 percent stake (previously a 51 percent stake was required); and companies may conduct trade dealings through a single foreign currency account rather than multiple accounts as before.

Egypt

Egypt abandoned its formal peg to the U.S. dollar in 2003 and launched an interbank foreign exchange market in late 2004. While Egypt technically allows its currency to move against the U.S. dollar, it has maintained a de facto peg against the dollar since January 2005: daily volatility has been low, and the pound has only gradually appreciated from 5.9 pounds per dollar, when the peg began, to 5.7 pounds per dollar in early 2007. Between December 2005 and December 2006, the pound appreciated 0.4 percent in nominal terms; however, due to Egypt's relatively high inflation (12.5 percent y/y in December), the real trade weighted effective exchange rate appreciated by 4.1 percent.

The de facto peg serves to dampen exchange rate volatility while the Central Bank of Egypt (CBE) lays the groundwork for greater currency flexibility. The CBE has a medium-term goal of adopting a formal inflation targeting regime to guide monetary policy. This would require the pound to float freely. In the meantime, the CBE is working to increase the transparency of its policymaking and improve its ability to monitor prices and economic conditions.

Structural reforms implemented since 2004, along with a robust regional economy, helped Egypt's economy to grow by 6.8 percent in the fiscal year ending in June 2006, with the IMF projecting growth of 6.7 percent for the year ending in June 2007. Egypt has also received a large influx of foreign capital, driven in part by the government's ambitious campaign to privatize state-owned firms: net foreign direct investment reached a record \$6.9 billion in the six months ending in December 2006, more than double the \$3.0 billion received during the same period in 2005.

Rapid economic growth has been accompanied by rising inflation: the CPI rose 12.5 percent y/y in December 2006, compared to a three percent increase during the same period in 2005. The recent spike in inflation partly reflects the temporary impact of reduced government price subsidies for energy and food. The monetary base (M0) grew by 10 percent in the year ending December 2006, contributing to 15 percent growth in broad money (M2).

The current account surplus rose modestly to 2.5 percent of GDP in 2006, compared to 2.2 percent of GDP in 2005. This surplus came mainly from the strong surplus on the services balance, including Suez Canal revenues and tourism, of 8.8 percent of GDP in 2006, and also large net transfers of 5.4 percent of GDP in 2006. By contrast, Egypt's trade deficit was 11.7 percent of GDP in 2006, while the bilateral trade deficit with the United States reached \$1.7

billion, an increase over the \$1 billion deficit in 2005. The CBE's reserves grew by 19 percent y/y to \$26.1 billion at-end December from \$21.9 billion a year earlier.

Saudi Arabia

High and rising oil prices over the last few years are the main cause of the country's high growth, large current account surplus, and rapidly accumulating net foreign assets, but the government's fiscal policy has also played some role. The Saudi Riyal has been unofficially pegged to the dollar since 1986 (officially since 2003), so interest rates largely follow recent increases in the United States. The Gulf Cooperation Council has set a goal of establishing a formal monetary union by 2010, but it is still unclear how this will affect Saudi Arabia's exchange rate regime. On a real trade-weighted basis, the Riyal depreciated 5.7 percent y/y to December 2006, which was largely due to U.S. dollar depreciation and relatively low inflation in Saudi Arabia.

Saudi Arabia is one of the most oil-dependent economies in the world, with oil accounting for around 50 percent of GDP, almost 90 percent of export earnings, and over 80 percent of government revenue. With high and rising oil prices over the past few years, real GDP growth has averaged close to six percent, with average nominal GDP growth around 12 percent. Despite strong economic growth, official CPI inflation was contained to less than one percent y/y on average over 2002-2005, but did increase modestly to 2.9 percent y/y in December 2006 on the back of strong food price inflation, which posted a 6.6 percent y/y increase to December 2006.

Saudi Arabia's current account surplus has soared over the past few years, but strong import growth of 26 percent y/y in 2006 caused the overall current account surplus to fall as a percent of GDP to 27.4 percent in 2006 compared to 29.3 percent in 2005. While oil export revenues increased to \$188.6 billion in 2006 from \$161 billion in 2005 due largely to higher oil prices, imports of goods and services increased by more, rising to \$120.2 billion in 2006 from \$88.2 billion in 2005. The bilateral trade surplus with the United States reached \$23.9 billion in 2006, compared with \$20.4 billion in 2005, due largely to higher oil prices.

