



REPORT TO CONGRESS

Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States

U.S. DEPARTMENT OF THE TREASURY OFFICE OF INTERNATIONAL AFFAIRS May 2019

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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

Global growth decelerated in the second half of 2018, weighed down by slowing activity in China and the euro area, though growth in the United States remained strong. More recent data suggest that the global slowdown persisted in early 2019, with signs of sluggish growth across several major regions of the global economy. While there is good reason to think that at least part of this weakness will prove transitory – in the United States, strong underlying fundamentals are likely to sustain solid growth going forward, and China's growth appears to be stabilizing on the back of recently enacted support measures – major economies should proactively pursue policies that will bolster confidence and help raise both near-term and medium-term growth.

The Administration's focus is on helping American workers and businesses to thrive, raising productivity, and increasing real median incomes. Following the first major reform of the U.S. tax code in three decades, the United States saw business investment and productivity accelerate notably in 2018. The President's Budget for FY 2020, released in March, aims to bring down the U.S. fiscal deficit over the medium term by curtailing spending, with the deficit falling to 2.6 percent of GDP by 2024 under the Administration's proposals and policies.

The Administration is working actively to dismantle unfair barriers to trade and achieve fairer and more reciprocal trade with major U.S. trading partners. This includes combatting unfair currency practices that facilitate competitive advantage, such as unwarranted intervention in currency markets. The U.S.-Mexico-Canada trade agreement incorporates commitments that all three countries will avoid unfair currency practices and publish related economic information. Additionally, in March, Korea for the first time reported publicly on its foreign exchange intervention. Treasury welcomes this important development in Korea's foreign exchange practices.

Treasury continues to carefully monitor developments in the Chinese renminbi (RMB). The RMB depreciated by 3.8 percent against the dollar during the second half of 2018 and is down 8 percent over the past year to 6.92 RMB to the dollar. China's exchange rate practices continue to lack transparency, including its intervention in foreign exchange markets. Based on Treasury estimates, direct intervention in foreign exchange markets by the People's Bank of China (PBOC) over the last several months appears limited. Nonetheless, given China's long history of facilitating an undervalued currency through protracted, large-scale intervention in the foreign exchange market, Treasury has continued to have ongoing discussions with the Chinese authorities about RMB developments and intervention practices.

Moreover, in recent years, China has shifted from a policy of gradual economic liberalization to one of reinforcing state control and increasing reliance on non-market mechanisms. The pervasive use of explicit and implicit subsidies and other unfair practices are increasingly distorting China's economic relationship with its trading partners. These actions tend to limit Chinese demand for and market access to imported goods, leading to a wider trade surplus. Indeed, the United States goods trade deficit with China reached a record \$419 billion in 2018. A key driver of this increase was a sharp decline in U.S. exports to China in the fourth quarter of 2018, a time when U.S. imports from China were sustained. The United States is committed to addressing our persistent bilateral trade deficit to improve trade patterns between our countries and provide better outcomes for U.S. workers and firms.

In recent years, there has been a decline in the scale and persistence of foreign exchange intervention among most major U.S. trading partners. Nonetheless, some U.S. trading partners have a history of one-sided intervention in foreign exchange markets. **Starting with this Report, Treasury will review and assess developments in a larger number of trading partners in order to monitor for external imbalances and one-sided intervention.** Treasury will also continue to monitor closely the extent to which intervention by our trading partners is symmetrical, and whether economies that choose to smooth exchange rate movements resist depreciation pressure in the same manner as appreciation pressure.

Treasury has pushed other economies to allow exchange rates to be supportive of growth and adjust to shifting economic conditions. All G-20 members concurred last year that strong fundamentals, sound policies, and a resilient international monetary system are essential to the stability of exchange rates, contributing to strong and sustainable growth and investment.

Notwithstanding these positive developments, the Administration remains deeply concerned by the large trade imbalances in the global economy. The U.S. trade deficit widened further in 2018, as domestic demand growth picked up in the United States while slowing in major U.S. trading partners, and the currencies of several major U.S. trading partners continued to be undervalued per estimates by the International Monetary Fund (IMF). Bilateral trade deficits with several major trading partners, particularly China, remain extremely large. The rise in the dollar's real effective exchange rate in 2018, if sustained, would likely exacerbate these large trade imbalances.

Further, global growth is neither sufficiently strong nor balanced. Large trade and current account surpluses have persisted in several major economies for many years. These imbalances pose risks to future growth, as rapid adjustments to lower imbalances have in the past typically occurred through demand compression in deficit economies, and a corresponding shortfall in demand and growth globally. These risks are intensified by the persistence of imbalances, which are causing net creditor and net debtor positions to expand as a share of global output. Treasury will continue to press major U.S. trading partners that have maintained large and persistent external surpluses to support stronger and more balanced global growth by reorienting macroeconomic policies to support stronger that facilitate unfair competitive advantage.

Treasury Analysis Under the 1988 and 2015 Legislation

The Omnibus Trade and Competitiveness Act of 1988 (the "1988 Act") requires the Secretary of the Treasury to provide semiannual reports to Congress on international economic and exchange rate policy. Under Section 3004 of the 1988 Act, the Secretary 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 adjustments or gaining unfair competitive advantage in international trade."

This determination is subject to a broad range of factors, including not only trade and current account imbalances and foreign exchange intervention (criteria under the second piece of legislation discussed below), but also currency developments, exchange rate practices, foreign exchange reserve coverage, capital controls, and monetary policy.

The Trade Facilitation and Trade Enforcement Act of 2015 (the "2015 Act") calls for the Secretary to monitor the macroeconomic and currency policies of major trading partners and conduct enhanced analysis of and engagement with those partners if they trigger certain objective criteria that provide insight into possibly unfair currency practices.

Under the 2015 Act, Treasury establishes thresholds for three specific criteria. Starting with this Report, Treasury is expanding the number of trading partners covered in the Report and adjusting the thresholds for the three criteria. Box 1 summarizes the changes that Treasury is making.

Beginning with this Report, Treasury will assess all U.S. trading partners whose bilateral goods trade with the United States exceeds \$40 billion annually. In 2018, this included 21 U.S. trading partners whose total goods trade with the United States amounted to nearly \$3.5 trillion, more than 80 percent of all U.S. goods trade last year. This includes all U.S. trading partners whose bilateral goods surplus with the United States in 2018 exceeded \$20 billion.

With regards to the three criteria under the 2015 Act, the thresholds Treasury will use are as follows:

Box 1. New Treasury Thresholds Under the 2015 Act						
Criteria	Benchmark	Previous threshold	New threshold			
Major Trading Partner Coverage	Total Bilateral Goods Trade (Imports plus Exports)	12 largest trading partners	\$40 billion ¹			
(1) Significant Bilateral Trade Surplus with the United States	Goods Surplus with the United States	\$20 billion	\$20 billion			
(2) Material Current Account Surplus	Current Account Balance	3% of GDP	2% of GDP			
(3) Persistent, One-Sided	Net FX Purchases	2% of GDP	2% of GDP			
Intervention in Foreign Exchange Markets	Persistence of Net FX Purchases (months)	8 of 12 months	6 of 12 months			

Box 1. New Treasury Thresholds Under the 2015 Act

¹As of 2018, 21 trading partners exceeded this threshold.

(1) A significant bilateral trade surplus with the United States is one that is at least \$20 billion.² This threshold captures a group of trading partners that represented three-fourths of the value of all trade surpluses with the United States in 2018. It also captures all trading partners with a trade surplus with the United States that is larger than about 0.1 percent of U.S. GDP.

(2) A material current account surplus is one that is at least 2 percent of gross domestic product (GDP). This threshold captures a group of economies that accounted for more than 90 percent of the value of current account surpluses globally in 2018.

(3) Persistent, one-sided intervention occurs when net purchases of foreign currency are conducted repeatedly, in at least 6 out of 12 months, and these net purchases total at least 2 percent of an economy's GDP over a 12-month period.³ The updated criteria will now capture all instances where one-sided purchases are undertaken in half or more of the months of the year. Looking over the last two decades, this quantitative threshold would capture all significant instances of sustained, asymmetric foreign exchange purchases by important emerging markets.

Treasury's goal in adjusting the coverage of the Report and these thresholds is to better identify where potentially unfair currency practices or excessive external imbalances may be emerging that could weigh on U.S. growth or harm U.S. workers and businesses.

Because the standards and criteria in the 1988 Act and the 2015 Act are distinct, 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.

Treasury Conclusions Related to China

Based on the analysis in this Report, Treasury determines, pursuant to the 2015 Act, that China continues to warrant placement on the Monitoring List of economies that merit close attention to their currency practices. Treasury determines that while China does not meet the standards identified in Section 3004 of the 1988 Act at this time, Treasury will carefully monitor and review this determination over the following 6-month period in light of the exceptionally large and growing bilateral trade imbalance between China and the United States and China's history of facilitating an undervalued currency. Treasury continues to have significant concerns about China's currency practices, particularly in light of the misalignment and undervaluation of the RMB relative to the dollar. China should make a concerted effort to enhance transparency of its exchange rate and reserve management

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 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.

operations and goals. Notwithstanding that China does not trigger all three criteria under the 2015 legislation, Treasury will continue its enhanced bilateral engagement with China regarding exchange rate issues, given that the RMB has fallen against the dollar by 8 percent over the last year in the context of an extremely large and widening bilateral trade surplus. Treasury continues to urge China to take the necessary steps to avoid a persistently weak currency. China needs to aggressively address market-distorting forces, including subsidies and state-owned enterprises, enhance social safety nets to support greater household consumption growth, and rebalance the economy away from investment. Improved economic fundamentals and structural policy settings would underpin a stronger RMB over time and help to reduce China's trade surplus with the United States.

• China continues to run an extremely large, persistent, and growing bilateral trade surplus with the United States, by far the largest among any of the United States' major trading partners. China's goods trade surplus with United States stands at \$419 billion over the four quarters through December 2018. The outsized magnitude of the bilateral deficit is a result of China's persistent and widespread use of non-tariff barriers, non-market mechanisms, state subsidies, and other discriminatory measures that are increasingly distorting China's trading and investment relationships. These practices tend to limit Chinese demand and market access for imported goods and services, leading to a wider trade surplus. China's policies also inhibit foreign investment, contributing to weakness in the RMB. Over the course of 2018, the RMB depreciated 5.4 percent against the U.S. dollar, and just under 2 percent on a broad, trade-weighted basis. If maintained, this depreciation would likely exacerbate China's large bilateral trade surplus with the United States.

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 continues to urge China to enhance the transparency of China's exchange rate and reserve management operations and goals. Treasury remains deeply disappointed that China continues to refrain from disclosing its foreign exchange intervention. Treasury is closely monitoring developments in the RMB and continues to have ongoing discussions with Chinese authorities.

China should pursue more market-based economic reforms that would bolster growth and confidence in the RMB. China needs to aggressively advance reforms that expand the role of market forces, support greater household consumption growth, and rebalance the economy away from investment. Such reforms would place China's economy on a more sustainable footing, support global growth, and help reduce its bilateral surplus with the United States.

