



REPORT TO CONGRESS

Foreign Exchange Policies of Major Trading Partners of the United States

U.S. DEPARTMENT OF THE TREASURY OFFICE OF INTERNATIONAL AFFAIRS October 17, 2017

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This Report reviews developments in international economic and exchange rate policies and is submitted pursuant to the Omnibus Trade and Competitiveness Act of 1988, 22 U.S.C. § 5305, and Section 701 of the Trade Facilitation and Trade Enforcement Act of 2015, 19 U.S.C. § 4421.¹

¹ The Treasury Department has consulted with the Board of Governors of the Federal Reserve System and International Monetary Fund (IMF) management and staff in preparing this Report.

Executive Summary

This Administration places a very high priority on ensuring that American workers and companies face a level playing field when competing internationally. When our trading partners engage in currency manipulation, they impose significant, and often long-lasting, hardship on American workers and companies. Expanding trade in a way that is freer and fairer for all Americans requires that other economies avoid unfair currency practices and persistent exchange rate misalignments; that they refrain from competitive exchange rate devaluations; and that they not target exchange rates for competitive purposes. A stronger and fairer international trading system must also be supported by robust and better balanced growth globally, with domestic demand-led growth becoming a sustained engine for expansion in key economies that have large and persistent external surpluses. This Report, by monitoring where unfair currency practices may be emerging and encouraging policies and reforms to address large external surpluses, represents an important component of the Administration's strategy for securing a stronger America and a more robust and fair global economy.

The Administration is working actively across a broad range of areas to help ensure a level playing field for our workers and companies. Through the U.S.-China Comprehensive Economic Dialogue, Treasury is pushing China to expand market access for U.S. goods and services and address industrial policies that unfairly discriminate against U.S. firms. A key objective in the context of the North American Free Trade Agreement (NAFTA) renegotiation is the adoption of an appropriate currency mechanism that ensures that NAFTA countries avoid manipulating exchange rates to gain an unfair competitive advantage, and Treasury is evaluating how similar mechanisms can be negotiated in the context of other free trade agreements. Treasury has also pressed for a stronger focus on exchange rate issues in key international venues, including the G-7, G-20, and the International Monetary Fund (IMF). Treasury continues to press the major trading partners of the United States to sustainably raise global output through robust domestic demand growth, underpinned by efficient tax systems with low rates and broad bases, sound monetary policies, and more stable exchange rates that can better support investment and growth.

The Administration remains deeply concerned by the significant imbalances in the global economy. Bilateral trade imbalances with many of our major trading partners have grown to very large levels. More broadly, current account surpluses in several major trading partners have not only been large but unusually persistent over the last decade. The IMF, in its 2017 External Sector Report, noted that of fifteen advanced economies with external surpluses in 2002, twelve also had surpluses in 2008 and eleven still had surpluses in 2016. The IMF further assessed that about one-third of the surpluses were excessive. These surpluses reflect extremely large amounts of saving, mostly corporate saving, in countries such as Germany, the Netherlands, Japan, and Korea that could have been used to support increased demand in those countries and increased imports from other countries. The IMF further identified that the real effective exchange rates in these countries with surpluses were generally undervalued. On a 20-year rolling average basis, the yen is more than 20 percent below, and the euro is 4 percent below, its longer-term real effective rate.

The size and persistence of these external surpluses highlights the weakness of the global adjustment process, and the limited market pressure that economies with large surpluses face to pursue more balanced growth. But this global configuration of external positions is untenable. The United States should not and will not bear the burden of an international trading system that unfairly disadvantages our exports and unfairly advantages the exports of our trading partners, whether through imbalanced macroeconomic policies or unfair trade barriers. It is critical that our major trading partners durably avoid foreign exchange and macroeconomic policies that facilitate unfair competitive advantage. Treasury is committed to aggressively and vigilantly monitoring and combatting unfair currency practices. Treasury will also vigorously pursue an agenda to facilitate more balanced global growth and a reduction in global imbalances in the G-20 and other fora.

Treasury Assessments of Major Trading Partners

Treasury has established thresholds for the three criteria specified in the Trade Facilitation and Trade Enforcement Act of 2015 (the "2015 Act") that determine whether enhanced analysis is necessary: (1) a significant bilateral trade surplus with the United States is one that is at least \$20 billion;² (2) a material current account surplus is one that is at least 3 percent of gross domestic product (GDP); and (3) persistent, one-sided intervention occurs when net purchases of foreign currency are conducted repeatedly and total at least 2 percent of an economy's GDP over a 12-month period.³ In 2016, the \$20 billion bilateral trade surplus threshold captured almost 80 percent of the value of all trade surpluses with the United States, while the 3 percent current account threshold captured more than threefourths of the nominal value of global current account surpluses.

Pursuant to the 2015 Act, Treasury has found in this Report that no major trading partner met all three criteria during the four quarters ending June 2017.

Similarly, based on the analysis in this Report, Treasury also concludes that no major trading partner of the United States met the standards identified in Section 3004 of the Omnibus Trade and Competitiveness Act of 1988 (the "1988 Act") for currency manipulation in the first half of 2017.

Notwithstanding these findings, Treasury has established a Monitoring List of major trading partners that merit close attention to their currency practices. An economy meeting two of the three criteria in the 2015 Act is placed on the Monitoring List. Once on the Monitoring List, an economy will remain there for at least two consecutive Reports to

² Given data limitations, Treasury focuses in this Report on trade in goods, not including services. The United States has a surplus in services trade with many economies in this report, including Canada, China, Japan, Korea, Mexico, Switzerland, and the United Kingdom. Taking into account services trade would reduce the bilateral trade surplus of these economies with the United States.

³ In assessing the persistence of intervention, Treasury will consider an economy that is judged to have purchased foreign exchange on net for 8 of the 12 months to have met the threshold. These quantitative thresholds for the scale and persistence of intervention are considered *sufficient* on their own to meet the criterion. Other patterns of intervention, with lesser amounts or less frequent interventions, might also meet the criterion depending on the circumstances of the intervention.

help ensure that any improvement in performance versus the criteria is durable and is not due to temporary factors. As a further measure, this Administration will add and retain on the Monitoring List any major trading partner that accounts for a large and disproportionate share of the overall U.S. trade deficit even if that economy has not met two of the three criteria from the 2015 Act. In this Report, the Monitoring List comprises China, Japan, Korea, Germany, and Switzerland.

With regard to the five economies on the Monitoring List:

• China has an extremely large and persistent bilateral trade surplus with the United States, by far the largest among any of the United States' major trading partners, with the goods trade surplus standing at \$357 billion over the four quarters through June 2017. Moreover, China continues to pursue a wide array of policies that limit market access for imported goods and services, and maintains a restrictive investment regime that adversely affects foreign investors. In comparison to the extremely large and persistent bilateral trade imbalance, China's multilateral external position has undergone greater adjustment in recent years, with its current account surplus falling to 1.4 percent of GDP in the first half of 2017 from 1.8 percent of GDP in 2016, and down from 10 percent of GDP in 2007. Further, after engaging in one-way, large-scale intervention to resist appreciation of the renminbi (RMB) for a decade, China's recent intervention in foreign exchange markets, tightened capital controls, and increased discretion over setting the daily fixing rate of the RMB have likely prevented a disorderly currency *depreciation* that would have had negative consequences for the United States, China, and the global economy.

Treasury remains concerned by the lack of progress made in reducing the bilateral trade surplus with the United States. Further opening of China's economy to U.S. goods and services as well as reducing the role of state intervention and allowing a greater role for market forces would provide more opportunities for American firms and workers to compete in Chinese markets and facilitate a more balanced economic relationship between the United States and China. Treasury places significant importance on China adhering to its G-20 commitments to refrain from engaging in competitive devaluation and to not target China's exchange rate for competitive purposes. Treasury also places high importance on greater transparency of China's exchange rate and reserve management operations and goals.

• Japan maintains the second-largest bilateral goods trade surplus with the United States, with a goods surplus of \$69 billion over the four quarters through June 2017. Japan's current account surplus over the four quarters through June 2017 was 3.7 percent of GDP, its highest level since 2010. Japan has not intervened in the foreign exchange market in almost six years. Treasury's expectation is that in large, freely-traded exchange markets, intervention should be reserved only for very exceptional circumstances with appropriate prior consultations. Japan should take advantage of the current window of above-potential economic growth, underpinned by accommodative monetary policy and flexible fiscal policy, to enact critical structural reforms that can

support a sustained expansion of domestic activity, create a more sustainable path for long-term growth, and help reduce Japan's trade imbalances.