The government's financial position continued to improve as oil revenue caused the budget surplus to increase slightly to 20.3 percent of GDP in 2006 from 18.4 percent in 2005. The government used much of that surplus to reduce total government debt, which fell to 28 percent of GDP in 2006 and is down from 86 percent in 2003. If oil prices are stable, implementing the government's plans to increase expenditure on social and infrastructure projects would reduce these surpluses over time.

Due to the large current account surplus and fixed exchange rate, the net foreign assets of the Saudi Arabian Monetary Agency rose to \$255 billion in March 2007, providing over two years of import cover, from \$182 billion in March 2006. However, SAMA official reserves minus gold actually fell over the same period from about \$28 billion to about \$27 billion.

Singapore

The Monetary Authority of Singapore (MAS) has a mandate to implement monetary policy with the objective of maintaining price stability for sustainable economic growth. To achieve its

mandate, the MAS uses the exchange rate as its operational monetary policy tool, managing the Singapore dollar (SGD) against an undisclosed basket of currencies of its major trading partners. Since April 2004, the MAS has followed a policy of "modest and gradual" nominal appreciation against this basket. On April 10, 2007, the MAS reaffirmed its policy stance.

In the second half of 2006, the SGD appreciated 3.2 percent against the U.S. dollar. (SGD appreciation totaled 8.4 percent for 2006.) JP Morgan's nominal trade-weighted index of the SGD appreciated 1.7 percent in the second half of last year. However, the real trade-weighted index depreciated 4.8 percent over the same time period, reflecting a significant drop in wholesale price inflation in Singapore in the last quarter of the year. Headline CPI inflation was just under one percent in 2006. The economy continued to expand briskly, with growth at 7.9 percent (saar) in the fourth quarter of 2006 following 3.9 percent (SAAR) in the third quarter.

High and increasing saving rates, accompanied by stable investment rates for Singapore in recent years, have resulted in persistently large current account surpluses. For 2006, the current account surplus reached 27.5 percent of GDP. Singapore's gross national saving rate, which has exceeded 40 percent of GDP since 2004, is among the world's highest, and primarily reflects extremely high corporate saving and, to a lesser extent, persistent budget surpluses. Meanwhile, domestic investment remains around 20 percent of GDP. Corporate profits and government savings – including profits from government-linked companies – are often invested overseas.

Driven by the large current account surplus and the managed exchange rate regime, reserves increased by \$8 billion in the second half of 2006, or about six percent of GDP. Total official reserves were \$138 billion at year-end, or just over 100 percent of GDP. In addition, the Singapore's Government Investment Corporation (GIC), which was established in 1981 to manage fiscal surpluses and reserves in the face of chronic balance of payments surpluses, also likely acquired additional foreign exchange. Singapore continues to run a bilateral trade deficit with the United States, amounting to about \$4.2 billion in the second half of the year, up from \$2.5 billion in the same period one year earlier.

India

India's exchange rate arrangement is a managed float. In the second half of 2006, the Reserve Bank of India (RBI) made U.S. dollar purchases totaling \$5 billion, contributing to an overall increase in foreign exchange reserves of \$14 billion. In the first half of 2006, the RBI purchased \$15.6 billion, and foreign exchange reserves increased \$25 billion. The rupee appreciated 4.0 percent against the dollar in the second half of the year. The JP Morgan real effective trade-weighted index of the rupee appreciated by 2.8 percent over the same period.

The RBI describes its monetary objectives as "maintaining price stability and ensuring adequate flows of credit to productive sectors." These objectives are implemented by adjusting market liquidity through repurchase ("repo") and reverse repo agreements, open market operations, and the cash reserve ratio applied to banks.

India's economy grew 9.8 percent in the second half of 2006 from the second half of 2005, driven by continued strong activity in the manufacturing and services sectors. Robust domestic

demand and increases in food prices put upward pressure on wholesale price inflation, which was 5.7 percent y/y in December, up from 4.4 percent y/y one year earlier. In response to inflationary pressures, the RBI increased policy rates by 25 basis points twice, in July and October, and raised the cash reserve ratio by 25 basis points in December.

The current account deficit was a seasonally adjusted \$2.7 billion (0.7 percent of GDP) in the second half of 2006 compared with \$7.3 billion (1.9 percent of GDP) in the first half. The U.S. bilateral trade deficit with India was \$6.0 billion in the second half of 2006, which is slightly larger than in the same period one year earlier.