Treasury Assessments of Other Major Trading Partners

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 December 2018. Similarly, based on

the analysis in this Report, Treasury concludes that no major trading partner of the United States met the standards identified in Section 3004 of the 1988 Act.

Regarding the 2015 legislation, Treasury has established a Monitoring List of major trading partners that merit close attention to their currency practices and macroeconomic policies. 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 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, in addition to China, the Monitoring List comprises Japan, Korea, Germany, Italy, Ireland, Singapore, Malaysia, and Vietnam.

With regard to the other eight economies on the Monitoring List:

- Japan maintains the fourth-largest bilateral goods trade surplus with the United States, at \$68 billion in 2018. Japan's current account surplus in 2018 was 3.5 percent of GDP, down from 4.2 percent of GDP in 2017. Japan has not intervened in the foreign exchange market since 2011. 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 its continued economic expansion to enact critical structural reforms that can support sustained faster expansion of domestic demand, create a more sustainable path for long-term growth, and help reduce Japan's public debt burden and trade imbalances.
- Korea's large external surpluses continued to moderate gradually in 2018, as the current account surplus narrowed to 4.7 percent of GDP in 2018. Similarly, Korea's goods trade surplus with the United States continued to trend down, reaching \$18 billion in 2018, the first time since 2013 that the goods trade surplus has been below \$20 billion. Treasury assesses that on net in 2018 the authorities intervened to support the won, making small net sales of foreign exchange. The won depreciated 4.1 percent against the dollar in 2018, while depreciating slightly on a real effective basis. Treasury welcomes Korea's first disclosure of its foreign exchange intervention, which covers activity in the second half of 2018. The authorities should continue to limit currency intervention to only exceptional circumstances of disorderly market conditions, and Treasury will continue to closely monitor Korea's currency practices. Given that Korea now only meets one of the three criteria from the 2015 Act, Treasury would remove Korea from the Monitoring List if this remains the case at the time of its next Report.
- Germany has the world's largest current account surplus in nominal dollar terms, \$298 billion over the four quarters through December 2018, marking the third consecutive year that Germany has been the largest contributor to external surpluses globally. Germany also maintains a sizable bilateral goods trade surplus with the United States, at \$68 billion over the four quarters through December 2018. The

persistence of the massive current account surplus and the large bilateral trade imbalance with the United States has resulted from lackluster demand growth in Germany and an undervalued real effective exchange rate. With Germany's budget surplus having risen to a record high in 2018 and GDP growth in Germany weakening in recent quarters, Germany should take meaningful policy steps to unleash domestic investment and consumption – including substantial fiscal reforms to minimize burdens from elevated labor and value-added taxes – which would underpin domestically driven growth and help reduce large external imbalances. The European Central Bank (ECB) has not intervened unilaterally in foreign currency markets since 2001.⁴

- Italy recorded a current account surplus of 2.5 percent of GDP in 2018, while its goods trade surplus with the United States rose to \$32 billion. Italy's competitiveness continues to suffer from stagnant productivity and rising labor costs. The country needs to undertake fundamental structural reforms to raise long-term growth consistent with reducing high unemployment and public debt and safeguard fiscal and external sustainability. The ECB has not intervened unilaterally in foreign currency markets since 2001.
- Ireland's current account surplus and bilateral trade surplus with the United States have expanded significantly in recent years, after Ireland ran current account deficits in the lead up to the euro area crisis. In 2018, Ireland's current account surplus reached 9.2 percent of GDP, while its goods trade surplus with the United States rose to a record high of \$47 billion. This is countered in part by a sizable U.S. surplus on services. The rise in Ireland's external balances reflects in part the significant and growing presence of foreign multinational enterprises (MNEs). A substantial share of current account transactions can likely be attributed to MNE activities, with a smaller share likely coming from the activities of domestic Irish residents. The European Central Bank (ECB) has not intervened unilaterally in foreign currency markets since 2001.
- Singapore runs one of the largest current account surpluses in the world as a share of GDP at 17.9 percent in 2018. Notwithstanding this large external surplus with the rest of the world, Singapore has consistently run a bilateral goods trade deficit with the United States, which in 2018 totaled \$6 billion. Singapore's monetary policy is uncommon, since it uses the exchange rate as its primary monetary policy tool. To meet price stability objectives, the authorities use foreign exchange intervention frequently to help guide the exchange rate and keep it within a target band. Treasury estimates that in 2018 Singapore made net foreign exchange purchases of at least \$17 billion, equivalent to 4.6 percent of GDP. Singaporean authorities announced in May that they would begin publicly disclosing intervention data in 2020. Treasury welcomes this development. While certain structural factors contribute to Singapore's large current account surplus, Singapore should undertake reforms that will lower its high saving rate and boost low domestic consumption, while striving to ensure that its real

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.

exchange rate is in line with economic fundamentals, in order to help narrow its large and persistent external surpluses.

- Malaysia has maintained a significant bilateral goods trade surplus with the United States since 2015, registering \$27 billion last year. However, Malaysia's current account surplus has narrowed substantially over the past decade on higher consumption and investment, falling to 2.1percent of GDP in 2018. Malaysia's central bank has over the last few years intervened in both directions in foreign exchange markets. Treasury estimates that in 2018, the central bank made net sales of foreign exchange of 3.1 percent of GDP to resist depreciation of the ringgit. Malaysia's external rebalancing in recent years is welcome, and the authorities should pursue appropriate policies to support a continuation of this trend, including by encouraging high-quality and transparent investment and ensuring sufficient social spending, which can help minimize precautionary saving.
- Vietnam's goods trade surplus with the United States has risen over the last decade, reaching \$40 billion in 2018. Vietnam's current account balance has also trended higher over the last decade, rising to a surplus of more than 5 percent of GDP in the four quarters through June 2018. Despite changes to the exchange rate regime in 2016 that increased the *de jure* flexibility of the exchange rate, in practice the Vietnamese dong remains closely managed against the U.S. dollar. As a result, foreign exchange intervention has been used frequently, and in both directions, to maintain the close link to the dollar. The Vietnamese authorities have credibly conveyed to Treasury that net purchases of foreign exchange were 1.7 percent of GDP in 2018.⁵ These purchases came in a context in which reserves remained below standard adequacy metrics and there was a reasonable rationale for rebuilding reserves. Further, while purchases of foreign exchange outweighed sales over the course of the year, the central bank intervened in both directions, with foreign exchange sales used to resist downward pressure on the Vietnamese dong in the second half of 2018. As Vietnam strengthens its monetary policy framework, and reserves reach adequate levels, Vietnam should reduce its intervention and allow for movements in the exchange rate that reflect economic fundamentals, including gradual appreciation of the real effective exchange rate, which will help reduce Vietnam's external surpluses.

India has been removed from the Monitoring List in this Report, having met only one out of three criteria – a significant bilateral surplus with the United States – for two consecutive Reports. After purchasing foreign exchange on net in 2017, the central bank steadily sold reserves for most of 2018, with net sales of foreign exchange reaching 1.7 percent of GDP over the year. India maintains ample reserves according to IMF metrics for reserve adequacy.

Switzerland has been removed from the Monitoring List in this Report, having met only one out of three criteria – a material current account surplus – for two consecutive Reports.

⁵ Forward intervention is included on a trade date basis.

Treasury estimates that foreign exchange intervention by the Swiss National Bank (SNB) has been very modest since mid-2017, and in 2018 totaled less than \$2 billion (0.3 percent of GDP).⁶ Treasury continues to encourage the Swiss authorities to publish all intervention data on a higher frequency basis. Switzerland should also adjust macroeconomic policies – such as using its ample fiscal space – to more forcefully support domestic economic activity, which would help alleviate the burden on monetary policy to durably lift inflation towards target.

Treasury continues to track carefully the foreign exchange and macroeconomic policies of U.S. trading partners under the requirements of both the 1988 and 2015 Acts. In this context, Treasury stresses the importance of all economies publishing data related to external balances and foreign exchange reserves in a timely and transparent fashion.

⁶ The SNB publishes a single annual figure for net intervention in its Annual Report. The SNB reported that it purchased 2.3 billion francs (about \$2.4 billion) in foreign currency in 2018 to influence the exchange rate. Swiss National Bank, 111th Annual Report, p. 13.

Section 1: Global Economic and External Developments

This Report covers economic, trade, and exchange rate developments for the last six months of 2018 and, where data are available, developments through end-April 2019. This Report covers developments in the 21 largest trading partners of the United States, whose bilateral goods trade with the United States exceeded \$40 billion in 2018. These economies' total goods trade with the United States amounted to nearly \$3.5 trillion over the four quarters through December 2018, more than 80 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 fourth quarter of 2018).

U.S. Economic Trends

U.S. economic growth remained strong in the second half of 2018 and accelerated in the first quarter of 2019. After growing at a rapid 3.2 percent annual rate during the first half of 2018, the U.S. economy grew at a strong 2.8 percent annual rate in the second half of the year, then accelerated to a 3.2 percent annual rate in the first guarter of 2019. Growth of private domestic final demand slowed somewhat, growing by 2.8 percent in the second half of last year, compared to a rate of 3.1 percent in the first half of 2018, and slowed further to 1.3 percent in the first quarter. However, the underpinnings of growth improved throughout 2018 and into the first quarter of 2019, including a faster pace of job creation, tightening labor markets with increased labor force participation, improved productivity growth, and rising nominal and real wages. Headline inflation decelerated during the latter half of 2018 as well as this year's first quarter, while core inflation, which excludes food and energy, remained relatively stable last year and slowed during the first quarter of 2019. Interest rates, including mortgage rates, continued to move higher during much of last year but began trending lower last November. As of early May 2019, a consensus of private forecasters predicted that for 2019 real GDP would expand at a rate of 2.3 percent, fourth quarter over fourth quarter. Over the last two years, however, private forecasters have on average underestimated realized GDP growth. The President's FY 2020 Budget predicts growth nearing 3 percent for the next few years.

U.S. Growth Performance Remains Strong

Real GDP expanded at an average annual rate of 3.2 percent in the first quarter of 2019, following robust growth of 3.0 percent from the fourth quarter of 2017 to the fourth quarter of 2018, the fastest Q4-over-Q4 GDP growth rate since 2005. Domestic final demand decelerated last year as well as during this year's first quarter, slowing from 3.1 percent in last year's first half to 2.8 percent in last year's second half, and further to 1.3 percent during this year's first quarter. Consumer spending growth accelerated to 3.0 percent in the second half of 2018 from 2.1 percent in the first half, then grew by 1.2 percent during the first quarter. Business fixed investment increased 4.0 percent during the second half of 2018, slowing from the 10.1 percent surge in the first half of the year, then grew by 2.7 percent during the first quarter of 2019. After slipping by 2.4 percent during the first half of 2018, residential investment slowed further, declining 4.1 percent in

the second half of the year. However, the slowdown in residential investment tapered during the first quarter to a decline of 2.8 percent, and there were also signs of stabilization in the housing sector during the first few months of 2019. Government spending grew by 1.1 percent during the second half of 2018, slowing from the 2.0 percent pace during the first half. During the first quarter of 2019, government spending increased 2.4 percent, driven by a 3.9 percent increase in state and local government spending—the fastest pace in three years. Net exports subtracted 1.0 percentage point from growth in the second half of 2018, after boosting growth by 0.6 percentage point in the first half of 2018, but during the first quarter of 2019 net exports added a full percentage point to real GDP. Inventory accumulation added 1.2 percentage points to growth during last year's second half, after posing a drag on growth of 0.5 percentage point during the first half of 2018, and added 0.7 percentage point to growth during 2019's first quarter.