- After several years of substantial asymmetric foreign exchange intervention to limit won appreciation in the context of large and growing current account surpluses, Korean authorities have reduced net foreign exchange intervention even as the exchange rate has appreciated moderately against the dollar. Treasury estimates that over the four quarters through June 2017, Korea on net purchased about \$5 billion of foreign exchange (0.3 percent of GDP) to limit won appreciation. Korea's current account surplus has also narrowed somewhat in the first half of 2017, to 5.3 percent of GDP. The IMF continues to describe Korea's current account surplus as stronger, and its exchange rate as weaker, than justified by medium-term economic fundamentals. Korea has a significant bilateral trade surplus with the United States, with a goods surplus of \$22 billion over the four quarters through June 2017. This is \$8 billion smaller than the same period 12 months prior. It is important that the Korean authorities act to strengthen domestic demand and avoid reverting to excessive reliance on external demand for growth. Treasury will continue to closely monitor Korea's currency practices and urges the authorities to enhance the transparency of its exchange rate intervention.
- Germany has a very large bilateral goods trade surplus with the United States, at \$63 billion, and an extremely large current account surplus at 7.8 percent of GDP over the four quarters through June 2017. In nominal dollar terms, Germany has the world's largest current account surplus at \$270 billion. This surplus represents a substantial excess of German income over German domestic spending. Stronger demand growth in Germany will be a key factor going forward, as will be policies that raise Germany's real effective exchange rate. Germany should take policy steps including meaningful fiscal reforms to minimize burdens from elevated labor and value-added taxes to encourage stronger domestic demand growth, which would place upward pressure on the euro's nominal and real effective exchange rates and help reduce its large external imbalances. The European Central Bank (ECB) has not intervened unilaterally in foreign currency markets in over 15 years.⁴
- Switzerland over the past few years has used foreign exchange purchases to help counter pressures from safe haven inflows and deflationary forces. Switzerland has space to deploy fiscal policy more forcefully to support domestic economic activity, and could also rely more heavily on traditional monetary policy tools (e.g., interest rates) to combat deflationary pressures, which would help reduce the need for foreign exchange intervention. Switzerland has a large current account surplus at 10.3 percent of GDP over the four quarters through June 2017, and the seventh largest surplus in the world in nominal dollar terms at \$69 billion. Per Treasury estimates, Switzerland engaged in sizable, one-sided foreign exchange purchases over the four quarters through June 2017. Though Switzerland's economic policy situation is distinctive given its small

⁴ For the purposes of Section 701 of the 2015 Act, policies of the ECB, which holds responsibility for monetary policy for the euro area, will be assessed as the monetary authority of individual euro area countries.

stock of domestic assets, which limits monetary policy options to address deflationary pressures and safe-haven inflows, Switzerland could increase reliance on policy rates in order to limit the need for foreign exchange interventions. Moreover, Treasury urges the authorities to enhance the transparency of exchange rate intervention.

Taiwan has been removed from the Monitoring List in this Report. Taiwan has met only one out of three criteria – a material current surplus – for two consecutive Reports. Since the April 2017 Report, Taiwan has also continued to reduce the scale of its foreign exchange intervention. Treasury estimates that over the first half of 2017, Taiwan's net foreign currency purchases were around \$3 billion, roughly half the level over the same period last year, while net purchases over the four quarters through June 2017 were around \$5 billion (0.9 percent of GDP). Nonetheless, Treasury will continue to urge Taiwan's authorities to further increase the transparency of foreign exchange market intervention and reserve holdings, as Taiwan is the only major emerging market economy in Asia not to publish data on the full details of its international reserves in accordance with the IMF Data Template on International Reserves and Foreign Currency Liquidity.

Over the first half of 2017, there has been a notable increase in the scale and persistence of India's net foreign exchange purchases, which have risen to around \$42 billion (1.8 percent of GDP) over the four quarters through June 2017. India has a significant bilateral goods trade surplus with the United States, totaling \$23 billion over the four quarters through June 2017. Treasury will be closely monitoring India's foreign exchange and macroeconomic policies.

Section 1: Global Economic and External Developments

This Report covers economic, trade, and exchange rate developments for the first six months of 2017 and, where data are available, developments through end-September 2017. This Report covers developments in the 12 largest trading partners of the United States, as well as Switzerland, which is currently the United States' 14th largest trading partner.⁵ These economies' total goods trade with the United States amounted to \$2.7 trillion over the four quarters through June 2017, over 70 percent of all U.S. goods trade during that period. For some parts of the analysis, especially those parts having to do with Section 701 of the 2015 Act, data over the most recent four quarters for which data are available are considered (typically up through the second quarter of 2017).

U.S. Economic Trends

The U.S. economy expanded at a moderate pace over the first half of 2017, growing at an average annual rate of 2.1 percent. Despite a weak first quarter, private domestic final demand has picked up noticeably, rising by 3.2 percent in the first half of 2017 after advancing 2.6 percent in the latter half of 2016. When measured on a year-over-year basis, U.S. economic growth has strengthened every quarter since mid-2016.

Sound fundamentals, including strong labor markets, upbeat consumer sentiment, solid household finances, and a healthy outlook for business activity, are likely to propel private domestic demand in the coming quarters. Inflation remains moderate, and low interest rates continue to support credit markets. As of early October, a consensus of private forecasters predicted that real GDP would expand at 2.5 percent in the second half of 2017 (at an annual rate) and at a rate of 2.2 percent for the whole of the year (measured on a year-over-year basis). While preliminary estimates suggest that Hurricanes Harvey and Irma could shave 0.8 percentage point from growth in the third quarter, a similar-sized boost is expected in the fourth quarter as output returns to its pre-hurricanes level, a portion of the delayed spending is made up, and outlays for clean-up and rebuilding occur. Growth was already expected to accelerate to 2.4 percent in 2018, and hurricane-related spending may provide an additional bump in the early part of next year.

Recent U.S. Growth Performance

Real GDP expanded at an average annual rate of 2.1 percent over the first half of this year, slightly below the 2.3 percent rate in the second half of 2016 but well above the 1.4 percent rate over the first half. Domestic final demand remained firm. Consumer spending contributed 1.8 percentage points to GDP growth in the first half of 2017, a few ticks shy of the 2.0 percentage points added in the second half of 2016. Business fixed investment contributed 0.9 percentage point to growth in the first half of 2017, building on a 0.2 percent contribution in the last half of 2016. Residential investment made a modest 0.1 percentage point contribution. In addition to domestic demand, net exports added 0.2

⁵ Switzerland is included in this Report as it has previously appeared on Treasury's Monitoring List in the October 2016 and April 2017 Reports.

percentage point to growth in the first half of 2017, a marked improvement from the 0.6 percentage point drag posed in the final two quarters of last year. Only inventory investment proved to be a negative factor over the first half of the year, while government expenditures were roughly neutral. Inventory drawdown subtracted 0.7 percentage point from growth in the first two quarters of 2017, after adding 0.6 percentage point in the final two quarters of 2016. Government spending held down growth by 0.1 percentage point in the first half of 2017, offsetting its small positive contribution in the second half of 2016.

Sound Fundamentals

The pace of job creation has remained solid in 2017, and the unemployment rate has fallen further. Nonfarm payroll employment added 148,000 jobs per month, on average, during the current year through September, moderating from last year's monthly average of 187,000. In the three months prior to September's hurricane-related decline in payroll job creation, however, nonfarm payroll employment averaged 172,000 per month, only a bit below last year's pace. The unemployment rate fell to 4.2 percent in September, a sixteen-year low, and well below the 10 percent peak of 2009. Other measures of labor market conditions continue to improve, including a rise in the labor force participation rate and decline in involuntary part-time employment, the latter to its lowest level in a decade.

Consumer sentiment is at a fresh thirteen-year high as of early October, with households expressing positive views about current as well as future economic conditions. While measures of compensation have mostly firmed over recent years, the pace of improvement has been disappointing. Average hourly earnings rose 2.5 percent over the twelve months ending September 2017, stepping up from the year-over-year rates that prevailed from 2011 through 2015 but dipping below the 2.7 percent seen in the second half of 2016. Total compensation costs for civilian workers advanced 2.4 percent in the four quarters ending in June 2017, a tick higher than the year-earlier pace. Despite the slow growth in nominal earnings, the debt-service ratio facing households has steadily declined to a record low, owing to a relatively stable level of mortgage debt and low interest rates. Moreover, the value of home equity has more than doubled since mid-2011 and household net worth stands at a record high.