Capital inflows financed the current account deficit comfortably. Although large overseas acquisitions by Indian companies drove up outward FDI, net foreign direct investment and portfolio inflows were \$10.2 billion in the second half of 2006 compared to \$9.3 billion in the second half of 2005. Gross FDI inflows in the second half of 2006 were \$12.1 billion, \$8.5 billion more than the year before. Higher FDI was driven by the strength of domestic economic activity and was focused in the financial services, manufacturing, information technology services and construction sectors. There were strong portfolio inflows from foreign institutional investors (FIIs)—particularly in equity markets between August and November 2006. During December 2006, FIIs registered outflows against the backdrop of global equity market volatility. Indian commercial borrowings abroad were valued at \$5.5 billion in the second half of 2006, \$2.4 billion higher than in the same period in 2005.

Japan

Japan maintains a floating exchange rate regime. The Yen is widely traded in foreign exchange markets, with total average daily volume of \$425 billion (dollar equivalent). Japanese authorities have not intervened in the foreign exchange market since March 2004.

Japan's economic recovery continues, but it has not proved sufficiently robust for the Japanese economy to durably exit price deflation. Although the recovery is now in its sixth year, nominal GDP still remains below its 1997 peak. Economic growth has accelerated modestly from 0.3 percent in the first year of the recovery (2002) to 2.2 percent in 2006. Although GDP growth increased to a 3.3 annual rate in the first quarter of 2007, domestic demand growth was a more subdued 1.4 percent, the same as the average rate for 2006. Growth last year was increasingly reliant on business investment and domestic demand (contributing 1.4 percent) but net exports also contributed 0.8 percent to overall growth. Private consumption contracted sharply in Q3 2006, but rebounded in the final quarter of 2006, to move above 2005 levels. Consumer prices, which rose 0.5 percent y/y during the second half of 2006, began to decline once again at the start of 2007. The CPI fell 0.1 percent y/y in March 2007, while the CPI, excluding fresh food, dropped 0.3 percent y/y.

With the exit from deflation not yet complete, the Bank of Japan (BOJ) continues to maintain an accommodative monetary policy stance. On July 14, 2006, the BOJ raised overnight interest rates from zero to 0.25 percent. The BOJ took another step on February 21, 2007, raising interest rates another 25 basis points to 0.50 percent.

Japan's trade and current account surpluses increased in the second half of 2006 as falling oil prices helped reduce the import bill. As a share of GDP, Japan's current account surplus stood at 4.1 percent in the second half of 2006 compared to 3.8 percent in the second half of 2005. Less than half of the current account surplus is due to trade in goods and services. Rather, net income inflows from Japan's overseas direct and portfolio investment account for more than half of the external surplus. The U.S.'s bilateral deficit with Japan widened by \$4.5 billion to \$45.4 billion in the second half of the year compared with the same period in 2005.

Gross flows of private capital remained very large in the second half of 2006, although the net outflow (the sum of net domestic and foreign outflows) slowed to \$47.1 billion in July-December 2006, compared to outflows of \$54.4 billion over the first six months of 2006. Japanese investor outflows have been supported by household demand for overseas bonds and equities. A wide interest rate gap between the U.S. and Japan remains, and investors continue to make use of short-term interest carry trades.

The yen weakened 3.8 percent versus the dollar over the July to December 2006 period, closing at \$119.07 on December 29. The yen has further weakened slightly in 2007, depreciating to \$121 by early June. Indexes of the real effective value of the yen have been weakening for some years as these indices have been dominated by the differential in inflation between Japan – which has experienced persistent deflation since 1998 – and its trading partners. The BOJ index indicates that the yen is at its weakest level in roughly 20 years. The BOJ index depreciated 3.3 percent over the second half of 2006, and was 3.3 percent weaker compared to December 2005. It has weakened further over the first five months of 2007.

Japan's foreign exchange reserves continue to rise, reflecting interest earned on reserves and valuation effects.²⁵. Gold and foreign exchange reserves totaled \$895.3 billion at the end of December 2006, up from \$864.9 billion at end-June and \$846.9 billion at end-December 2005. Reserves rose further to \$908.9 billion at end-March 2007.