Strengthening Fundamentals

Nonfarm payroll employment growth accelerated during the first half of 2018 to 235,000 jobs per month on average, and remained strong in the second half at an average 211,000 jobs per month. Throughout 2018, payroll employment increased by 223,000 jobs per month on average, well up from the 2017 average of 179,000 per month. Thus far in 2019 through April, nonfarm payroll employment growth has averaged 205,000 jobs per month, only a bit below the 2018 average monthly pace. Unemployment remained near historical lows throughout 2018. In the first half of 2018, the unemployment rate fluctuated around 4.0 percent. During the second half of 2018, the unemployment rate declined to a 48-year low of 3.7 percent in September and November before closing the year at 3.9 percent. As of April 2019, the unemployment rate declined to a 49-year low of 3.6 percent. Other measures of labor market conditions continued to improve: the labor force participation rate rose to 63.1 percent by the end of 2018 and stood at 62.8 percent as of April 2019, just below the five-year high of 63.2 percent reached in January and February 2019. Broader measures of unemployment generally declined over the course of 2018 and have continued to trend lower thus far in 2019.

Compensation growth accelerated noticeably in the second half of 2018. Nominal average hourly earnings for production and nonsupervisory workers rose 3.5 percent over the year through December 2018, faster than the 2.9 percent advance over the year through June 2018, a rate which itself was much faster than the 2.5 percent pace over the year through December 2017. In real terms, average hourly earnings rose 1.6 percent over the year through December 2018, after declining 0.2 percent over the year through June 2018. As of April 2019, 12-month nominal wage growth was 3.4 percent, while real earnings were up 1.6 percent over the year through March 2019 (the latest available data). Wages and salaries for private industry workers, as measured by the Employment Cost Index, advanced 3.0 percent over the four quarters ending in March 2019, slightly faster than the 2.9 percent pace over the four quarters ending in March 2018.

Consumer sentiment, as measured by the Reuters/Michigan index, rose to a 14-year high of 101.4 in March 2018, and ended the year just a few points lower at 98.3 in December 2018. Consumer confidence as measured by the Conference Board index trended higher through

much of 2018, reaching an 18-year high of 137.9 in October 2018. Thereafter, though, the index dropped more than 11 points, ending the year at 126.6 in December. Consumer sentiment rose 5.2 points in early May to 102.4, its highest level since January 2004. Consumer confidence advanced 5.0 points in April to 129.2, moving closer to last year's multi-year high.

While growth of business activity and investment slowed towards the end of 2018, the slowdown followed an acceleration to multi-year highs through much of last year. The Institute for Supply Management's manufacturing index rose to a 14-year high in August 2018, but thereafter drifted down to a two-year low of 54.3 in December 2018. The ISM's non-manufacturing index reached a 13-year high in September 2018 but had declined to 58.0 by the end of the year. As of April 2019, the ISM's manufacturing index had declined to 52.8, while the ISM's non-manufacturing index had declined further to 55.5, but both indices continued to signal business activity expansion. Labor productivity has improved dramatically: productivity grew 0.2 percent at an annual rate over the first two quarters of 2018, and then growth accelerated to 2.4 percent over the latter half of last year. During the first quarter of 2019, productivity growth accelerated to a 3.6 percent annual rate, the most rapid pace since the third quarter of 2014.

Headline inflation remains moderate by historical standards and slowed in the latter half of last year. The consumer price index (CPI) for all items rose 2.9 percent over the 12 months through June 2018, but by December, the 12-month rate had slowed to 1.9 percent. Growth in the core CPI (which excludes food and energy prices) remained relatively stable, registering 2.3 percent over the year through June 2018 and 2.2 percent over the year through December 2018. Through April 2019, the 12-month headline CPI inflation rate was 2.0 percent, while core CPI inflation had edged down to 2.1 percent over the same period.

Fiscal Policy and Public Finances

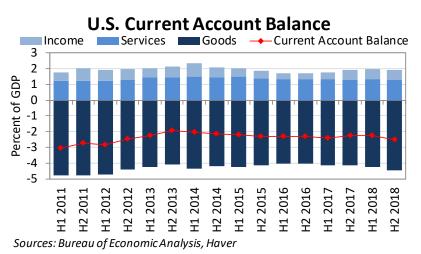
The Federal Government's budget deficit rose to 3.8 percent of GDP (\$779 billion) in the 2018 fiscal year, from 3.5 percent (\$665 billion) in FY 2017. Excluding net interest payments, the deficit was 2.2 percent of GDP in FY 2018, up 0.1 percentage point from FY 2017. Federal receipts were 16.5 percent of GDP in FY 2018 (down from 17.2 percent in FY 2017). Net outlays for FY 2018 were 20.3 percent of GDP, down from 20.7 percent of GDP in FY 2018, down from 19.3 percent in FY 2017. Federal debt held by the public, or federal debt less that held in government accounts, rose 7.4 percent to \$15.75 trillion by the end of FY 2018. Publically-held debt as a share of GDP increased by 1.7 percentage points to 77.8 percent of GDP.

According to the Administration's Budget for FY 2020, the federal deficit is expected to rise to 5.1 percent of GDP (\$1.09 trillion) in FY 2019. From FY 2020 to FY 2024, the deficit would fall to 3.9 percent of GDP on average over five years. The projection assumes the Administration's proposals – including increased spending on national defense, cuts to non-defense discretionary outlays, elimination of the Affordable Care Act, and reform of

multiple welfare programs – will be implemented. These proposals would gradually decrease the deficit to 0.6 percent of GDP by FY 2029. The Budget expects that the primary deficit (which excludes net interest outlays) will be 3.3 percent of GDP in FY 2019 but will turn into a small primary surplus by FY 2024. Debt held by the public would peak around 82 percent of GDP in FY 2022 but would gradually decline to 71 percent of GDP by FY 2029.

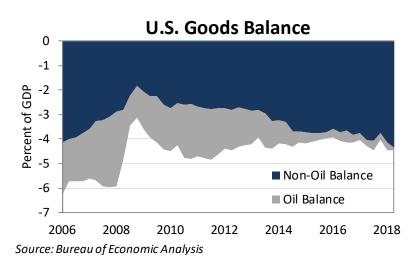
U.S. Current Account and Trade Balances

The U.S. current account was in deficit by 2.5 percent of GDP in the second half of 2018, widening from 2.2 percent of GDP in both the first half of 2018 and the same period a year earlier. While the goods trade deficit has expanded slightly in nominal terms (increasing \$84 billion in 2018 compared to last year), it has been relatively steady as a share of GDP.



After narrowing in the post-crisis era to just below 2 percent of GDP in the second half of 2013, the headline U.S. current account deficit has been quite stable since 2015 in the ballpark of $2-2\frac{1}{2}$ percent of GDP. Similarly, the goods trade deficit has been relatively stable in recent years, in the range of $4-4\frac{1}{2}$ percent of GDP. But significant shifts have occurred within the goods balance. The U.S. petroleum deficit has fallen as domestic production has expanded, and net petroleum imports narrowed to 0.1 percent of GDP in the fourth quarter of 2018. The non-oil goods deficit, by comparison, has been widening, with 2018 marking the first year it has been above 4 percent of GDP in more than a decade. This has primarily reflected strong import growth and relatively stagnant export growth:

Over the last four years, growth in real non-oil goods imports has exceeded 4 percent annually on average, whereas average annual growth of real goods exports was below 2 percent. In particular, exports of key manufactures – capital goods and automobiles – are effectively flat over the last four years, and have fallen as a share of U.S. GDP, whereas

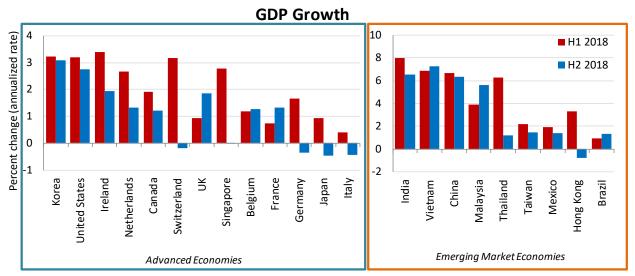


imports in these categories are up over 15 percent since 2014. The dollar's broad strength over this period has likely contributed to these developments in U.S. trade patterns.

At the end of the fourth quarter of 2018, the U.S. net international investment position stood at -\$9.7 trillion (46.6 percent of GDP), a deterioration of \$2 trillion compared to end-2017. The value of U.S.-owned foreign assets was \$25.4 trillion, while the value of foreign-owned U.S. assets stood at \$35.1 trillion. Deterioration in the net position in 2018 was due in part to valuation effects from an appreciating dollar that lowered the dollar value of U.S. assets held abroad, as well as the relative underperformance of foreign equity markets compared to U.S. stock markets in 2018.

International Economic Trends

Global growth momentum pulled back in 2018, and the near-term outlook for the global economy is weaker than it was a year ago. After starting 2018 in a strong cyclical upswing, most major economies saw growth decelerate in the second half of the year, with the euro area and China in particular showing signs of weakening activity. Idiosyncratic developments across a wide range of economies have contributed to the global deceleration, including political uncertainty in many European countries, financial turbulence in some large emerging markets, and attempts by Chinese authorities to rein in leverage. But the broad-based slowdown increases risks of a more sustained stagnation in the global economy, calling for proactive policies to restore growth. The pullback is also a reminder that the fundamentals of the global economy are weaker than they should be. While productivity growth has ticked up recently in the United States, in general productivity growth across advanced economies remains very weak, reflecting in part many years of subpar investment following the crisis. Recent financial turbulence in key emerging markets, as well as China's efforts to address corporate debt vulnerabilities, are a reminder of the risks posed by substantial build-up in debt (including external debt) and



Note: Based off semester average of Q/Q SAAR growth rates. China, India, and Vietnam based off Y/YNSA data. Sources: National Authorities, Haver

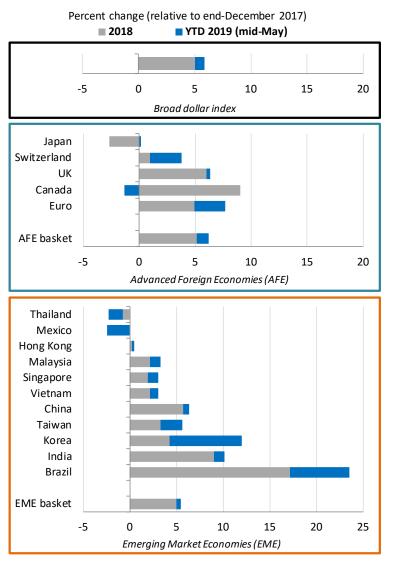
the need for greater transparency around debt obligations. The IMF projects that global growth will slow to 3.3 percent in 2019 and tick up to 3.6 percent in 2020 (in line with 2018 growth but below its 2017 level). Macroeconomic policy adjustments and structural reforms across both advanced and emerging economies are needed to durably raise global growth prospects.