Business activity is also expanding at a healthy pace. According to the most recent survey of the Institute for Supply Management (ISM), manufacturing growth accelerated in September to a thirteen-year high. Seventeen of 18 industries reported expansion, while one industry reported contraction. The ISM's non-manufacturing index also pointed to faster expansion in the services sector in September. After several weak quarters in 2015 and early 2016, business fixed investment has firmed, with a notable pick-up in the first half of 2017 when it grew at an average annual rate of 7.0 percent.

Although headline inflation turned up in mid-2016 with the recovery in energy prices, a pullback in oil prices caused a deceleration starting in early spring 2017. The consumer price index (CPI) for all items rose 2.2 percent over the twelve months ending in September 2017, one-half percentage point below the 2.7 percent rate seen in February 2017 but faster than the 1.5 percent increase over the twelve months ending in September 2016.

Growth in the core CPI (which excludes food and energy prices) remains stable but relatively low. As of September 2017, core inflation has run at 1.7 percent (year-over-year) for five consecutive months, after accelerating to 2.3 percent in January 2017.

Fiscal Policy and Public Finances

As fiscal consolidation has taken hold in recent years, the government sector has made a largely neutral contribution to growth. On an inflation-adjusted basis, total government expenditures in the second quarter of 2017 were slightly lower than the year-earlier level, with federal spending up slightly and state and local spending down a bit. Although Congress has not yet finalized spending levels for the coming fiscal year, the House of Representative's budget resolution largely aligns with the President's proposals, suggesting that government spending will have a small economic impact in coming quarters. The Administration's mid-session review of the fiscal year (FY) 2018 Budget projects discretionary nondefense spending to decline to 3.1 percent of GDP, down from an estimated 3.3 percent of GDP in FY2017. In FY2016, the federal budget deficit was 3.2 percent of GDP. Debt held by the public rose to \$14.2 trillion in FY2016. As a share of the economy, publicly held debt rose from 73.3 percent at the end of FY2015 to 77.0 percent at the end of FY2016. The Administration projects debt to peak at 77.9 percent in FY2017 before declining due to its policy proposals.

U.S. Current Account and Trade Balances

The U.S. current account was in deficit by 2.5 percent of GDP in the first half of 2017, rising slightly from 2.4 percent in the second half of 2016. This widening of the current account deficit was driven by the goods trade balance, which deteriorated by \$24 billion in the first half of 2017 compared to the second half of 2016. A modest pick-up in the surplus on income helped offset a portion of the larger goods trade deficit.



The headline U.S. current account deficit has been relatively stable since 2015 at around 2½ percent of GDP. On its face, this would seem to suggest that the U.S. external sector has been relatively resilient to the effects of the dollar strengthening trend that was witnessed from mid-2014 through the end of 2016. Developments in the non-oil goods balance call this conclusion into question. The non-oil goods deficit widened to 3.8 percent of GDP in the first half of 2017, equal to its peak post-crisis level. Further, the decline in the non-oil goods balance has been concentrated among the manufactured goods that might be

expected to be more sensitive to exchange rate developments.⁶ The relative stability of the U.S. goods trade balance – and the overall current account – has been supported by the significant narrowing of U.S. petroleum deficit, reflecting increased domestic oil production and lower world oil prices.



At the end of the second quarter

of 2017, the U.S. net international investment position stood at a deficit of \$7.9 trillion (41.2 percent of GDP), an improvement of more than \$380 billion compared to six months earlier. The value of U.S.-owned foreign assets was \$25.9 trillion, while the value of foreign-owned U.S. assets stood at \$33.9 trillion. The improvement in the net position over the last six months has been supported by valuation effects that increased the dollar value of U.S. assets held abroad.

International Economic Trends

Over the first half of 2017, global growth strengthened broadly. Powered by a synchronized and sustained expansion across major economies over the first half of the year, the global economy finally achieved a longawaited acceleration after several years of lackluster growth. The pick-up in growth is helping narrow output gaps in economies where the effects of the global financial crisis have



lingered, and is reflected particularly in strong employment gains across major advanced economies. Wage and inflation dynamics, on the other hand, remain muted in most economies, with inflation expectations still below pre-crisis levels in most advanced economies and inflation continuing to moderate across many emerging market economies. The persistent weakness of both wages and inflation in the post-crisis era reflects in part anemic productivity growth. While it appears that productivity has been hampered by

⁶ Specifically, almost 80 percent of the decline in the non-oil goods balance relative to 2014 is accounted for by a deterioration in the trade balances for automobiles, capital goods, and consumer goods, reflecting both lower exports and higher imports (in nominal terms) across all three categories.

both cyclical and structural factors, untangling the key drivers – and formulating remedies – remains one of the preeminent challenges for economic policymakers.

Near-term growth expectations have remained firm, as reflected in continued asset price gains and strong readings of consumer and business confidence. However, the outlook remains modest within a historical context, particularly for advanced economies. The IMF, in its October 2017 forecast, projects that advanced economies will grow steadily over the next 18 months, expanding 2.2 percent in 2017 and 2.0 percent in 2018. While this would represent an improvement over the middling 1.6 percent pace of growth advanced economies averaged from 2011-2016, it is still well below the 2.7 percent average growth they achieved from 1990-2006. Emerging market economy growth looks to be more robust, with the IMF forecasting expansion of 4.6 percent in 2017 and 4.8 percent in 2018, which would be broadly in line with the 4.7 percent average pace of growth from 1990-2006.

Global Imbalances

For much of the period since 2000, the global economy has been characterized by large global imbalances, in particular elevated surpluses in the rapidly industrializing Asian economies (most notably China) and in northern Europe (notably Germany), paired with a large deficit in the United States. The collapse in global demand triggered by the financial crisis narrowed imbalances, but also substantially lowered global growth as output gaps opened in both deficit and surplus economies. Rather than achieving a symmetric adjustment of global imbalances that would have supported global growth – encompassing supportive macroeconomic policies to boost demand in surplus economies and corrective policies to address fiscal and external imbalances in deficit economies – the global economy was hampered by a coordinated shift to restrictive fiscal policies, as not only deficit but also surplus

economies attempted to strengthen their public finances. Though global imbalances are smaller than at their peak, they remain more than twice as large as a share of global GDP than in the mid-1990s, and the surpluses among many economies continue to be excessively large.



As the IMF has recently noted in its 2017 External Sector Report, the persistence of large current account surpluses has been a historically unusual feature of the global economy over the last 15 years. The IMF noted that of 15 advanced economies that had external surpluses in 2002, 12 still had them in 2008 and 11 still had them in 2016. In several instances, the surpluses have grown larger. During the mid-2000s, almost the entirety of current account surpluses globally – more than 90 percent – was accounted for by economies that had a current account surplus of at least 3 percent of GDP for at least three years. Though the share of these large and persistent surpluses has receded to around 60 percent of global current account surpluses, they remain higher than at any point since the mid-1980s. One result of the strong persistence of current account surpluses is that stock

imbalances have grown dramatically over the last decade as most large surplus economies now have sizeable (and expanding) stocks of net foreign claims. These claims represent unspent funds by surplus economies, posing a risk to strong, sustainable, and balanced global growth.



Among major U.S. trading partners, the very large surpluses

Note: The bottom (top) half of the chart depicts shares of the total value of global current account deficits (surpluses), with the deficit shares being given a negative sign.

of Germany, Japan, Korea, Taiwan, and Switzerland have each remained significant as a share of GDP, with the combined surpluses of these economies totaling \$678 billion (equivalent to 0.9 percent of global GDP) over the four quarters through June 2017. China's surplus has narrowed over the last two years, reaching 1.3 percent of GDP in the four quarters through June 2017, but remains the third largest in the world in nominal terms at \$155 billion.

Across most large surplus economies, the imbalance between saving and investment has increasingly reflected large and growing saving by the corporate sector. In several economies – including Germany, Japan, and Korea, though not China – it has also reflected relatively weak trends in both public and private investment. Given the still-lingering output gaps in the global economy in the aftermath of the financial crisis, global growth could be stronger, more sustainable, and more balanced if the excess saving in large surplus economies was productively channeled into increased demand in these economies, which would help boost imports from other countries and support global trade. This should be facilitated by a comprehensive policy approach that utilizes all policy levers –

fiscal, monetary, and structural policies – to raise domestic demand above GDP growth in surplus economies.