South Korea

South Korea's exchange rate has exhibited a high degree of flexibility on both a day-to-day basis and over time, although the authorities have carried out intervention operations. Over the past two years, the average daily fluctuation of the Korean won²⁶ has been similar to that of the euro and the Japanese yen. The won appreciated 3.2 percent against the dollar in the last half of 2006, and by more than 10 percent from its December 31, 2005 value. The won appreciated 30.3 percent against the dollar from February 27, 2002, when the Federal Reserve Board's Index of the dollar's nominal trade weighted value reached its most recent peak, through May 10, 2007. During that period, the dollar depreciated 36.0 percent against the euro, 28.6 percent against the pound sterling, and 31.2 percent against the Canadian dollar. The won has also appreciated in real effective terms, strengthening 5.7 percent by end-2006 versus end 2005, but has since weakened 3.0 percent from the beginning of this year through March 2007.

²⁵ Upward valuation adjustments are the result of increases in the dollar value of non-dollar currencies that Japan holds as reserves.

²⁶ As measured by the average absolute value of the daily percentage change in the closing price of a currency.

Foreign exchange reserves increased \$28.4 billion (13.5 percent) in 2006, reaching \$238.4 billion, almost equal to South Korea's total foreign debt of \$263.4 billion. The pace of growth in foreign exchange reserves over the second half of the year (\$14.4 billion) was slightly less than in the first half (\$15.3 billion). Over the first three months of 2007, foreign exchange reserves have grown \$5.0 billion to \$243.4 billion.

South Korea's economy continues to perform well, with real GDP growth of 5.0 percent in 2006, after 4.2 percent growth in 2005. The Bank of Korea (BOK) has used inflation targeting since 1998, and its current inflation target for the period 2007-2009 has been set as a range of 3.0 ± 0.5 percent in terms of the three-year average of annual consumer price inflation. The overnight call rate is the major monetary policy instrument of the BOK. Consumer price inflation – at 2.2 percent in March 2007 – is below the central bank's target range. South Korea's flexible exchange rate regime, under which the won has appreciated steadily since 2003, has contributed significantly to containing inflation. Despite substantial nominal and real appreciation of the South Korean won over this period, exports grew by close to 15 percent in 2006, after a 12 percent increase in 2005.

Rapid growth of imports caused the trade surplus to contract by \$6.6 billion in 2006 to \$16.6 billion, with the trade surplus with the U.S. declining by \$1.2 billion to \$9.5 billion. South Korea runs a surplus in merchandise trade, but has a substantial and growing deficit in services. Driven by a rising net outflow of tourists and students, the services deficit reached a record \$18.8 billion in 2006. Spurred by declining balances in goods and services trade, Korea's current account surplus fell sharply in 2006 to just \$6.1 billion (0.7 percent of GDP), down from \$15.0 billion in 2005 and \$28.2 billion in 2004 (when it was 4.1 percent of GDP). Korea depends heavily on petroleum imports, and the trade balance is sensitive to world oil prices. While down overall in 2006, South Korea's trade and current account surpluses expanded in the final quarter of the year due to a sharp drop in the import bill as oil prices fell.

China

The Chinese economy continued to grow rapidly during 2006, with GDP growth of 10.7 percent for the year. Growth accelerated during the first quarter of 2007, reaching a higher than anticipated 11.1 percent. At the same time, internal imbalances within the Chinese economy, which are of concern to the Chinese authorities and are the focus of the most recent Five-Year Plan, continued to grow more severe.

Growth continues to rely on net exports and investment. In 2005, net exports and investment contributed 26 percent and 38 percent of GDP growth, respectively. Net exports have been rising as a share of GDP in recent years, reaching a record 7.3 percent of GDP in 2006. A preliminary estimate indicates that net exports contributed about one fifth of GDP growth in 2006. The expansion of Chinese net exports continued in the first quarter of 2007. The trade surplus for the quarter was \$46.5 billion, double the surplus in 1Q2006.²⁷ China's current account surplus rose to a record \$249.9 billion in 2006 —55 percent above the 2005 level and

²⁷ Special features, e.g. anticipation of lower export tax rebates, may explain some of the rapid growth in the trade surplus in the first quarter.

9.0 percent of China's GDP. China's current account surplus has been rising as a share of GDP since 2001, but the increase has been particularly sharp in the last two years.