Foreign Exchange Markets⁷

The U.S. dollar appreciated 5.0 percent on a nominal effective basis over 2018, retracing most of its decline over 2017.8 Dollar strength was broad-based in 2018, with the dollar rising most of the year against most advanced economy and emerging market currencies. Outperformance of the U.S. economy in 2018 contrasted with downside growth surprises in much of the rest of the world, contributing to further divergence in monetary policy across major economies and attracting capital flows into the United States. Dollar appreciation was

U.S. Dollar vs. Major Trading Partner Currencies

(+ denotes dollar appreciation)



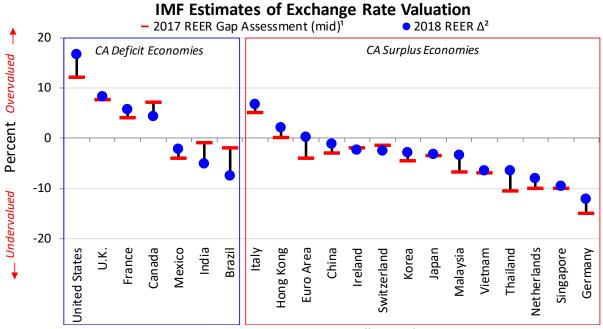
Source: FRB, Haver

⁷ Unless otherwise noted, this Report quotes exchange rate movements using end-of-period data. Bilateral movements against the dollar and the nominal effective dollar index are calculated using daily frequency or end-of-period monthly data from the Federal Reserve Board. Movements in the real effective exchange rate for the dollar are calculated using monthly frequency data from the Federal Reserve Board, and the real effective exchange rate for the dollar are calculated of the real effective in this Report are calculated using monthly frequency data from the Federal Reserve Board, and the real effective exchange rate for all other currencies in this Report are calculated using monthly frequency data from the Bank for International Settlements or JP Morgan if BIS data are unavailable.

⁸ In February 2019, the Federal Reserve implemented a new methodology for calculating its broad dollar indices. Most notably, the revised methodology incorporates services trade into its estimation of weights for the broad dollar basket. The new methodology and updated data resulted in shifts to the composition of the dollar index basket (with the Vietnamese dong added to the broad dollar index and the Venezuelan bolivar removed) and in currency weights (with a decline in the weight of the renminbi and an offsetting rise in the weights of advanced economy currencies including the euro, Canadian dollar, and pound sterling). While indices calculated under the new and old methodologies track closely over the longer run, there was greater divergence over the last year, as the old methodology suggested that the broad nominal dollar had appreciated by about 2.5 percentage points more in 2018 than the new methodology indicates.

particularly notable against some emerging market currencies (e.g., the Brazilian real and Indian rupee), as external pressures on many emerging markets intensified in the midst of crises in Argentina and Turkey, and against the Canadian dollar, which was weighed down by the fall in oil prices. The Japanese yen was the only outlier among major currencies to appreciate (modestly) against the dollar in 2018, as the fall in global risk appetite generated some safe haven flows into the yen. To date in 2019, the dollar has continued to strengthen modestly on a nominal basis, as lingering economic weakness in several other trading partners has weighed on foreign currencies.

Of concern, the dollar has strengthened at a time when the IMF judges that the dollar is overvalued on a real effective basis. Over 2018, the dollar appreciated by 4.5 percent in real effective terms to stand 8 percent above its 20-year average. Sustained dollar strength would likely exacerbate persistent trade and current account imbalances. Notwithstanding broad dollar strength, the currencies of most major U.S. trading partners with external surpluses rose modestly in 2018 in both nominal effective and real effective terms due to appreciation relative to their non-U.S. trading partners, though the real effective exchange rates for Germany, the Netherlands, and Singapore remain undervalued according to IMF assessments.



Sources: IMF 2018 External Sector Report, IMF 2018 Article IV Consultation Staff Reports for Vietnam and Ireland, BIS REER Indices, JP Morgan, and FRB.

1/The IMF's estimate of real effective exchange rate (REER) gap (expressed as a range) compares the country's average REER in 2017 to the level consistent with the country's medium-term economic fundamentals and desired policies. The midpoint of the gap range is depicted above.

2/Change through December 2018 versus 2017 average.

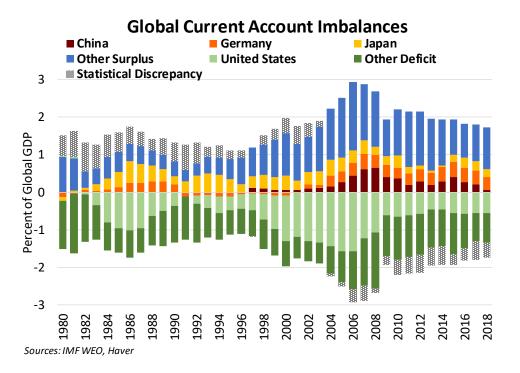
Note: The IMF does not provide an estimate of Taiwan's REER gap.

Treasury judges that foreign exchange markets have continued to function smoothly in recent months, including as the Federal Reserve raised its interest rate corridor (in March, June, September, and December of 2018) and continued reducing the size of its balance

sheet. The dollar continues to be the world's principal currency in international foreign exchange markets, reflecting its dominant global position both in terms of market turnover (being bought or sold in 88 percent of all currency trades) and trade settlement.⁹

Global Imbalances

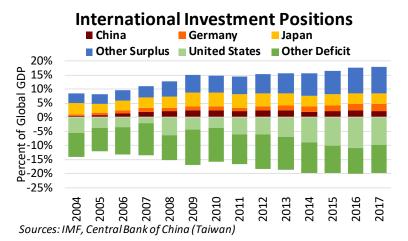
Global current account imbalances have been broadly stable the last three years, averaging around 1.8 percent of global GDP.¹⁰ This is high from a historical perspective. Global current account imbalances averaged 1.4 percent of global GDP over the 1980s and 1990s. After rising to nearly 2 percent of global GDP for the first time in recent history in 2000, imbalances averaged 2.3 percent of global GDP from 2000-2008. And over the decade since the global financial crisis, imbalances have averaged 2.0 percent of global GDP. Thus, while imbalances are down notably from their pre-crisis peak of 3 percent of global GDP, the gap between where they stand currently and what they averaged from 1980-1999 is above 0.3 percent of global GDP, or around \$280 billion annually. These imbalances can pose risks to future growth, as the pattern from history (demonstrated most recently in the global financial crisis) is that rapid adjustments to lower imbalances typically occur through demand compression in deficit economies, and a corresponding shortfall in demand and growth globally, rather than through a symmetric rebalancing process that sustains global growth momentum.



⁹ Currency market turnover according to the 2016 Bank for International Settlement *Triennial Central Bank Survey of Foreign Exchange and OTC Derivatives.*

¹⁰ Specifically, global current account surpluses have totaled 1.8 percent of global GDP in recent years. Correspondingly, global current account deficits, along with the statistical discrepancy (which has consistently been negative for more than a decade), also equal 1.8 percent of global GDP.

The risks posed by these large current account imbalances are intensified because of their extreme persistence across major economies, which are causing net creditor and net debtor positions to expand as a share of global output. Over the 1980s and 1990s, imbalances were generally not persistent across the same economies (with the notable exceptions of the United States and Japan, the



major deficit and surplus economies respectively). However, over the last two decades, imbalances have been strongly persistent across key economies: Japan has been persistently in surplus for almost four decades, Germany for almost two decades since the creation of the euro, and China for more than two decades (though its surplus has moderated recently). Conversely, the United States has been the major deficit economy throughout this period. As a result, net creditor and net debtor positions are now at a historically high level of global output. These large stock positions will likely make it more difficult to achieve a symmetric reduction of global current account imbalances, as historical evidence suggests that positive stocks of net foreign assets contribute to larger future current account surpluses rather than leading to adjustments in the trade balance.¹¹ That is, economies have tended to save, rather than spend, the income they receive from net asset positions. The fact that persistent imbalances are causing stock positions to diverge increases the urgency of putting in place a more symmetric rebalancing process that entails all economies carrying a share of the adjustment.

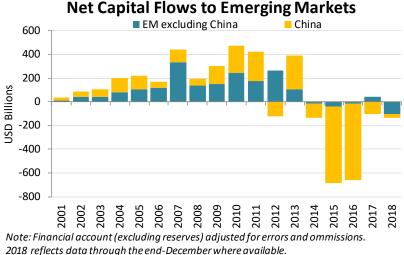
Capital Flows

Global financial conditions tightened in 2018, as financial turbulence in key emerging market economies contributed to a pullback by investors, with foreign portfolio flows to emerging markets (excluding China) turning negative in the second quarter for the first time since 2015. Global liquidity generally receded from emerging markets (ex-China), as net portfolio and other investment flows totaled -\$295 billion over the four quarters through December 2018 (based on data available as of end-April), declining by about \$150 billion relative to the same period in 2017. Foreign direct investment to emerging markets, on the other hand, remained resilient and stable in 2018, largely offsetting net portfolio and other outflows. Higher frequency data (from sources beyond quarterly balance of payments data) suggest that global financial conditions eased in early 2019, with foreign portfolio flows to emerging markets accelerating in January 2019 to their highest level in a year, as risk appetite was supported by improving growth prospects in some key emerging

¹¹ Alberola, Estrada, and Viani. (March 2018). BIS Working Papers No 707: *Global Imbalances From a Stock Perspective. The Asymmetry Between Creditors and Debtors.* Monetary and Economic Department. Stock imbalances of debtor economies, by contrast, generally have a stabilizing impact on external imbalances, as they tend to reduce trade imbalances, limit current account deficits, and curb future debt accumulation.

markets as well as communication from the Federal Reserve that U.S. monetary policy will respond flexibly to economic developments.

In China, resident capital outflows remained contained in 2018, as tight capital controls were maintained, though resident outflows did pick up somewhat in the second half of the year as the RMB depreciated and



Source: National Authorities, U.S. Department of the Treasury Staff Calculations

domestic economic activity slowed. Foreign portfolio flows were relatively strong compared to recent years, aided by the inclusion of China in some key emerging market bond and equity indices, and there was a sizeable pick-up in foreign direct investment.

Foreign Exchange Reserves

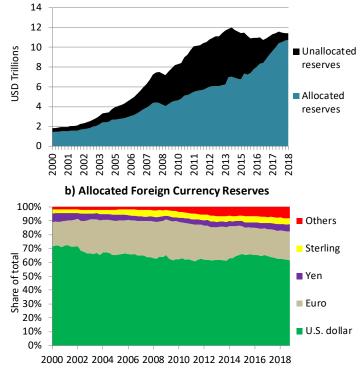
Global foreign currency reserves were broadly stable in 2018, as headline reserves ended the year close to \$11.4 trillion, down a very modest \$19 billion compared to a year earlier.

The rise in the dollar over 2018 contributed to the decline, as valuation effects accounted for a share of the decline in global reserves, though net foreign exchange sales also contributed to the slight fall in reserve levels.