Global adjustment should also be supported by consonant shifts in exchange rates. In its 2017 External Sector Report, the IMF found that real effective exchange rates among several major economies with large and persistent surpluses remained undervalued on average in 2016. Moreover, few surplus economies have seen significant changes in their real effective exchange rates this year that meaningfully reduce the estimated misalignment.⁷



1/The IMF's estimate of real effective exchange rate (REER) misalignment (expressed as a range) compares the country's average REER in 2016 to the level consistent with the country's medium-term economic

fundamentals and desired policies. The midpoint of the misalignment range is depicted above. 2/Change through August 2017 versus 2016 average.

Note: The IMF does not provide an estimate of Taiwan's REER misalignment.

Capital Flows

Private capital outflows from China – one of the major trends that defined global capital flows over the last two years – slowed significantly in early 2017, while net capital flows to other emerging markets remained comparably small and positive in aggregate. In China, the deceleration comes after two years of large net private outflows related to concerns over slowing Chinese growth and financial stability risks. A variety of domestic policies and global developments over the last year have contributed to the reduction in outflow pressures: tightened capital controls on outbound direct investment and cross-border borrowing sharply curtailed resident outflows in 2017 (the largest component of net

⁷ While several major economies have witnessed notable movements in their REER this year relative to end-2016 levels, the moves relative to average 2016 levels – which are the basis for the IMF's estimates of misalignments – have generally been much more modest.

outflows in prior years), higher domestic growth expectations attracted the highest level of non-foreign direct investment inflows since early 2014, and the weakening of the dollar in 2017 eased downward pressure on the RMB. At their current pace, capital outflows from China are on track to reach only a fraction of their 2015 and 2016 levels.



Note: Financial account (excluding reserves) adjusted for errors and omissions. Chart shows Q1 data only for 2017. Source: IMF

Aggregate net private capital inflows into emerging markets other than China picked up slightly in the first quarter of 2017 over the prior quarter. Sentiment toward emerging markets continued to improve as strong growth in early 2017 across major economies pointed to a synchronized global expansion. Capital flows remained concentrated among the larger emerging market economies, albeit remained small in nominal terms compared to flows to the advanced economies and China. Foreign direct investment continued to represent the majority of net capital inflows, though net portfolio debt inflows increased notably in early 2017.

Foreign Exchange Markets

The dollar depreciated on a nominal, trade-weighted basis by roughly 7 percent over the first nine months of 2017, more than reversing the 5.9 percent appreciation over the second half of 2016. The dollar's decline was broad-based, depreciating against most major and emerging market currencies alike. The dollar's decline was gradual over the course of the year, reflecting delayed expectations for both U.S. fiscal stimulus and further U.S. monetary policy tightening, as well as strengthening growth in foreign economies. Most major currencies outside the United States either appreciated or were on net little changed on a nominal, trade-weighted basis over the first nine months of 2017. The Mexican peso increased the most among currencies covered by this Report, recovering strongly on a trade-weighted basis from the large depreciation in the second half of 2016 as concerns over the regional economic outlook and trade relationships subsided. The euro

and Canadian dollar both appreciated more than 5 percent on a trade-weighted basis, as growth accelerated and expectations for monetary policy moved in a less accommodative direction. Shifts in the euro area outlook also relieved safe-haven inflow pressures on the Swiss franc, which fell by 3.5 percent on a trade-weighted basis in the third quarter. Though the trade-

U.S. Dollar vs. Major Trading Partner Currencies



weighted Brazilian real is only 2 percent lower on net this year through end-September, it fell by as much as 5 percent over the first half of the year amid political turbulence before gaining back most of that decline in the third quarter as the economic recovery appeared to gain firmer footing.



Treasury judges that foreign exchange markets have generally

functioned smoothly, including around increases in the Federal Reserve's policy rate corridor in both March and June. Compared to the second half of 2016, net changes in most nominal effective exchange rates in the first half of 2017 were generally smaller, reflecting the improving growth outlook and greater global policy clarity. The U.S. dollar continues to be the world's principal currency in international foreign exchange markets, being bought or sold in 88 percent of all currency trades, according to the most recent (2016) Bank for International Settlements (BIS) Triennial Survey of foreign exchange activity.

Foreign Exchange Reserves

Global foreign currency reserves increased in the first half of 2017 by nearly \$330 billion on net in nominal terms, surpassing \$11 trillion in June 2017. The headline increase in global reserves in 2017 offset the \$300 billion decline over the second half of 2016, stabilizing the level of global reserves within the range where it has remained over the past year. The rise in headline reserve levels globally over the first half of 2017 was primarily a byproduct of valuation changes, and particularly the depreciation of the dollar, which boosted the dollar value of other reserve holdings. Nonetheless, even after accounting for valuation effects, there was net accumulation of reserves at the global level in the first half of 2017, a reversal of the pattern observed over the previous two years, during which many economies engaged in reserve asset sales to stem or slow the depreciation of their currencies. Among the economies included in this Report, Switzerland's reserves increased by \$90 billion in the context of continued foreign exchange purchases, while China's headline reserves rose by over \$45 billion despite continued foreign exchange sales (though the pace of sales was much reduced compared to the prior two years).

A more in-depth discussion of foreign exchange reserves adequacy can be found in Annex I.

	FX Reserves as % of	FX reserves as		
	short term debt	% of GDP		
Brazil	702%	18%		
India	412%	16%		
China	360%	27%		
Mexico	323%	16%		
Korea	322%	25%		
Taiwan	264%	81%		
Switzerland	72%	109%		
Japan	47%	24%		
Canada	12%	5%		
Italy	4%	2%		
UK	2%	5%		
Germany	2%	1%		
France	2%	2%		



Foreign exchange reserves as of June 2017.

GDP measured as the 4Q rolling sum through Q2 2017. Short-term debt consists of gross external debt with remaining maturity of one year or less, as of Q1-2017. Sources: National authorities, World Bank, IMF, Haver

Economic Developments in Selected Major Trading Partners

China

China's goods trade surplus with the United States over the four quarters through lune 2017 was \$357 billion, by far the largest of any major trading partner of the United States. Because of global value chains, in which economies such as Taiwan, Korea, Japan, and Southeast Asian economies send inputs and parts to China for manufacturing and re-export to the United States, the bilateral trade surplus is likely overstated.⁸ But even accounting for global value chains, the bilateral deficit of the United States stands out and must be addressed through a combination of structural adjustments in China, including reduced barriers to goods and services imports from the United States, and macroeconomic policies that support consumption growth in China.

Treasury is concerned by the lack of progress made in reducing the bilateral trade surplus. China should take concrete steps to level the playing field for American workers and firms. This means addressing the adverse impact of China's industrial, agricultural, technological, and cyber policies on market access for U.S. firms. Further opening of the Chinese economy to U.S. goods and services, as well as reducing the role of state intervention and allowing a greater role for market forces, would provide more opportunities for American firms and

⁸ The Organization for Economic Co-operation and Development (OECD) estimates that in 2011, the difference between the domestic value-added content of China's exports to the United States and the United States' exports to China was \$153 billion, meaning that China's trade surplus with the United States in valueadded terms was around half the size of the nominal trade surplus. This gap has likely narrowed in recent years as China has increased the share of value added in its exports.

workers to compete in Chinese markets and facilitate a reduction in the trade and investment imbalance between the United States and China.

In the first half of 2017, China's goods surplus with the United States expanded by \$9.8 billion to \$171 billion relative to the same period in 2016, despite a 16 percent increase in the value of U.S. exports to China. While U.S. firms notably increased soybean, automotive, and scrap shipments to China, U.S. imports of Chinese goods – particularly cellphone and other electronics – increased by more. The relatively modest U.S. services trade surplus with China expanded by \$1.1 billion to \$19.9 billion in the first half of 2017, compared to the first half of 2016.

In contrast to the large bilateral surplus with the United States, China runs trade deficits

with many other economies, and as such, has a smaller overall trade and current account surplus globally. China's current account surplus narrowed in nominal terms in the first half of 2017 to \$82 billion (1.4 percent of GDP) from \$126 billion (2.3 percent of GDP) in the first half of 2016 and remains significantly below its 2007 half year peak of over 10 percent of GDP. Of the \$44 billion decline, the largest share (\$26 billion) reflected an expanded services trade deficit driven by increased Chinese foreign travel expenditure. The goods trade surplus declined by \$20 billion. largely reflecting an increase in imports. China's primary income deficit made a smaller contribution, declining by \$5.9 billion in the first half of 2017 compared to the first half of 2016.