Investment as a share of GDP has risen along with net exports' share of GDP. China's investment rate rose in each of the five years to 2005, reaching 42.7 percent of GDP. Investment maintained this elevated level in 2006. Investment is supported by China's high national saving rate, which was a record 52 percent of GDP in 2005.²⁸ Since the beginning of the reform era, most booms and slowdowns in the Chinese economy have been associated with fluctuations in investment, and the rising share of investment in GDP increases the potential amplitude of these swings. The rapid growth of investment and GDP in the first quarter of 2007 and the acceleration of consumer price inflation have raised anew concerns about the possibility of overheating, industrial overcapacity, the potential build-up of new non-performing loans, and asset bubbles. A rapid unwinding of these conditions could lead to an abrupt slowdown (a "hard landing") in the Chinese economy.

China's tightly managed exchange rate regime is a substantial obstacle to the resolution of economic imbalances that foster China's high savings, high investment, and large trade surpluses. China maintained a de facto fixed exchange rate against the dollar from 1997 until July 2005. On July 21, 2005, the Peoples Bank of China (PBOC) revalued its currency, the renminbi, by 2.1 percent and announced the adoption of a new managed floating exchange rate regime. Since the initial revaluation, the renminbi has been tightly managed against the U.S. dollar, with limited fluctuation on a daily basis. The policy limit on daily movement above or below the morning "reference rate" was 0.3 percent until May 18, 2007, when the PBOC widened the limit to 0.5 percent. So far, intra-day movements of the RMB exchange rate have rarely approached the limits of the original 0.3 percent band. In the first year under the managed basket regime (July 22, 2005 to July 22, 2006), the maximum daily movement on either side of the reference rate averaged 0.04 percent during the course of trading. The RMB/USD rate has has experienced slightly more movement since, averaging 0.1 percent daily divergence from the morning reference rate.

The renminbi appreciated 2.4 percent against the U.S. dollar in the second half of 2006. This was the largest half-yearly renminbi appreciation since the new exchange rate regime began in July 2005. The renminbi appreciated 6.5 percent against the Japanese yen and depreciated by 0.8 percent against the euro during this same period as these currencies moved against the US dollar. The IMF index of China's nominal effective exchange rate appreciated by 1.3 percent in the latter half of 2006. China's real effective exchange rate (i.e., the average movement of the renminbi against the currencies of China's trading partners, adjusted for movements in domestic prices), gained 2.7 percent in the second half of 2006 on the back of rising domestic inflation. By the same indicator, China's currency appreciated 0.9 percent in real effective terms from July 2005 to December 2006.

During the second half of 2006, the People's Bank of China (PBOC) continued to intervene heavily in China's foreign exchange market. The PBOC's foreign exchange reserves climbed by

²⁸ With national saving calculated as the sum of investment and the current account balance.

\$247.5 billion in 2006 and reached \$1.066 trillion at end-2006.²⁹ China's large trade surplus was the primary source of net foreign demand for renminbi, although net foreign direct investment also contributed to foreign demand for the currency. China's foreign exchange reserves continued to grow very rapidly in the first part of 2007, with total reserves reaching \$1.2 trillion by end-March. The reserve increase in the first quarter of 2007 was in part due to the unwinding of foreign exchange swap contracts that the PBOC had entered into with Chinese banks as well as the rapid growth of the trade surplus.³⁰

In the 11th Five-Year Plan launched in early 2006, Chinese authorities set forth policy priorities aimed at curbing China's domestic and external economic imbalances. Chief among these policy goals was bringing about a shift in the composition of China's aggregate demand to rely less on investment and exports and more on domestic consumption. Despite this high level attention, the outcome for 2006 shows that the role of consumption continued to diminish and the shares of national saving, investment and net exports in GDP further increased.

Slow implementation of market-based tools for domestic macroeconomic management is a key reason that China's economy grew more imbalanced in 2006. Typically, in an economy as large as China's, the central bank's main goals are to maintain domestic growth and price stability. In China's case, the primary task of the PBOC is to manage the exchange rate and absorb the large amount of domestic liquidity that results from the net inflow of foreign exchange into China. This ample supply of funds has contributed to low interest rates, high credit and investment rates, and increased risk of a "boom-bust" cycle.