The currency composition of foreign exchange reserves at a global level has become more transparent over the last five years. According to the IMF Composition of Foreign Exchange Reserve database, "unallocated reserves" (i.e., foreign exchange reserves not specified by currency) accounted for an increasing share of global reserves during the early and mid-2000s, reaching more than 45 percent of the total by 2013 after accounting for roughly 30 percent of total reserves during the 1980s

Composition of Global Foreign Currency Reserves

a) Total Foreign Currency Reserves



Sources: IMF COFER, Treasury staff calculations

and 1990s. Since then, this portion has dropped considerably, as China has been gradually increasing the share of its reserves reported by currency in the IMF's database. As of December 2018, the share of unallocated reserves has declined to 6 percent globally, the lowest level since at least the 1970s. At the same time, the currency composition of allocated reserves. which currently includes reserves denominated in eight currencies, has remained broadly stable.¹² The most notable shift over the last decade has

	FX Reserves				
	FX Reserves Reserves FX Reserves		FX Reserves	(months of	
	(USD Bns)	(USD Bns)	(% of GDP)	(% of ST debt)	imports)
China	3,072.7	-67.2	23%	252%	14.5
Japan	1,209.5	6.9	24%	42%	15.7
Switzerland	738.4	-23.8	105%	72%	23.5
Taiwan	466.8	10.1	79%	261%	16.4
Hong Kong	424.5	-6.8	117%	38%	7.5
Korea	393.3	13.9	24%	311%	7.3
India	369.8	-15.3	14%	356%	7.1
Brazil	365.5	0.1	19%	547%	17.3
Singapore	285.3	7.5	78%	25%	6.3
Thailand	197.0	3.0	39%	376%	8.3
Mexico	165.2	0.3	14%	273%	3.9
UK	140.2	19.7	5%	3%	1.9
Malaysia	97.8	-1.2	27%	101%	5.3
Canada	73.3	-3.4	4%	11%	1.5
Vietnam	55.1	6.4	23%	237%	2.9
France	48.5	10.8	2%	2%	0.6
Italy	39.1	1.6	2%	4%	0.8
Germany	36.4	-1.0	1%	2%	0.3
Belgium	10.2	0.6	2%	2%	0.3
Netherlands	4.7	-0.3	1%	0%	0.1
Ireland	2.9	0.9	1%	0%	0.1
World	11,421.5	-19.4	n.a.	n.a.	n.a.

Table 1: Foreign Exchange Reserves

Foreign exchange reserves as of Dec 2018.

Sum of rolling 4Q GDP through Q4-2018.

Short-term debt consists of gross external debt with original maturity of one year or less, as of the end of Q4-2018. Vietnam data through Q2-2018.

Sum of rolling 4Q imports of goods and services through Q4-2018. India and Malaysia data through Q3-2018. Vietnam data through Q2-2018.

Sources: National Authorities, World Bank, IMF, BIS.

been that non-major currencies (i.e., currencies other than the U.S. dollar, euro, Japanese yen, or pound sterling) have gradually risen from 2 percent to 8 percent of allocated reserves.

The economies covered in this Report continue to maintain ample - or more than ample foreign currency reserves compared to standard adequacy benchmarks. Reserves in most economies are more than sufficient to cover short-term external liabilities and anticipated import costs. Excessive reserve accumulation imposes costs both on the local economy (in terms of sterilization costs and foregone domestic investment) and the world. Economies should focus on enhancing resilience through stronger policy frameworks, as recommended by the IMF, rather than through increasing reserves to excessive levels.¹³

¹² Data on RMB-denominated reserves have been included in "allocated reserves" since Q4-2016. Currently, RMB reserves account for 1.9 percent of allocated reserves (1.8 percent of total reserves).

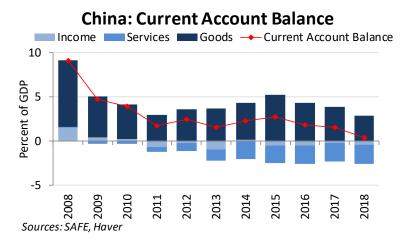
¹³ International Monetary Fund, 2011, "Assessing Reserve Adequacy," IMF Policy Paper, February (Washington: International Monetary Fund).

Economic Developments in Selected Major Trading Partners

China

China's trade surplus with the United States continues to be the largest trade imbalance that the United States has with any trading partner, with the goods trade surplus growing to a record level of \$419 billion in 2018. U.S. goods imports from China again rose in 2018 to \$540 billion from \$505 billion in 2017, while U.S. goods exports to China experienced a marked decrease – falling from \$130 billion in 2017 to \$120 billion in 2018 overall, reflecting a sharp decrease in the fourth quarter. Ongoing trade frictions played a role in widening the trade imbalance in 2018, as some Chinese exports to the United States were frontloaded ahead of the implementation of U.S. tariffs, while China imposed tariffs and non-tariff measures on a range of U.S. goods, notably agricultural exports. The United States services trade surplus with China held steady near \$41 billion in the four quarters through December 2018, after totaling \$40 billion in 2017.

China's current account surplus decreased to \$49 billion in 2018 (0.4 percent of GDP) from \$195 billion (1.6 percent of GDP) in 2017. Of the \$146 billion decline, the largest share (\$81 billion) reflected a decrease in China's overall goods surplus driven by an increase in imports, while China's services deficit increased by \$33 billion largely driven by an increase in transport and foreign travel expenditure.



Despite these developments, China continues to make persistent and widespread use of non-tariff barriers, non-market mechanisms, state subsidies, and other discriminatory measures that contribute to distortions in its trading and investment relationships. Treasury urges China to create a more level and reciprocal playing field for American workers and firms; expand the role of market forces; and implement macroeconomic reforms to support greater household consumption growth, bring down the elevated saving rate, and rebalance the economy away from investment.

Chinese economic activity moderated in the second half of 2018 following a tightening of credit growth that resulted from the government's financial deleveraging campaign. Real GDP growth in 2018 decelerated by 0.2 percentage points to 6.6 percent. Net exports were a drag on growth, whereas consumption (both household and government) accounted for 76 percent of growth last year and helped make up for the drop in net exports and a moderation in investment activity. While the deleveraging campaign was a much needed response to growing financial sector risks, the slowdown in credit has adversely impacted

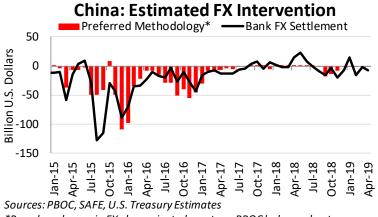
private sector financing and local government infrastructure spending. There are some early indications that the slowdown in investment has also impacted consumer confidence. To date, Chinese officials have responded to this slowdown with targeted fiscal and monetary measures, including tax cuts, reductions in the required reserve ratio, and incentives to increase lending to small and medium-sized enterprises.

In this context, the RMB depreciated by 8 percent against the dollar over the last year. On a nominal trade-weighted basis, however, the RMB depreciated less in 2018 than on a bilateral basis against the dollar, with the People's Bank of China (PBOC)'s CFETS index declining nearly 5 percent from mid-June through year-end. Further, the real effective exchange rate (REER) moved little on net over 2018



(depreciating roughly 1 percent) and is broadly unchanged over the last five years. As of mid-May 2019, depreciation pressures have resurfaced, with the RMB weakening by 2.7 percent versus the dollar since the beginning of May, while depreciating 2.0 percent against the CFETS nominal basket over the same period.¹⁴

China does not publish its foreign exchange market interventions but Treasury staff estimate China's direct intervention in the foreign exchange market by the PBOC to have been relatively modest in 2018. Net foreign exchange sales increased slightly in the second half of 2018, totaling \$38 billion, compared to net purchases of \$6 billion in the first half of the year. The increase in net sales



*Based on change in FX-denominated assets on PBOC balance sheet

occurred towards the end of a marked depreciation of the RMB in the second half of the year, which saw a 10 percent weakening in the RMB against the U.S. dollar between mid-April and the end of November. As of April 2019, Chinese foreign exchange reserves were valued at \$3.1 trillion, which is above standard measures of reserve adequacy.

Meanwhile, broader measures that proxy for intervention suggest that net foreign exchange sales by onshore financial entities beyond the PBOC, including state banks, grew

¹⁴ 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.

in the second half of 2018. The second half of 2018 saw sales totaling \$57 billion, which more than offset net foreign exchange purchases of \$43 billion in the first half of 2018. In the second half of 2018, authorities have reportedly used additional tools to stem depreciation pressures including implementing administrative measures and influencing the daily central parity exchange rate fixing through a countercyclical adjustment factor.

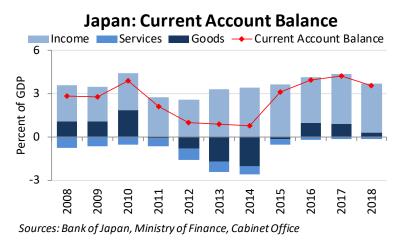
Depreciation of the RMB in 2018 was not accompanied by significant capital outflow pressures. However, there was a slight pickup in outflows in the second half of 2018, which accelerated into the fourth quarter as economic activity slowed. Treasury estimates that, in the last half of 2018, net outflows (excluding flows accounted for by trade and direct investment) totaled around \$146 billion, an increase from \$13 billion in the first half of 2018. On the whole, net outflows for 2018 (excluding trade and investment flows) amounted to \$158 billion, markedly lower than comparable net outflows of \$300 billion in 2017, \$640 billion in 2016, and \$726 billion in 2015. This moderation in net Chinese resident capital outflows was aided by the continuation of relatively tight capital control measures, in addition to an uptick in foreign direct investment and inflows into Chinese financial assets. Nonetheless, the persistent presence of sizeable net errors and omissions, which have been negative for 19 consecutive quarters and increased in the second half of 2018, could suggest continued undocumented capital outflows.

Chinese economic activity stabilized in the first quarter of 2019 at 6.4 percent year-on-year (y/y) growth, matching y/y growth in fourth quarter of 2018, which was China's slowest y/y quarterly growth outturn since the depths of the global financial crisis. Growth was held up by ongoing stimulus measures and rejuvenated credit expansion. Credit and export growth rebounded in March but still cooled on net over the first quarter of 2019. The front loading of local government debt issuance this year is expected to provide a boost to infrastructure spending, while cuts to value-added taxes should further support the manufacturing sector. On the whole, however, Chinese economic activity may remain constrained in the near term by tighter credit conditions, as authorities have pledged to refrain from excessive stimulus and signaled a desire to continue implementing structural economic reforms.

Going forward, Chinese policymakers will need to continue to maintain a balance between policies that support growth and curbing financial sector risks. In this context, policy support should be provided through well-targeted, transparent, on-budget measures, rather than through credit easing and off-balance sheet vehicles. China should make a concerted effort to enhance transparency of its exchange rate and reserve management operations and goals. It is also critical that China aggressively addresses market-distorting forces and pursues meaningful structural reforms to reduce the role of the state in the economy, permit a greater role for market forces, and rebalance the economy away from investment and exports towards household consumption and services. These reforms would provide more opportunities for American firms and workers to compete in Chinese markets, while facilitating a more balanced economic relationship between the United States and China. Improved economic fundamentals and structural policy settings would underpin a stronger RMB over time and help to reduce China's trade surplus with the United States.