The Chinese currency has moved recently in a direction that would help correct the bilateral trade imbalance with the United States, but on a trade-weighted basis, the currency has become more competitive globally. Through the end of September, the renminbi has strengthened 4.4 percent against the dollar and weakened 0.5 percent against China's CFETS nominal basket.⁹ Further, on a real, trade-weighted basis, China's currency

⁹ The China Foreign Exchange Trade System (CFETS) RMB index is a trade-weighted basket of 24 currencies published by the People's Bank of China.

depreciated 2.7 percent through August 2017. U.S. dollar weakness, an improved nearterm Chinese economic growth outlook, and reassertion of control by the central bank over the daily fixing rate of the renminbi likely contributed to the relative stabilization of the currency and contributed to a decline in net Chinese capital outflows. Tightened capital controls also likely aided a reduction in net outflows (excluding the trade surplus and net direct investment inflows) in the first half of 2017 to an estimated \$160 billion, compared to \$290 billion during the same period in 2016. Research by staff at the Federal Reserve Board suggests that capital controls have possibly been circumvented to some extent by Chinese residents' acquisition of foreign assets abroad mis-recorded as services imports.¹⁰ This circumvention effectively results in an understatement of China's current account surplus by inflating import figures with transactions that should be included in China's financial account.

China does not publish its foreign exchange market intervention, but Treasury estimates that Chinese authorities significantly curtailed intervention to support the value of the renminbi in the first half of 2017 as depreciation pressures abated due to Chinese capital control measures and higher growth expectations. Foreign exchange reserves sold in the first six months of the year are



estimated at \$62 billion, a pace of sales which is less than one-third of that witnessed over 2016 on average. As of August, Chinese foreign exchange reserves were valued at \$3.1 trillion, which is above standard measures of reserve adequacy.

Real GDP in the second quarter of 2017 grew 6.9 percent relative to the same period in 2016, unchanged from the previous quarter, but higher than the annual rate of 6.7 percent in 2016. Economic momentum has remained solid despite some recent monetary and financial regulatory tightening. Consumption represented the largest contributor to China's economic growth in the first half of 2017, indicating some progress toward rebalancing the economy, but consumption continues to represent a relatively low share of GDP relative to fixed investment. Monetary policy is tighter compared to 2016, although still fairly accommodative. While the rate of credit expansion – particularly shadow credit growth – has come down since the beginning of the year due to China's regulatory efforts, Treasury staff estimate that total nominal credit growth, after factoring in local government bond swaps and shadow credit activity, amounted to roughly 14 percent in August, still higher than nominal GDP growth. Meanwhile, new lending to the real economy remains strong due to longer-term corporate and mortgage lending.

¹⁰ Wong, Anna (2017). China's Current Account: External Rebalancing or Capital Flight? *International Finance Discussion Papers 1208*.

Japan

Japan's current account surplus remained elevated but steady in the first half of 2017 at \$90 billion (3.7 percent of GDP). From July 2016 to June 2017, the current account surplus was 3.7 percent of GDP, up from a surplus of 3.4 percent of GDP for the same period 12 months prior. While a reduction in the services trade deficit has played a role,

Japan: Current Account Balance



the elevated current account surplus continues to be driven by high net foreign income, which accounted for over 85 percent of the overall surplus in the first half of 2017 (see chart). Many years of continual surpluses have produced sizable net foreign assets: Japan's net international investment position stood at 61 percent of GDP in 2016, the highest in the G-7, and the IMF projects it will rise to 85 percent in the medium term, suggesting sizable net foreign income flows for years to come.¹¹

Japan's goods trade balance moved from deficit into surplus in 2016 for the first time since the 2011 earthquake – supported in part by low oil prices – and has remained in surplus in the first half of 2017, albeit modestly lower compared to 2016. Japan's seasonally adjusted trade balance (including both goods and services, on a yen-basis) also declined slightly in the first half



of 2017 but remains in surplus. Rising imports on the back of strong domestic demand have been a factor in a lower trade surplus, even as export volumes increased substantially between January and April, with average annual increases of 5.0 percent for the first six months of 2017 compared to average annual decreases of 2.3 percent for the same period one year earlier. Japan's goods trade surplus with the United States in the first half of 2017 was \$34 billion, unchanged from the first half of 2016. As Japan runs services trade deficits with the United States, its overall trade surplus (goods *plus* services, seasonally adjusted) was \$28 billion in the first half of 2017, about the same as a year earlier. Treasury remains concerned by the persistence of the large bilateral trade imbalance between the United States and Japan.

¹¹ Net international investment position figures and estimates from the IMF 2017 External Sector Report.

After a year of significant movement in the dollar-yen exchange rate, 2017 has seen steady but moderate yen appreciation against a backdrop of dollar weakness. As of end-September, the yen had appreciated 3.7 percent vis-à-vis the dollar, though it was 0.2 percent weaker on a real effective basis through August. Appreciation has been driven by strong domestic economic data as well as safe-haven inflows amid heightened geopolitical tensions. Japan has not intervened in the foreign exchange market in almost six years.

Japan's current policy mix consists of accommodative monetary policy and supportive fiscal policy.

The Bank of Japan (BOJ) adopted a new policy framework in 2016, which shifted policy implementation from targeting monetary base expansion toward "yield curve control," or targeting short-term interest rates as well as 10-year government bond yields. The BOJ also adopted an "inflation-overshooting commitment" to further support inflation expectations. In order to maintain the target on 10-year yields of "around" zero percent as upward pressure on yields increased, the BOJ has three times employed the tool of fixed-rate purchase operations, in which the Bank pledged to buy unlimited amounts of Japanese Government Bonds within a specified maturity range.

The Japanese government has been actively employing fiscal policy where available, with Prime Minister Abe's 2016 stimulus package the latest example. The package in terms of new fiscal spending was 1.3 percent of GDP, the largest since January 2013. In a sign that Abe's stimulus support is finally impacting the economy, second quarter GDP showed an increase in public investment of nearly 3 percent on the year, the largest such increase since the second quarter of 2014 before the last consumption tax hike. The IMF projects that growth will slow in 2018 due to a smaller expansion in foreign demand, the scheduled expiration of fiscal support, and a moderation in consumption growth. The challenge for the Japanese authorities over the medium term will be to implement necessary fiscal consolidation in a manner that minimizes the negative impact on overall growth.

Korea

Korea's current account surplus declined modestly in 2016, a trend that has continued in the first half of 2017. After reaching a peak of 7.8 percent of GDP in 2015, the current

account surplus declined to 5.3 percent of GDP in the first half of 2017. The decline was largely due to a widening of the services trade deficit. Korea's goods trade surplus continued to moderate slightly as well, though it remains high at 8 percent of GDP. The IMF in its most recent analysis described Korea's current account surplus as stronger than justified by



medium-term fundamentals. The economy remains overly dependent on exports to support growth, given persistently weak domestic demand.

Korea's goods trade surplus with the United States remains high at \$22 billion between July 2016 and June 2017. Although Treasury remains concerned by the large bilateral trade imbalance between the United States and Korea, it was \$8 billion lower than the same period 12 months prior. Given that the United States runs a services surplus with Korea, the overall trade and goods and services trade surplus was somewhat lower at \$12 billion during the same period.

Through end-September, the won has appreciated 5.4 percent against the dollar, but it is little changed in 2017 on a real effective basis. In its most recent analysis, the IMF maintained its assessment that the won is 5-15 percent undervalued.

Korea does not publish its foreign exchange market intervention. Treasury estimates that Korean authorities made net purchases of foreign exchange of \$4.9 billion (0.3 percent of GDP), including activity in the forward market, between July 2016 and June 2017. Korea maintains ample reserves at \$371 billion as of June 2017, equal to more than three times gross short-term external debt and 25 percent of GDP. Korea has well-developed institutions and markets, and





should limit currency intervention to only truly exceptional circumstances of disorderly market conditions. Korea also maintains sufficient policy space to support domestic demand, particularly when public sector debt remains relatively low at around 40 percent of GDP. Increased social spending, which remains well below most other OECD economies, could be particularly helpful for supporting stronger domestic consumption.

The Euro Area and Germany

The euro area is a currency union in which there has been considerable dispersion across members in terms of the quality and strength of economic performance. This dynamic has affected the euro exchange rate such that real effective exchange rates in some individual member countries (e.g., Germany) appear to be undervalued relative to economic fundamentals.