An autonomous monetary policy, with greater exchange rate flexibility, would give the PBOC better control over domestic credit and investment, and allow the PBOC to further liberalize interest rates and develop the monetary policy transmission mechanism, thus enabling improved credit allocation and reducing the risks of bubbles in asset prices. More effective monetary policy would help rebalance the Chinese economy towards greater household consumption, absorbing the impacts of increased government spending on education and social safety nets to prevent overheating. (Increases in fiscal outlays, as called for in the 11th Five-Year Plan, will help to reduce households' "precautionary saving" for medical care, education, and retirement— and bring down excessive national saving.)

However, with current policy measures and constrained movement of the exchange rate, China's growth grew more unbalanced in 2006. As Premier Wen Jiabao said before the National People's Congress in March of this year, "the biggest problem in China's economy is that the growth is unstable, imbalanced, uncoordinated and unsustainable." This sentiment was echoed in a statement by National Development and Reform Commission (NDRC) Chairman Ma Kai in the same month when he said, "transformation of the nation's growth structure is an extremely urgent task."

²⁹ The PBOC has conducted an undisclosed amount of foreign exchange swaps with Chinese commercial banks in recent years as a domestic liquidity management measure. One effect of these swaps is that the PBOC's reported currency reserves are smaller than they otherwise would be until the swaps unwind.

³⁰ According to the 2006 annual reports of Bank of China, China Development Bank, and China Construction Bank, currency swaps conducted by these institutions with the PBOC exceeded US\$ 70 billion. See in the China Securities Journal (Chinese) 王栋琳, 去年"已知"货币掉期达700多亿美元, 中证网: 2007-04-17, at (Chinese) 2007-04-17, at (Chinese) 2007-04-17 (Chinese) 2007-04-17

The leadership seems to be cautiously recognizing the benefits of a more flexible exchange rate. In January at the National Financial Sector Work Conference, Premier Wen said "a perfect exchange rate regime should consider our country's economic situation and the ability of the economy and companies to bear such changes and ensure there are no big fluctuations in the economy." And in the same month, a research agency under the Ministry of Commerce, an agency historically averse to increased renminbi flexibility, issued a report stating that the renminbi was undervalued and that "continued, progressive and moderate appreciation of the renminbi would help regulate China's yawning trade surplus." ³¹ However, the report suggested that renminbi appreciation would also have negative effects in China, particularly for farmers and unskilled laborers and those in the central and western regions.

China continues to take steps, though at a slow pace, aimed at reforming currency and monetary policy to eventually move towards a more freely-tradable and market-determined exchange rate. Currency market and financial sector reforms provide needed infrastructure for foreign exchange trading and hedging. China has now authorized 22 banks (both foreign and domestic) to act as market makers in the foreign exchange market. While in 2005 almost all foreign exchange transactions were with the Chinese authorities, now over 80 percent of all spot trades are conducted by private parties. The transaction volume in foreign exchange swaps, introduced in April 2006, reached \$1 billion per day one year later, evidencing a rapid rise in the use of foreign exchange hedging. In January 2007, China launched SHIBOR (Shanghai InterBank Offer Rate) to create a benchmark yield curve for pricing financial instruments, including foreign exchange derivative products, as well as to enable the PBOC to monitor domestic liquidity conditions. In an effort to increase two-way capital flows, China announced on May 11, 2007, that QDII (Qualified Domestic Institutional Investor) license holders would be allowed to invest half of their funds in overseas equities. (QDII's were previously limited to bonds and other fixed income instruments). On May 23, China announced that the quota for QFIIs (Qualified Foreign Institutional Investors) would be increased from \$10 billion to \$30 billion.

At the second session of the U.S.-China Strategic Economic Dialogue (SED) held in Washington on May 22 and 23, Chinese and U.S. officials discussed China's reform progress in detail. Chinese authorities reiterated the priority they place on shifting the composition of economic growth towards domestic consumption and correcting imbalances in the economy and the role that exchange rate reform plays in that process.

Despite the progress that China has made and the continued public commitment to reform, China's exchange rate is undervalued against the U.S. dollar, even in the judgment of domestic observers. Prolonged, one-way intervention in foreign exchange markets by the central bank, an unprecedented amount of foreign exchange reserve accumulation, and a rapidly increasing current account surplus are clear indicators of fundamental renminbi undervaluation. While China has taken some steps to increase the flexibility of the renminbi, the pace of appreciation that the authorities have allowed is much too slow and should be quickened.