Japan

Japan's current account surplus narrowed to \$176 billion, or 3.5 percent of GDP in 2018 (from 4.2 percent in 2017), largely due to a smaller goods trade surplus, which fell from \$45 billion in 2017 to \$14 billion in 2018. The decline was driven by import growth, which outpaced export growth, in part due to higher oil prices. Japan's current account surplus continues to be driven primarily by high net foreign

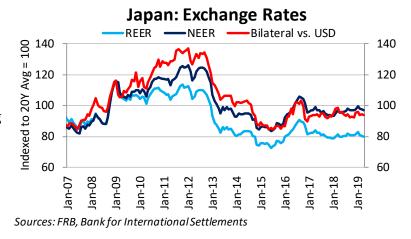


income: Since 2011, net foreign income has exceeded 2.5 percent of GDP while accounting for at least four-fifths of the overall current account surplus every year.

Treasury remains concerned by the persistence of the large bilateral trade imbalance between the United States and Japan. Japan's goods trade surplus with the United States was \$68 billion in 2018, down slightly from \$69 billion in 2017, driven by increased U.S. exports to Japan of \$75 billion, up from \$68 billion in 2017. In particular, U.S. exports of mineral fuels (including LNG) accounted for a large share of these exports, increasing from \$5.5 billion in 2017 to \$8.8 billion in 2018. The United States continues to have a services trade surplus with Japan (\$11 billion in the four quarters through December 2018), reducing the overall bilateral trade deficit.

The yen ended 2018 modestly stronger against the dollar. The yen reached a 16-month high in late March 2018, appreciating 7 percent from the beginning of the year to ± 105 to the dollar. It subsequently retraced and was 2.7 percent stronger at the end of the year in nominal terms. On a real effective basis, the yen was 2.9 percent stronger for the year, after a 3.3 percent real depreciation in 2017. Over the last five years, the yen has been relatively stable on a real effective basis near historically weak levels. Japan publishes its foreign exchange interventions, and has not intervened in foreign exchange markets since 2011.

Despite innovative and aggressive monetary easing since 2013, inflation remains below the Bank of Japan's (BOJ) two percent target. Year-overyear core CPI inflation (excluding fresh foods) reached a high of 1 percent at several points in the year, but decelerated to 0.7 percent as of December 2018. The BOJ Policy Board's own

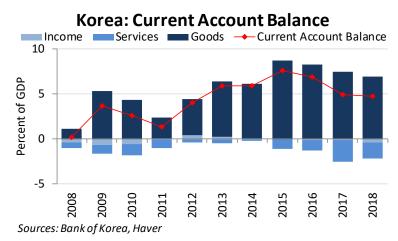


forecasts predict inflation will remain below target through fiscal year 2020. As noted in the October 2018 Report, the BOJ made some adjustments to its policy of "Quantitative and Qualitative Easing with Yield Curve Control" in July 2018 to address concerns about the cumulative impact of persistent low interest rates on financial institutions' profitability and the potential impact on bond market functioning. The BOJ's refinements allowed for increased flexibility of its ETF and REIT asset purchase program, reduced the size of account balances subject to negative interest rates, and allowed more movement in the 10year yield around the zero percent target.

Japan's economy is in its longest post-war expansion, although the pace of recovery remains modest. Real GDP growth slowed to 0.8 percent in 2018 from 1.9 percent in 2017, driven by weaker consumption, residential investment, and exports. The IMF projects growth to increase to 1.0 percent in 2019, supported by recovery from the natural disasters of 2018 and additional government spending, including measures to minimize the impact of the increase in the consumption tax planned for October 2019. Looking forward, the IMF projects annual growth of less than one percent in 2020-2024. In this context, it remains important that the Japanese authorities pursue further structural reforms to increase productivity and raise potential growth, especially through labor market reforms.

Korea

Korea's current account surplus has narrowed since its peak of close to 8 percent of GDP in 2015, falling to 4.7 percent of GDP in 2018. The decline in the current account has been largely due to a widening of Korea's services trade deficit. Korea's overall goods trade surplus has also moderated somewhat, though it remains high at around 6.9 percent of GDP. The IMF's most recent assessment

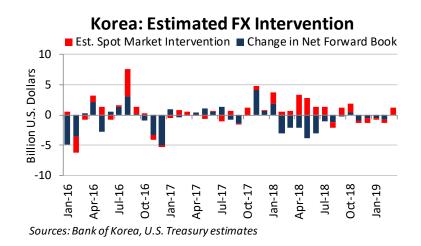


continued to describe Korea's external position as moderately stronger than justified by medium-term economic fundamentals.

Korea's goods trade surplus with the United States has also been trending down from its 2015 peak of \$28 billion, and dropped to \$18 billion in 2018. This adjustment has been driven by increased U.S. exports to Korea, particularly of chemicals and fuels. The United States has a surplus in services trade with Korea, at \$12 billion over the four quarters through December 2018.

Treasury assesses that on net over 2018 the authorities intervened modestly to support the won, making net sales of foreign exchange of \$2.9 billion (0.2 percent of GDP). January was the largest month for net purchases, estimated at \$3.7 billion, coming at a time when

the won was appreciating against the dollar. These purchases were reversed in subsequent months, with net foreign exchange sales in February and March totaling \$3.8 billion and relatively moderate intervention throughout the rest of the year. On March 29, Korea took a welcome step in disclosing its foreign exchange intervention, which covers activity in the

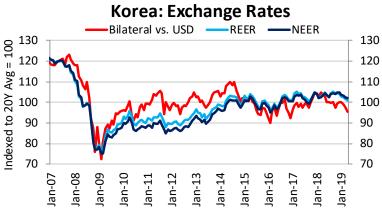


second half of 2018.¹⁵ Korea has announced that it will further disclose its foreign exchange intervention over the first half of 2019 in September and then transition to a quarterly disclosure schedule. Treasury supports the authorities' ongoing plans to report foreign exchange intervention in a more transparent and timely manner.

Korea has well-developed institutions and markets, and should limit currency intervention to only truly exceptional circumstances of disorderly market conditions. Korea maintains ample reserves at \$393 billion as of December 2018, equal to more than three times gross short-term external debt and 24 percent of GDP.

The IMF has considered the Korean won to be undervalued every year since 2010, and in its most recent evaluation considered the won to be undervalued by 2-8 percent. The won depreciated 4.1 percent against the dollar in 2018, while it was broadly unchanged on a real effective basis.

Though Korea's external position has adjusted somewhat since the



Sources: FRB, Bank for International Settlements

peak of the current account surplus in 2015, there remains scope for policy reforms that would support a more durable strengthening of domestic demand. Korea was strongly reliant on external demand in the first few years after the global financial crisis, with net exports accounting for more than one-third of cumulative growth over 2011-2014. Domestic demand growth has been stronger since 2015, averaging above 3 percent annually.

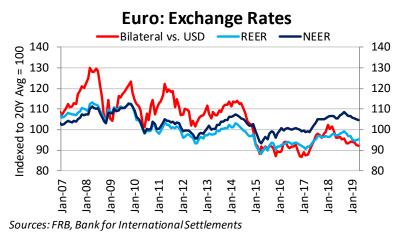
¹⁵ Treasury's measure for intervention is more frequent and broader in scope, covering activity in the spot, forward, and swap markets.

Korea maintains sufficient policy space to support domestic demand, particularly as public sector debt remains relatively low at around 44 percent of GDP. After progressively tightening fiscal policy from 2015-2018, in December Korea adopted a budget for 2019 that includes a 9.5 percent increase in fiscal spending compared to the 2018 budget. Subsequently in April of this year, Korea proposed a \$5.9 billion supplementary budget. To more forcefully support domestic demand, particularly in light of a negative output gap and weaker projected growth this year, Korea could further reduce the structural balance in the coming years. While it is important that fiscal policy remain supportive going forward, structural measures will be required to increase potential growth. Korea could do more to support labor force participation by pairing new budget initiatives with comprehensive labor market reforms that reduce restrictions on laying off regular workers and incentivize hiring non-regular workers.

The Euro Area

Euro area GDP growth moderated in 2018 as the external tailwinds that underpinned 2017's brisk expansion faded while final domestic demand growth also slowed. Further, the cyclical positions of individual member economies within the currency union remain divergent due to the legacies of the euro area crisis, while trend growth also varies widely across member countries, due in part to structural differences that affect competitiveness. These dynamics have weighed on the value of the euro, making the euro's exchange rate appear undervalued for some of the strongest-performing individual member countries in the currency union (e.g., Germany).

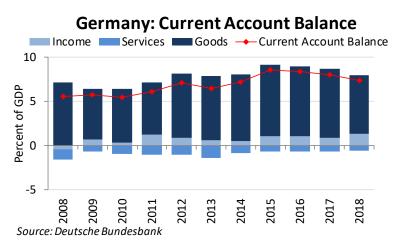
The euro depreciated by 4.7 percent against the dollar in 2018, but strengthened modestly on both a nominal effective and real effective basis, by 1.2 percent and 0.3 percent, respectively. Recent movements leave the euro still on the weaker side of longer-term trends: The euro is about 5 percent below its 20-year average in real effective terms and around 5 percent weaker on a nominal bilateral



basis against the dollar versus its 20-year average. The weakness of the euro is a multiyear phenomenon, spurred initially by concerns about the resilience of the monetary union in the midst of the regional crisis and sustained more recently by an accommodative monetary policy stance. The ECB's quantitative easing and negative interest rate policy opened a sizable gap in bond market yields between the euro area and other advanced economies, which has contributed to the euro's weakness versus its historical level in recent years. The IMF's most recent assessment judged the euro area's external position to be moderately stronger than warranted by medium-term economic fundamentals and desirable policies, with the real effective exchange rate undervalued by 0-8 percent. The ECB publishes its foreign exchange intervention, and has not intervened unilaterally in foreign exchange markets since 2001.

Germany

Germany's current account surplus fell slightly as a share of GDP to 7.4 percent in 2018 (from 8 percent in 2017), but remains the largest in the world in nominal terms at \$298 billion. This marks the third consecutive year in this position and suggests that German economic policies have not addressed Germany's external imbalances that derive from high domestic saving and low consumption and



investment. Over the long run, there has been a meaningful divergence between German domestic inflation and wage growth and (faster) average euro area inflation and wage growth (though German wage growth has recently accelerated to above the euro area average). This long-run divergence has contributed to a general rise in Germany's competitiveness vis-à-vis its euro area neighbors. However, given the wide dispersion of economic performance across the euro area, the euro's nominal exchange rate has not tracked this rise in German competitiveness. Consistent with this, the IMF estimates that Germany's external position remains substantially stronger than implied by economic fundamentals, and Germany's real effective exchange rate undervalued by 10-20 percent.