The euro has appreciated markedly this year, but remains relatively weak in historical terms. Through the end of September, the euro has appreciated in 2017 by 12 percent against the dollar and 5.8 percent on a nominal effective basis. Real effective appreciation in 2017 has been more modest, at 4.8 percent through end-August. Further, in spite of this recent appreciation, the euro remains 4 percent weaker than its historical average in real effective terms, and roughly 2 percent weaker on a bilateral basis against the dollar versus its historical average. Although persistent weakness in some of the peripheral euro area economies contributed to uncertainty about the resilience of the monetary union and weakened the euro amidst the European debt crisis, euro area monetary policy has had a sizeable influence on the currency since 2014. Easing by the ECB opened a sizable gap in bond market yields between the United States and the euro area, which contributed to the euro's weakness versus its historical level. More recently, however, the euro area's recent stronger economic performance and shifts in expectations for the ECB policy outlook have contributed to euro appreciation in 2017.

The combination of lower oil prices, a relatively weak currency, and German economic policies supporting high domestic saving and low consumption and investment has led to a rapid increase in Germany's surplus, which is now the largest nominal surplus in the world at \$270 billion over the four quarters through June 2017. Germany's real effective exchange rate has depreciated by 8 percent since 2009, a shift that is counterintuitive in light of Germany's large and persistent current account surplus but for its membership in the monetary union.

A number of German economic policies have restrained domestic consumption and investment, including elevated labor and value-added taxes. Nonetheless, German domestic demand has strengthened recently and has driven German growth since mid-2015, while the contribution from net exports has been slightly negative over the same period. Still, demand growth has been insufficient to appreciably reduce Germany's external imbalance, and the IMF projects only a small reduction over the medium term under current policies. Demand growth would need to accelerate substantially over a sustained period for rebalancing to proceed at a reasonable pace, which would be supported by growth-friendly reforms to tax policy.

Germany's bilateral trade surplus with the United States is very sizable and a matter of concern. Treasury recognizes that Germany does not exercise its own monetary policy and that in the absence of stronger growth elsewhere in the currency union, upward pressure on the nominal and real effective exchange rates may not be strong. Treasury also recognizes that Germany is near full employment. Nevertheless, Germany has a responsibility as the fourth-largest economy globally and as an economy with a very large external surplus to contribute to more balanced demand growth and to more balanced trade flows. Pushing demand against relatively inelastic supply should help push up wages, domestic consumption, relative prices against many other euro area members, and demand

for imports; and higher relative prices would help appreciate Germany's low real effective exchange rate. This would contribute to both global and euro area rebalancing.

Switzerland

Although Switzerland has faced persistent pressures from safehaven inflows over the last few years, these pressures have eased, at least temporarily, following the French elections and in advance of expected ECB policy normalization. At the same time, domestic economic activity remains weak, and the current account surplus remains elevated. The current account surplus in the first half of 2017



was 10 percent of GDP, up marginally from 9.9 percent of GDP in 2016. Switzerland's role as an international trading and financial services hub contributes to its large current account surplus: For example, the Swiss brokerage industry (which facilitates trade in goods) constitutes 3-4 percent of GDP, and accounted for half of Switzerland's trade surplus last year, even though the actual merchandise may not physically pass through Switzerland.

The United States' goods trade deficit with Switzerland was \$6.6 billion in the first half of 2017, unchanged compared to a year earlier.

Through August 2017, the Swiss franc's nominal and real effective exchange rates were both lower by roughly 2.5 percent. Through the end of September, the Swiss franc depreciated 6.3 percent against the euro and appreciated 4.9 percent against the dollar.

Switzerland continues to rely on monetary policy as its main tool to spur growth and

inflation, with negative interest rates and intervention in the foreign exchange market to contain appreciation pressure on the franc. While Swiss authorities do not publish monthly intervention data, Treasury estimates that Swiss National Bank (SNB) net purchases of foreign exchange (specifically euros) totaled \$58 billion from the second half of 2016 through the first half of 2017, with most of the



2017 interventions occurring in the first quarter. This suggests a modest decline compared to intervention in 2016, according to the SNB's annual report, of \$68 billion.

As a result of intervention, Switzerland's stock of foreign reserves has grown to 109 percent of GDP in the first half of this year. The IMF noted in Switzerland's 2016 Article IV consultation that future interventions should primarily be limited to preventing sharp appreciations from safe-haven inflows, and that interest rates should be used to meet longer-term inflation and economic objectives. Treasury supports this recommendation, and also encourages the Swiss authorities to publish all intervention data on a higher-frequency basis.

Section 2: Intensified Evaluation of Major Trading Partners

Together, the Omnibus Trade and Competitiveness Act of 1988 (the "1988 Act") and the Trade Facilitation and Trade Enforcement Act of 2015 (the "2015 Act") require the Secretary of the Treasury to provide semiannual reports on the foreign exchange policies of the major trading partners of the United States. Under Section 3004 of the 1988 Act, the Report must consider "whether countries manipulate the rate of exchange between their currency and the United States dollar for purposes of preventing effective balance of payments adjustment or gaining unfair competitive advantage in international trade." Section 701 of the 2015 Act requires that Treasury undertake an enhanced analysis of exchange rates and externally-oriented policies for each major trading partner "that has— (1) a significant bilateral trade surplus with the United States; (2) a material current account surplus; and (3) engaged in persistent one-sided intervention in the foreign exchange market." Additionally, the 2015 Act establishes a process to engage economies that may be pursuing unfair practices and impose penalties on economies that fail to adopt appropriate policies.¹²

Key Criteria

Pursuant to Section 701 of the Trade Facilitation and Trade Enforcement Act of 2015, this section of the Report seeks to identify any major trading partner of the United States that has: (1) a significant bilateral trade surplus with the United States, (2) a material current account surplus, and (3) engaged in persistent one-sided intervention in the foreign exchange market. Section 701 requires data on each major trading partner's bilateral trade balance with the United States, its current account balance as a percentage of GDP, the three-year change in the current account balance as a percentage of GDP, foreign exchange reserves as a percentage of short-term debt, and foreign exchange reserves as a percentage of GDP. Data for the most recent four-quarter period (July 2016 to June 2017, unless otherwise noted) are provided in Table 1 (on p. 15) and Table 2 (below).

As noted earlier, Treasury's focus is on the 12 largest trading partners of the United States; these economies account for more than 70 percent of U.S. trade in goods. Additionally, this Report covers Switzerland, which is currently the United States' 14th largest trading partner, but has previously been among the 12 largest trading partners and has appeared on Treasury's Monitoring List. No economy below the top 12 trading partners individually accounts for more than 1.6 percent of U.S. goods trade. Treasury's goal is to focus attention on the currency practices of those economies whose bilateral trade is most significant to the U.S. economy and whose policies are the most material for the global economy.

¹² Because the standards and criteria in the 1988 Act and 2015 Act are distinct, it is possible that an economy could be found to meet the standards identified in one of the Acts without being found to have met the standards identified in the other. In particular, a finding that an economy met the standards in the 1988 Act of manipulating its currency would require Treasury to examine a wider array of additional facts such as foreign exchange reserve coverage, monetary policy, or inflation developments.

The results of Treasury's latest assessment pursuant to Section 701 of the 2015 Act are discussed below.

Table 2: Major Foreign Trading Partners Evaluation Criteria									
	Bilateral Goods	Current Account			Net l	Net Foreign Exchange Intervention			
	Surplus with United States (USD Bil.,	Balance (% of GDP,	3 Year Change in Balance	Balance (USD Bil.,	• •	Purchases (USD Bil.,	Purchases (USD Bil.,	Purchases 8 of 12	
	Trailing 4Q)	Trailing 4Q)	(% of GDP)	Trailing 4Q)	• •	Trailing 4Q)	• •	Months ⁺	
	(1)	(2a)	(2b)	(2c)	(3a)	(3b)	(3c)	(3d)	
China	357	1.3	-0.1	155	-2.7	-311	-62	No	
Japan	69	3.7	3.5	185	0.0	0	0	No	
Mexico	69	-1.7	0.7	-18	-0.2	-2	-2	No	
Germany	63	7.7	0.7	268	-	-	-	-	
Italy	29	2.8	1.4	51	-	-	-	-	
India	23	-1.3	-0.3	-30	1.8	42	30	Yes	
Korea	22	5.7	-0.3	84	0.3	5	9	Yes	
Canada	19	-2.9	-0.2	-45	0.0	0	0	No	
France	14	-1.0	0.3	-26	-	-	-	-	
Taiwan	14	12.7	1.5	70	0.9	5	3	Yes	
Switzerland	13	10.3	1.3	69	8.7	58	30	Yes	
United Kingdom	-1	-5.1	0.4	-129	0.0	0	0	No	
Brazil	-5	-0.7	2.9	-13	2.3	46	5	Yes	
<i>Memo</i> : Euro Area	126	3.0	0.8	357	0.0	0	0	No	

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Sources: Haver, National authorities, U.S. Census Bureau, and U.S. Department of the Treasury staff estimates

†In assessing the persistence of intervention, Treasury will consider an economy that is judged to have purchased foreign exchange on net for 8 of the 12 months to have met the threshold.