³¹ Website of the Ministry of Commerce (English), 1/17/2007, "Report: RMB Estimated to Keep Gaining This Year," Xinhua.

Although the renminbi is undervalued and market sentiment clearly favors appreciation, Treasury concluded that China did not meet the technical requirements for designation under the terms of Section 3004 of the Act during the period under consideration. Treasury was unable to determine that China's exchange rate policy was carried out for the purpose of preventing effective balance of payments adjustment or gaining unfair competitive advantage in international trade.

Taiwan

Taiwan operates a managed floating exchange rate regime. According to the central bank's official policy statement, the exchange rate is market-determined except in instances when "the market is disrupted by irregular factors" and the central bank intervenes. Throughout the second half of 2006, the Taiwan dollar (NT\$) remained within the 31-35 NT\$/USD trading range in which it has fluctuated for more than five years. After ending 2005 at 33.29/USD and appreciating 2.6 percent to end the first half of 2006 at 32.44/USD, the NT\$ depreciated 0.5 percent to end the year at 32.59/USD. The NT\$ ended March 2007 at 33.06/USD, having depreciated another 1.4 percent from its end-2006 value.

Broad money supply (M2) grew 6.13 percent over 2006. The central bank raised interest rates by 50 basis points, with the discount lending rate ending the year at 2.75 percent; required reserve ratios remained unchanged over the year. The central bank continued its practice of sterilizing nearly all of its interventions.

Taiwan has experienced sluggish domestic demand growth and low inflation or falling prices since a sharp decline in fixed investment spending led to a short recession that began in the fourth quarter of 2000. However, strong export growth has allowed Taiwan to achieve annual real GDP growth rates between three and six percent since the recession ended. Growth in Taiwan has been highly dependent on world market growth and demand for Taiwan's exports.

Real GDP growth slowed from 6.3 percent at an annual rate in the last half of 2005 to 3.0 percent in the first half of 2006, as net export growth slumped. GDP growth then recovered to 6.2 percent in the second half of 2006, as net exports recovered and contributed 3.3 percent to GDP growth. Taiwan's exports are heavily concentrated in sales of electronics to China, Japan, and the United States, meaning that small fluctuations in either overall demand in these three large economies or global demand for electronics can lead to significant fluctuations in Taiwan's income from net exports.

Inflation also continued to remain very low, with prices falling by some measures, throughout 2006. Consumer prices, excluding food and energy, rose by 0.5 percent y/y in the second half of 2006, while Taiwan's GDP deflator declined by 1.2 percent in the second half of 2006. Prices have remained very weak in 2007; consumer prices excluding food and energy were 0.1 percent lower at end-March 2007 than at end-2006.

Taiwan's current account surplus rose from \$10.4 billion (5.9 percent of GDP) in the first half of 2006 to \$14.8 billion (8.2 percent of GDP) in the second half of 2006, reflecting a widening surplus in goods trade, a narrowing deficit in services trade, and growth in the income surplus.

Since the second half of 2005, Taiwanese residents have increased their demand for foreign assets while foreign investors have eased their demand for Taiwan dollar assets, reducing upward pressure on the Taiwan dollar exchange rate. Net accumulation of foreign exchange reserves, which averaged nearly \$29 billion a year from 2001 to 2005, consequently slowed to \$2.7 billion in the first half of 2006, and \$3.4 billion in the second half of 2006. Total foreign reserves stood at \$260 billion at mid-year, and \$266 billion at year's end 2006. Total foreign reserves rose by just \$1 billion in the first quarter of 2007 to reach \$267 billion at end-March 2007.

Malaysia

Nearly two years after its move off a fixed U.S. dollar peg, Malaysia is progressing towards a more flexible exchange rate regime. Since the initial revaluation on July 21, 2005, the ringgit has appreciated steadily against the dollar. Daily exchange rate volatility has increased since mid-2006, and Malaysia took further steps to relax foreign exchange controls in April 2007. Structural imbalances still persist in the Malaysian economy. The current account surplus remains very large, and the level of foreign exchange reserves has increased significantly over the past year. Nevertheless, there are signs that private consumption and fixed investment levels are rising, which, with a more flexible exchange rate, should lead to more balanced growth in the coming years.