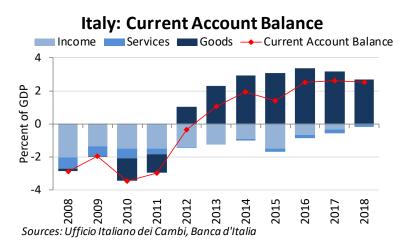
A number of German economic policies have restrained domestic consumption and investment, including elevated burdens from taxation. Overly conservative budget forecasts have also persistently underestimated revenues in recent years. This has contributed to consistent over-performance of fiscal surplus targets, with the budget surplus rising to a high of 1.7 percent of GDP in 2018. Growth was strongly supported by net exports for several years following the crisis, which led to a substantial widening of the current account surplus. Since 2015, growth has been more balanced, with German domestic demand contributing substantially to growth over the last three years. This has helped stall the growth in the current account surplus, but it has not been sufficient to appreciably reduce external imbalances. Demand growth needs to accelerate substantially for a sustained period for external rebalancing to proceed at a reasonable pace, which would be supported by growth-friendly tax and other policy reforms that make use of existing fiscal space.

Germany's bilateral trade surplus with the United States has more than doubled since the creation of the euro and remains a matter of significant concern. Treasury recognizes that Germany does not exercise its own monetary policy and that the German economy

continues to experience strong gains in employment. Nevertheless, German GDP has weakened recently, and Germany – as the fourth-largest economy globally – has a responsibility to contribute to more balanced demand growth and to more balanced trade flows. The persistence of record surpluses suggests that Germany could do more to support domestic demand and, in turn, demand for imports. This would contribute to both global and euro area rebalancing.

Italy

In the decade following the adoption of the euro, Italy's current account averaged a deficit of 1.5 percent of GDP before gradually narrowing and shifting into surplus starting in 2013. Since 2013, Italy's growing trade surplus, initially supported by lower commodity prices and later by a rebound in external demand, drove roughly two-thirds of the growth in Italy's current account surplus,



which rose to 2.6 percent of GDP in 2017. The remainder resulted from a higher income balance, following an increase in residents' net purchases of foreign assets and a reduction in payments on external liabilities. In 2018, Italy's current account surplus moderated slightly to 2.5 percent of GDP, as higher energy costs and weaker external demand weighed on the trade surplus.

The United States is Italy's third-highest export destination, and Italy's goods trade surplus with the United States rose to \$32 billion in 2018. Italy also runs a modest services trade surplus with the United States, at \$4 billion in 2018.

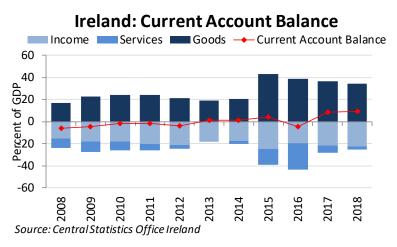
The IMF's most recent assessment describes Italy's external position as broadly in line with medium-term economic fundamentals. However, Italy faces longstanding structural weaknesses that have contributed to low growth and weak social outcomes. Simultaneously, the high public debt level is a key source of vulnerability, and Italy's current fiscal stance and proposed budgetary plans have raised concerns about the long-term sustainability of its public finances. In particular, the 2019 budget will likely increase current expenditure on a permanent basis through its two main measures, the Citizens' Income and rollback of earlier pension reforms, introducing uncertainty into Italy's fiscal and financial outlook.

Against this backdrop, the risk premium on Italian government debt rose sharply in 2018, and Italy entered into technical recession during the second half of the year. In order to escape a low-growth, high-debt equilibrium, it is critical that Italy undertake fundamental structural reforms to tackle deep-rooted rigidities and boost competitiveness and potential

growth. Italy should adhere to prudent fiscal management over the next several years, including a shift in the composition of fiscal policy toward more growth-friendly and better-targeted spending, to help reduce external vulnerabilities and bolster investor confidence. The government should also focus on reforms to address barriers to stronger growth in Italy, such as labor market reforms to tackle the widening unit labor cost gap between Italy and the rest of the euro area and other supply-side reforms that will help reinvigorate investment.

Ireland

Ireland's economy has grown at an impressive rate since 2014, hitting 7.2 percent real GDP growth in 2017 followed by 6.8 percent in 2018, highlighting the significant progress Ireland has made in recovering from the bursting of Ireland's creditdriven real estate bubble in 2008. After successfully exiting its three-year IMF/EU program at the end of 2013, Ireland embarked down a robust growth



path thanks in large part to its strong competitiveness, flexible labor markets, and low rates of corporate taxation. A combination of exports, gross fixed investment, and rebounding private consumption have been primary contributors to Ireland's growth. Over the past decade, Ireland's external position has also shifted drastically, with the current account balance moving from a deficit above 6 percent of GDP pre-crisis to a surplus of 9.2 percent of GDP in 2018. Gross current account flows have risen notably, with much larger trade surpluses alongside significant income and services trade deficits. The current account simultaneously has become more volatile: while Ireland has typically run surpluses in recent years, in 2016 the current account was in deficit by more than 4 percent of GDP. All of these developments – the strong upswing in growth, and the changes in the current account balance, including its average rise and increased volatility – reflect in part the significant and growing presence of foreign multinational enterprises (MNEs) with headquarters in Ireland.

The United States is Ireland's top export destination, with U.S. goods imports from Ireland reaching \$57 billion in 2018. Ireland has maintained a goods trade surplus with the United States for 23 consecutive years, growing its surplus from just over \$1 billion in 1996 to a record high of roughly \$47 billion in 2018. Key Irish goods exports to the United States include pharmaceutical products, organic chemicals, optical/medical instruments, and beverages. The United States is also a major goods exporter to Ireland, ranking second only to the United Kingdom. The United States' services trade surplus with Ireland stood at \$30 billion as of 2017. Two-way investment between the United States and Ireland also continues to grow. Ireland's membership in the EU attracts U.S. companies that use Ireland

as a base to sell into Europe and other markets. Ireland has also recently become an important research and development center for U.S. firms in Europe.

The growing role of foreign MNEs in Ireland has created challenges with accurately measuring economic activity that is rooted in domestic residents' versus MNEs' activities. For example, Irish GDP has been substantially boosted since 2015 by the large-scale relocation of intellectual property assets to Ireland by foreign MNEs; however, such relocation has limited impact on the domestic economy or the living standards of domestic residents. Since 2017, Ireland's Central Statistics Office has produced a complementary metric – the Modified Gross National Income or GNI* – which excludes the profits of redomiciled companies, the depreciation of intellectual property products, and aircraft leasing. This GNI* metric indicates that in 2017 the Irish domestic economy was roughly 38 percent smaller than measured by GDP.

Similarly, a modified current account balance metric that filters out the volatile activities of MNEs with limited impact on the domestic economy suggests that the modified current account balance that is attributable to Irish (domestic) residents has in recent years been a fraction of the headline current account balance. Whereas the headline and modified current account balances tracked relatively closely up until 2012, they have diverged widely since then, with the modified current account surplus in the range of 1-3 percent of GNI* from 2015-2017. In its latest assessment, the IMF attempted to control for the effects of MNEs' operations and determined Ireland's external position to be moderately stronger than implied by its medium-term fundamentals, while recognizing the complexities in calculating Ireland's "underlying" current account balance.

Despite its strong economy, Ireland faces a potential challenge with large consequences: a disorderly Brexit. The Central Bank of Ireland forecasts a disorderly Brexit could reduce the growth rate of the Irish economy by up to 4 percentage points in the first year and could reduce the overall level of Irish output by around 6 percent over the long-term. The damage would propagate predominantly through the trade channel with spillover effects likely to hit key areas of economic activity in Ireland. Aside from Brexit, another external factor with potential for downside economic effects in Ireland would be changes to international tax regimes that could reduce the attractiveness of Ireland as a destination for foreign investment.

Singapore

Singapore has a large and persistent current account surplus that stood at 17.9 percent of GDP in 2018. The outsized current account surplus is driven by an extremely large goods trade surplus, partly offset by deficits in the services trade and income balances. The current account surplus has remained above 14 percent of GDP since 2003. Singapore's national saving rate has averaged 46 percent of GDP since 2011, well above most regional peers. The high saving imbalance reflects, in part, high forced saving and relatively modest social safety net spending, which in concert depress consumption and push up both public and private saving. Structural factors like a rapidly aging population and Singapore's status as a financial center and an oil exporter all contribute to the external imbalance. However,

these structural factors are insufficient to fully explain Singapore's large surpluses. The IMF's most recent assessment found Singapore's external position to be substantially stronger than warranted by medium-term fundamentals and desirable policies.

The United States has run a steady bilateral goods trade surplus with Singapore, which

35 30 5 0 -5 -10 -15 2016 2018 2008 2010 2013 2009 2011 2012 2014 2015 2017

Singapore: Current Account Balance

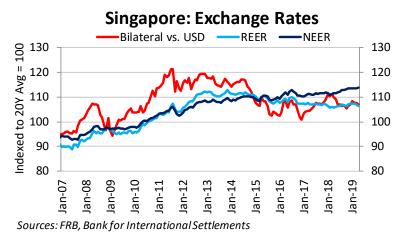
Services Goods — Current Account Balance



totaled \$6 billion in 2018. Top U.S. exports to Singapore included machinery, aircraft, medical instruments, mineral fuels, and agricultural products. The U.S. goods trade surplus with Singapore reflects in part Singapore's role as a regional transshipment hub, with some U.S. exports to Singapore ultimately intended for other destinations in the region.

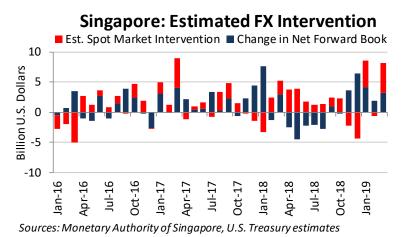
Income

The Monetary Authority of Singapore (MAS) tightly manages the Singaporean dollar against a basket of trading partner currencies. Like other central banks MAS aims to achieve price stability in the domestic economy. However, MAS is uncommon in that it uses the nominal effective exchange rate of the Singapore dollar (the S\$NEER) as its primary tool for monetary policy rather than



using interest rates because external price pressures are more acutely felt in Singapore, where gross trade flows total roughly 400 percent of GDP. MAS manages the value of the Singapore dollar within an undisclosed trading band and executes changes to its monetary policy stance by making adjustments to the degree of appreciation or depreciation (i.e. the rate of change of the S\$NEER) and the width of the trading band. Within this framework, greater appreciation has the effect of monetary tightening (analogous to an increase in the policy interest rate), while depreciation has the opposite effect, through the pass-through of changes in the exchange rate to the price of tradable goods.

MAS does not yet disclose its intervention in foreign exchange markets. MAS announced on May 8 that it would begin disclosing data on foreign exchange intervention operations, comprising MAS' net purchases of foreign exchange on a six-month aggregated basis, and with a six-month lag from the end of the period, beginning with the data for the second half of 2019. Treasury welcomes this development. Over 2018, Treasury estimates that Singapore made net purchases of foreign exchange of at least \$17 billion (4.6 percent of GDP). This was roughly half the level of net foreign exchange purchases in 2017. MAS intervention slowed in line with a turn toward tighter monetary policy and the attendant appreciation of the currency. Lower levels of intervention may have also stemmed in part from lighter annual net portfolio inflows in 2018.