Criterion (1) – Significant bilateral trade surplus with the United States:

Column 1 in Table 2 provides the bilateral goods trade balances for the United States' 12 largest trading partners and Switzerland for the four quarters ending June 2017.¹³ China has the largest trade surplus with the United States by far, after which the size of bilateral trade surpluses declines notably. Treasury assesses that economies with a bilateral goods surplus of at least \$20 billion (roughly 0.1 percent of U.S. GDP) have a "significant" surplus. Highlighted in red in column 1 are the seven major trading partners that have a bilateral surplus that meets this threshold over the most recent four quarters.

Criterion (2) – Material current account surplus:

Treasury assesses current account surpluses in excess of 3 percent of GDP to be "material" for the purposes of enhanced analysis. Highlighted in red in column 2a are the five economies that had a current account surplus in excess of 3 percent of GDP for the four quarters ending June 2017. In the aggregate, these five economies accounted for more than half of the value of global current account surpluses as of the end of 2016. Column 2b

¹³ Although this Report does not treat the euro area itself as a major trading partner for the purposes of the 2015 Act - this Report assesses euro area countries individually - data for the euro area are presented in Table 2 and elsewhere in this Report both for comparative and contextual purposes, and because policies of the ECB, which holds responsibility for monetary policy for the euro area, will be assessed as the monetary authority of individual euro area countries.

shows the change in the current account surplus as a share of GDP over the last three years, although this is not a criterion for enhanced analysis.

Criterion (3) – Persistent, one-sided intervention:

Treasury assesses net purchases of foreign currency, conducted repeatedly, totaling in excess of 2 percent of an economy's GDP over a period of 12 months to be persistent, onesided intervention.¹⁴ Columns 3a and 3d in Table 2 provide Treasury's assessment of this criterion.¹⁵ In economies where foreign exchange interventions are not published, Treasury uses estimates of net purchases of foreign currency to proxy for intervention. Switzerland and Brazil meet this criterion for the four quarters ending June 2017, per Treasury estimates. India is very close to meeting this criterion for the four quarters ending June 2017, with net purchases of foreign currency slightly below 2 percent of GDP.

Summary of Findings

Pursuant to the 2015 Act,¹⁶ Treasury finds that no major trading partner of the United States met all three criteria in the current reporting period. Four major trading partners of the United States, however, met two of the three criteria for enhanced analysis in this Report. Additionally, one major trading partner, China, constitutes a disproportionate share of the overall U.S. trade deficit. **These five economies – China, Japan, Korea**, Germany, and Switzerland - constitute Treasury's Monitoring List. Japan, Germany, and Korea have met two of the three criteria in every Report since the April 2016 Report, having material current account surpluses combined with significant bilateral trade surpluses with the United States. Switzerland has met two of the three criteria in every Report since the October 2016 Report, having a material current account surplus and having engaged in persistent, one-sided intervention in foreign exchange markets. China has met one of the three criteria in every Report since the October 2016 Report, having a significant bilateral trade surplus with the United States, with this surplus accounting for a disproportionate share of the overall U.S. trade deficit. Treasury will closely monitor and assess the economic trends and foreign exchange policies of each of these economies.

¹⁴ Notably, this quantitative threshold is sufficient to meet the criterion. Other patterns of intervention, with lesser amounts or less frequent interventions, might also meet the criterion depending on the circumstances of the intervention.

¹⁵ Treasury used publicly available data for intervention on foreign asset purchases by authorities, or estimated intervention based on valuation-adjusted foreign exchange reserves. This methodology requires assumptions about both the currency and asset composition of reserves in order to isolate returns on assets held in reserves and currency valuation moves from actual purchases and sales, including estimations of transactions in foreign exchange derivatives markets. Treasury also used alternative data series when they provide a more accurate picture of foreign exchange balances, such as China's monthly reporting of net foreign assets on the PBOC's balance sheet and Taiwan's reporting of net foreign assets at its central bank. To the extent the assumptions made do not reflect the true composition of reserves, estimates may overstate or understate intervention. Treasury strongly encourages those economies in this Report that do not currently release data on foreign exchange intervention to do so.

¹⁶ Section 701 of the Trade Facilitation and Trade Enforcement Act of 2015, 19 U.S.C. § 4421.

Taiwan has been removed from the Monitoring List in this Report. Taiwan met two of the three criteria in the October 2016 Report, having a material current account surplus and having engaged in persistent, one-sided intervention in foreign exchange markets, but met only one of the three criteria, a material current account surplus, in both the April 2017 Report and this Report.

Regarding the 2015 Act, while no economy met all three of the criteria for the current reporting period, Treasury remains deeply concerned by the significant imbalances in the global economy. Bilateral trade imbalances with many of our major trading partners have grown to very large levels. More broadly, current account surpluses in several major trading partners have not only been large but unusually persistent over the last decade.

This global configuration of external positions is untenable. The United States should not and will not bear the burden of an international trading system that unfairly disadvantages our exports and unfairly advantages the exports of our trading partners, whether through imbalanced macroeconomic policies or unfair trade barriers. It is critical that our major trading partners durably avoid foreign exchange and macroeconomic policies that facilitate unfair competitive advantage. Treasury is committed to aggressively and vigilantly monitoring and combatting unfair currency practices. Treasury will also vigorously pursue an agenda to facilitate more balanced global growth and a reduction in global imbalances in the G-20 and other fora.

Based on the analysis in this Report, Treasury has also concluded that no major trading partner of the United States met the standard in the 1988 Act of manipulating the rate of exchange between its currency and the United States dollar for purposes of preventing effective balance of payments adjustments or gaining unfair competitive advantage in international trade during the period covered in the Report.

Annex I: Foreign Exchange Reserves – Recent Developments and Adequacy Measures¹⁷

Global foreign currency reserves resumed a multi-decade climb in the years following the 2008 global financial crisis, reaching a historic peak of over \$12 trillion in mid-2014.¹⁸ Since mid-2014, however, the global stock of foreign currency reserves has declined, falling back to around \$11.1 trillion as of June 2017. The decline in global reserves over the last three years has largely been due to developments in China, which sold foreign exchange to stem capital outflow pressures and arrest depreciation pressure of the renminbi; and in oil exporters, which have used reserves to cushion the external shock from lower oil prices. Excluding China and several large oil exporters, global foreign exchange reserves have in fact been broadly stable over the last three years, though country-level trends vary.

This annex examines recent developments in the reserve holdings of the 13 major U.S. trading partners discussed in this Report, which together account for almost two-thirds of global foreign currency reserves. Further, the annex evaluates reserve adequacy for these economies against several standard benchmarks. All of the emerging market economies that are major U.S. trading partners have more than sufficient reserves when measured against these benchmarks, and many currently have stocks of foreign currency reserves that are at or near all-time highs. Excessive reserve accumulation imposes costs both on the reserve accumulator and the global economy, heightening the importance of building resilience through stronger policy frameworks rather than continued reserve accumulation.

Recent Trends in Reserve Holdings

The 13 major U.S. trading partners discussed in this Report account for 63 percent of global foreign currency reserves, as shown in Figure 1; China alone accounts for 28 percent. China is the only major U.S. trading partner whose reserves have declined substantially over the last three years. China's foreign currency reserves fell from a peak of close to \$4 trillion in mid-2014 to around \$3 trillion in



early 2017, and have been broadly stable since. The net decline in China's reserves through June (\$910 billion, or a 23 percent reduction) accounts for nearly 90 percent of the global fall in foreign currency reserves witnessed over the last three years.

¹⁷ This annex was prepared by Alexandra Altman and Daniel Hall.

¹⁸ Changes in reserves are not adjusted for valuation effects.

Excluding China, reserves for the other 12 economies covered in the Report grew roughly 10 percent between mid-2014 and early-2017, as the value of reserve holdings grew in 9 of the 12 economies. Over the three-year window, Switzerland was the only major U.S. trading partner to rapidly accumulate reserves. Between mid-2014 and mid-2017, Switzerland's reserves rose by close to \$230 billion (roughly 45 percent) as the Swiss National Bank purchased foreign currencies (primarily the euro) to limit appreciation pressures and combat deflationary forces. In Korea, India, and Taiwan, foreign exchange reserves grew steadily, and currently are at or near all-time highs for all three economies.