Malaysian authorities have intervened in foreign exchange markets in both directions – buying the ringgit to limit depreciation and accumulating foreign reserves to fend off upward pressure. Though Malaysia's authorities have intervened heavily in times of strong pressures on the currency, the ringgit has recently been appreciating at a faster pace than in the 14 months following the initial revaluation. Since the initial 1.4 percent revaluation in July 2005, the ringgit continued to appreciate steadily over the course of 2006, rising by 6.6 percent in nominal terms. The average daily fluctuations against the dollar have also increased from 0.05 percent in the second half of 2005 to 0.16 percent in the first half of 2006 and 0.18 percent in the second half of the year. The ringgit has appreciated by an additional three percent in nominal terms since the beginning of 2007, as a result of strong portfolio flows into the local stock market. The authorities have stated that they will continue efforts to moderate excessive volatility in the exchange rate, but reiterated that long-term fundamentals should drive the value of the ringgit.

Malaysia continues to relax the capital controls put in place in the aftermath of the Asian crisis in 1998, and has more recently begun to relax controls that pre-dated the crisis. In March 2007, the central bank, Bank Negara Malaysia, announced changes to the foreign exchange rules that liberalize capital flows in both directions. The measures, which took effect on April 1, allow greater flexibility for onshore banks to engage in foreign exchange activity by abolishing limits on net open positions and increasing the scope of allowable activity; provide non-residents with greater access to ringgit assets and financial products; and allow residents to engage in foreign currency transactions. However, offshore trading of the ringgit remains prohibited.

Malaysia's economy has maintained a strong rate of growth, averaging nearly 6.0 percent y/y over the past four years. In 2006, despite weaker external demand, real GDP grew 5.9 percent y/y, driven by domestic consumption, which contributed 3.5 percentage points of the growth, and

rising investment spending, which added an additional 1.7 percentage points to growth. Private sector demand was a key driver, supported by improving business sentiment and rising job creation. Inflation rose in the first half of 2006, peaking at 4.8 percent y/y in March, following increases in administered fuel prices earlier in the year, but steadily decelerated over the second half, ending the year at 3.1 percent y/y. The 3.6 percent inflation rate for 2006 was the highest rate since 1998. For the first four months of 2007, inflation declined further to an average of 2.4 percent. Given relatively low inflationary pressures, the central bank has maintained the overnight policy rate at 3.5 percent since April 2006.

Exports have been a key source of growth, with the export share of GDP exceeding 120 percent, greater than the average of its regional peers.³² Electronic exports account for nearly half of Malaysia's total exports, and the United States is Malaysia's primary export destination for electronic goods. (Malaysia is the United States' 11th largest trading partner.) This closely ties Malaysian export performance to economic conditions in the United States. In the second half of 2006, export growth slowed to 14.1 percent y/y from 23.1 percent in the first half of the year, and fell further in the first quarter of 2007 to 7.7 percent y/y due to weak external demand. The increase in intermediate imports kept pace with exports given that they make up 70 percent of total imports, but demand for other import goods has been relatively robust due to stronger domestic demand.

As a net oil exporter, Malaysia has significantly benefited from recent high oil prices, and the rise in oil prices has contributed to further growth of Malaysia's already large current account surplus. In 2006, the current account surplus was \$25.6 billion, over 16 percent of GDP, with the non-oil current account surplus at 13 percent of GDP. Except for Singapore, Malaysia runs the highest current account surplus as a percentage of GDP of emerging market countries in Asia. Significant capital outflows, reflecting greater overseas investment by Malaysian firms and debt repayments, have, to a large extent, offset the large current account surplus. Nevertheless, Malaysia's external position remains strong, as reserves stood at \$82.5 billion at the end of 2006, roughly six months of import cover. Reserves increased by \$3.7 billion in the second half of 2006, as compared to \$8.3 billion in the first half. Reserves have continued to accumulate in 2007, and were \$88.6 billion as of end-March, a seven percent year-to-date increase.

Total investment continues to recover from its post-Asian crisis collapse, but has yet to return to pre-crisis levels. Private fixed capital investment has increased by 28 percent since 1999 and has continued to recover steadily over the past two years. However, investment in Malaysia as a share of GDP is still well below what it was in the early 1990s – long before the run-up to the Asian financial crisis. In 2006, gross fixed capital formation was 27 percent of GDP compared to an average of almost 40 percent over the 1990-1994 period.

³² Malaysia, like many economies in East Asia, imports components for further processing and assembly. This is the reason that total exports (but not value-added in export industries) are larger than GDP.