For the rest of the world, foreign currency reserves declined by \$410 billion between mid-2014 and mid-2017. This primarily reflected a fall in reserves among oil exporters, particularly those with less flexible exchange rate regimes.

Reserve Adequacy

There is no single, commonly accepted standard for assessing reserve adequacy, and unique economic and political factors may need to be considered as part of reserve adequacy analysis. Traditional benchmarks for reserve adequacy have attempted to estimate the scale of funding a country might need to respond to shocks to the current and capital accounts by comparing reserves to levels of import demand or short-term external debt. Common standards for these metrics – three to six months of imports and one year of short-term external debt¹⁹ – were based on general concepts rather than historical experiences, such that the proposed adequacy levels were not correlated with actual reserve needs in past capital or current account crises. Moreover, these traditional metrics focus only on narrow risk exposures, and will often imply materially different levels of reserves adequacy.

More recently there have been attempts to use model-based approaches to evaluate reserve adequacy, including efforts to estimate reserve demand or compare the relative costs and benefits of reserve accumulation. While such models have been an active area of research, they tended to be highly sensitive to underlying assumptions, which limits their practical utility as a guide to the appropriate level of reserves.²⁰

The IMF in 2011 introduced a new adequacy metric for emerging market economies to build on the simplicity of traditional metrics while incorporating insights from historical experience.²¹ The IMF metric is a weighted combination of four elements that reflect

¹⁹ The Greenspan-Guidotti short-term debt rule suggests an economy's reserves should be measured against all of the government's foreign assets and all sovereign liabilities denominated in, or indexed to, foreign currencies, as well as foreign currency assets and liabilities of financial intermediaries that have access to the safety net (e.g. banks). Greenspan, Alan. "Remarks by Chairman Alan Greenspan Before the World Bank Conference on Recent Trends in Reserves Management," 29 April 1999, Washington D.C.
²⁰ See, for example, Sebastian Edwards, Sebastian (1985). "On the Interest-Rate Elasticity of the Demand for International Reserves: Some Evidence from Developing Countries," *Journal of International Money and Finance* 4 (June), pp. 287-95; and Jeanne, Olivier and Romain Rancière (2006). "The Optimal Level of Reserves for Emerging Markets: Formulas and Applications," IMF Working Paper No. 06/229.

²¹ International Monetary Fund (2011). "Assessing Reserve Adequacy," IMF Policy Paper, February.

several sources of external funding risk based on past balance of payments crises: export earnings (to capture risk of external demand collapse); broad money (to represent domestic assets that could be shifted abroad); short-term debt; and medium- and longterm debt and equity liabilities (to reflect flight risk of portfolio and bank flows). Observed outflows in past balance of payments crises are used to model the relative risk levels of these potential sources of pressures, as well the appropriate coverage ratio for each component. The metric is calibrated to the type of exchange rate regime (fixed or floating) as well as the existence of capital controls. The IMF's current metric for fixed and floating exchange rate regimes is calculated as:

Fixed FX Regime

Suggested Reserves = 10% x Exports + 10% x Broad Money + 30% x Short-term debt + 20% Other Liabilities

Floating FX Regime

Suggested Reserves = 5% x Exports + 5% x Broad Money + 30% x Short-term debt + 15% Other Liabilities²²

Given remaining uncertainties in estimating the appropriate level of reserves, the IMF conservatively suggests reserves are sufficient when they fall within 100 to 150 percent of the metric.

Table 1 compares reserve levels in each of the 13 major U.S. trading partners covered in this Report to three benchmarks: import coverage, short-term external debt, and the IMF's adequacy metric. As discussed in prior versions of this Report, emerging market economies over the last decade have consistently held reserves in excess of common adequacy benchmarks.²³ It is unsurprising, therefore, that economies that have built reserves in recent years (Brazil, India, Korea, Taiwan) remain comfortably above these levels. More interesting is that despite the dramatic recent decline, China's reserves also remain more than sufficient compared to these benchmarks. The IMF's adequacy metric, by contrast, does not gauge China's reserves to be as excessive as the traditional metrics. This is largely due to the outsized influence of the broad money component, which alone accounts for over 60 percent of China's recommended reserve level under the IMF adequacy metric. By comparison, the broad money component accounts for closer to 40 percent, on average, of the suggested level of reserves among other emerging market economies in Table 1.

While foreign currency reserves serve a useful role in both preventing crises and mitigating their impact, excessive reserve accumulation also imposes costs on the accumulating economy and on the rest of the world. Domestically, these costs include the opportunity costs of foregone government expenditures, as well as the explicit costs of sterilizing

²² The analogous capital-control adjusted metrics are the following:

Fixed FX Regime = 10% x Exports + 5% x Broad Money + 30% x Short-term debt + 20% Other Liabilities Floating FX Regime = 5% x Exports + 2.5% x Broad Money + 30% x Short-term debt + 15% x Other Liabilities ²³ "Annex: Foreign Exchange Reserve Accumulation Recent Developments and Adequacy," Report to Congress on International Economic and Exchange Rate Policies (July 2010); "Appendix III: The Adequacy of Foreign Exchange Reserves," Report to Congress on International Economic and Exchange Rate Policies (December 2006).

reserve accumulation.²⁴ Externally, an economy's excessive reserve accumulation can generate negative spillover effects for the rest of the world, by facilitating unfair competitive advantage for the accumulating economy and creating balance of payment pressures on other economies.

Rather than relying solely on reserves, the IMF recommends that countries enhance their resilience by strengthening their policy frameworks. In particular, the IMF highlights several priorities for enhancing resilience to external shocks: sound macroeconomic and prudential policy frameworks; low and sustainable levels of public debt; monetary and exchange rate policies that maintain low inflation; and effective supervision that limits contingent risks from financial sector. Moreover, other reserve-like resources, including credit lines from international financial institutions, swap lines, or sovereign wealth fund assets, can also complement traditional reserves by providing a safety net to buffer external shocks. Many of the economies in this Report have in fact strengthened their macroeconomic and prudential policy frameworks in the post-crisis period, but have concurrently continued to build reserves. With reserves at sufficient – or more than sufficient – levels among most major U.S. trading partners, robust macroeconomic policy frameworks should be the first line of defense against external shocks, rather than continued reserve accumulation.

			Reserves	s Adequacy	Metrics	Reserves in	Excess of Met	tric (US\$ Bn)
				Reserves/				
	Reserves (US\$ Bn)	Reserves/ GDP	Import Coverage ¹ (Months)	Short- Term External Debt ²	IMF Metric ³	Import Coverage (6 Months)	Short-Term Debt (100%)	IMF Metric (100%)
China	3057	27%	20	597%	171% ⁴	2100	2500	1300
Japan	1189	24%	18	142%		790	350	
Switzerland	725	109%	23	222%		540	400	
Taiwan	442	80%	17	516%		290	360	
Korea	371	25%	8	273%	121%	110	240	60
Brazil	369	18%	25	349%	181%	280	260	170
India	362	16%	7	368%	150%	70	260	120
Mexico	166	16%	5	300%	106%		110	10
υ.к.	117	5%	2	8%				
Canada	75	5%	2	23%				
France	38	2%	1	4%				
Germany	38	1%	0	5%				
Italy	37	2%	1	16%				

Table 1: Measures of Reserve Adequacy

¹ Goods and service imports. IMF data as of March 2017.

² Sum of International Debt Securities and Consolidated Liabilities to BIS Reporting Banks with less than one year remaining maturity. Sourced from the Joint External Debt Hub.

³ The IMF does not provide reserves for advanced economies or Taiwan. IMF metric as of April 2017.

⁴ China's reserves are compared to the IMF's capital control-adjusted metric.

²⁴ For a fuller discussion of domestic costs of reserves accumulation, see Green, Russell and Tom Torgerson (2006). "Are High Foreign Exchange Reserves in Emerging Markets a Blessing or a Burden?" Department of the Treasury, Office of International Affairs, Occasional Paper No. 6, March 2007.

Glossary of Key Terms in the Report

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

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

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

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

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

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

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

Real Effective Exchange Rate (REER) – A weighted average of bilateral exchange rates, expressed in price-adjusted terms. Unlike the nominal effective exchange rate, it is further adjusted for the effects of inflation in the countries concerned.

Trade Weighted Exchange Rate – see Nominal Effective Exchange Rate.