The Singapore dollar depreciated

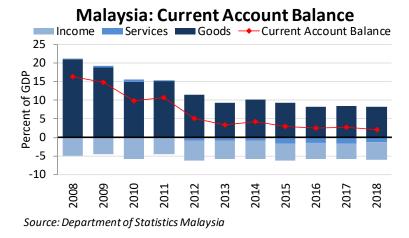
1.9 percent against the US dollar in 2018, while over the same period the S\$NEER appreciated by 1.5 percent and currency appreciated by 0.4 percent on a real effective basis. The IMF's most recent assessment noted that Singapore's exchange rate is 4-16 percent weaker than warranted by fundamentals.

A number of reforms would help reduce external imbalances. Expanding the social safety net in areas like healthcare, unemployment insurance, and retirement would help reduce incentives for private saving and support stronger consumption. Reductions in the high rates for mandatory contribution to the government pension scheme would have similar benefits in strengthening domestically driven growth. Some further appreciation of the real effective exchange rate would also assist in external rebalancing, even when accounting for Singapore's unique structural characteristics.

Malaysia

Malaysia's current account surplus has declined substantially over the past decade from a high of 16.5 percent of GDP in 2008 to 2.1 percent of GDP in 2018. This external rebalancing was facilitated by higher levels of both consumption and investment, following years of elevated national savings. In 2008, gross national saving was 38 percent of GDP; by 2018, it had fallen to 26 percent of GDP.

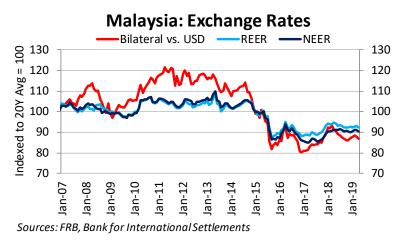
A significant decline in Malaysia's overall goods trade surplus has been a key factor in the narrowing of the current account surplus over the last decade; nonetheless, the goods trade surplus remains large, and steadily exceeded 8 percent of GDP in recent years. Malaysia's key exports include electronics and petroleum products. The goods trade surplus is partly



counterbalanced by a large income deficit, in the range of 4-5 percent of GDP in recent years.

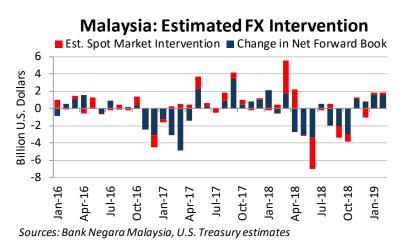
In 2018, Malaysia's goods trade surplus with the United States stood at \$27 billion, up by about \$2 billion over the previous year. Malaysia's largest goods exports to the United States were electrical machinery, optical and medical instruments, rubber, and furniture. The largest U.S. goods exports to Malaysia were electrical machinery, aircraft, optical and medical instruments, and plastics.

Bank Negara Malaysia (BNM) maintains a floating exchange rate regime, although BNM often intervenes in the foreign exchange market. The ringgit depreciated between end-2013 and end-2016, falling a cumulative 27 percent against the dollar, driven by capital outflows. The ringgit depreciated against the dollar by 2.1 percent during 2018. On a nominal effective basis, the ringgit



appreciated by 0.9 percent, while the real effective exchange rate depreciated by 0.5 percent. The IMF's most recent assessment estimated the ringgit to be 3-7 percent weaker in real effective terms than what is warranted by fundamentals and desirable policies.

Malaysia does not publish intervention data, but based on Treasury estimates of BNM intervention activity, BNM has demonstrated a pattern over time of intervening on both sides of the market, as illustrated by alternating periods of significant net sales and net purchases of foreign exchange over the last few years. Treasury estimates that in 2018 net BNM sold about \$11 billion in foreign exchange



(equivalent to 3.1 percent of GDP) to resist ringgit depreciation.

Malaysia's substantial external rebalancing over the last decade is welcome, and the authorities should pursue appropriate policies in order to continue this trend and bring the external sector further towards balance. Continuing to promote efficient and well-targeted social spending will help avoid excessive levels of precautionary saving. The authorities should seek to foster more high-quality and transparent investment, particularly from the

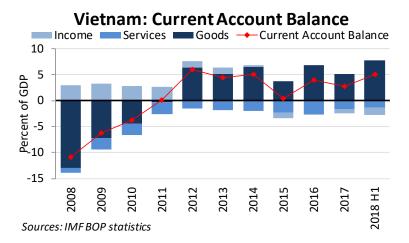
private sector. The authorities should continue to allow the exchange rate to move to reflect economic fundamentals and limit foreign exchange intervention to avoid excessive volatility, while increasing transparency of foreign exchange intervention.

Vietnam

Economic liberalization has transformed Vietnam from one of the poorest countries in the world to a lower middle income country within a quarter of a century. Since 1989 growth has averaged almost 7 percent annually. The ratio of population in poverty has fallen from nearly 60 percent to less than 15 percent, and gains in health and education improvements are also substantial.

Since Vietnam joined the World Trade Organization in 2007, foreign direct investment (FDI) has helped integrate Vietnam into global and Asian supply chains. Vietnam's large and skilled labor force, competitive wages, and young and well-educated population have produced substantial comparative advantages that have drawn large numbers of foreign invested enterprises (FIEs) to operate in Vietnam As a result, Vietnam's inbound FDI, the majority of which is concentrated in export sectors, has steadily increased over the past decade and almost tripled since 2007. In the four quarters through June 2018, inbound FDI reached a record \$15 billion, about 6 percent of GDP.

The rapid growth of the FIE sector has transformed Vietnam's external position. Vietnam's current account turned from a perennial deficit into a steady surplus reaching 5.4 percent of GDP in the four quarters through June 2018. The surplus is driven by a large goods trade surplus emanating from the FIE sector, particularly in electronics and other manufacturing. In recent years,



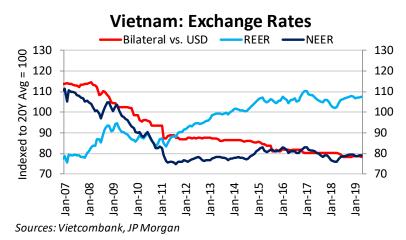
there has been a growing gap between the trade surplus in the FIE sector (13.3 percent of GDP in 2018) and a trade deficit in the domestic sector (10.4 percent of GDP). The IMF assesses Vietnam's external position to be substantially stronger than warranted by fundamentals and desirable policies, and reflects the relatively unproductive domestic economy and constraints on private investment.

In 2018, Vietnam's goods trade surplus with the United States reached \$40 billion, the sixth largest among the United States' trading partners. Vietnam's growing trade surplus with the United States reflects a large expansion of Vietnam's export capacity in apparel and technology, and its growing global supply chain integration, but also tariff and non-tariff barriers that have impeded U.S. companies' and agricultural producers' access to the

Vietnamese market in automobiles, agriculture, digital trade, electronic payments, and other areas.

Vietnam's authorities tightly manage the value of the dong. Until 2016, the State Bank of Vietnam (SBV) utilized a crawling peg exchange rate system, where the SBV would only periodically announce changes in the reference rate (i.e., the peg), usually in response to heavy pressure on the dong. In January 2016, the SBV announced a more flexible exchange rate policy that would allow daily updates to its reference rate, and stated that it would allow the dong to float within a previously established +/- 3 percent trading band.¹⁶ While these changes introduced greater *de jure* flexibility into the dong, in practice the dong has remained tightly managed, particularly against the dollar. Based on cross rates between the dong and the currencies in the basket, the SBV still appears to manage the dong far more closely to the U.S. dollar than to any other reference, and in very few instances has the dong reached the edge of the band during trading.

The dong has been relatively stable on a nominal basis since 2011, both against the dollar and on a broad, trade-weighted basis. In this context, and amid strong productivity growth with the rise of the FIE sector, together with bouts of much higher inflation than its trading partners, the REER appreciated notably from end-2010 to end-2015, rising by 22 percent, and was broadly stable from 2015 to present. In



2018, the dong depreciated 2.1 percent against the dollar, while the NEER and REER appreciated 1.2 and 2.3 percent, respectively. The most recent IMF assessment indicated that the dong was 7 percent undervalued on a real effective basis as of 2017.

Vietnam does not publish data on foreign exchange intervention. However, the Vietnamese authorities have credibly conveyed to Treasury that net purchases of foreign exchange were 1.7 percent of GDP in 2018.¹⁷ Vietnam's purchases were concentrated in the first half of the year amid relatively easier global financial conditions, while there were more modest sales of foreign exchange over the second half of the year as financial turbulence in a few large emerging markets led to a pullback from other many smaller emerging markets and created downward pressure on many emerging market currencies, including the dong.

¹⁶ The new policy came after a number of adjustments in 2015, where the SBV weakened the reference rate for the dong by 1 percent in January, May, and August 2015 following the depreciation of the Chinese RMB. The SBV stated that the new policy would entail a reference rate based on a weighted basket of eight foreign currencies – those of China, the European Union, Japan, Singapore, South Korea, Taiwan, Thailand, and the United States – though the SBV has not disclosed the relative weights.

¹⁷ Forward intervention is included on a trade date basis.

Treasury urges the authorities to enhance the timeliness and transparency of data on foreign exchange reserves, intervention, and external balances.

Vietnam's foreign exchange reserves have been below standard adequacy metrics for several years. For example, during the period of currency market stress in 2015, reserves declined to \$29 billion, equivalent to only 1.9 months of import coverage. Since that time, the central bank has gradually rebuilt its reserves, though the IMF continues to assess that Vietnam's reserves remain below adequate levels. 2018 reserves (\$56 billion) met less than 80 percent of the IMF reserve adequacy metric, or about 2.9 months of import cover.

Further structural reforms are crucial for building greater resilience and stability into this dynamic economy. A stronger, modernized monetary policy framework will allow the SBV to transition to an inflation-targeting monetary policy regime. Vietnam should prioritize improving the quality and accuracy of financial data, which will allow the SBV to better monitor and respond to financial vulnerabilities, including by introducing loan-to-value ratios and other macroprudential regulations. Reducing the reliance on credit growth targets, which contribute to financial sector risks, will enable financial institutions to better allocate capital and manage risks. As Vietnam strengthens its monetary policy framework, and reserves reach adequate levels, Vietnam should reduce its intervention and allow for movement in the exchange rate in line with economic fundamentals, including gradual appreciation of the real effective exchange rate, which will help reduce external imbalances, including the bilateral trade surplus with the United States.

Section 2: Intensified Evaluation of Major Trading Partners

The Omnibus Trade and Competitiveness Act of 1988 (the "1988 Act") requires the Secretary of the Treasury to provide semiannual reports to Congress on international economic and exchange rate policy. Under Section 3004 of the 1988 Act, the Secretary must:

"consider whether countries manipulate the rate of exchange between their currency and the United States dollar for purposes of preventing effective balance of payments adjustment or gaining unfair competitive advantage in international trade."

This determination is subject to a broad range of factors, including not only trade and current account imbalances and foreign exchange intervention (criteria under the second piece of legislation discussed below), but also currency developments, exchange rate practices, foreign exchange reserve coverage, capital controls, and monetary policy.

The Trade Facilitation and Trade Enforcement Act of 2015 (the "2015 Act") requires the Secretary of the Treasury to provide semiannual reports on the macroeconomic and foreign exchange rate policies of the major trading partners of the United States. 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.

Key Criteria

Pursuant to Section 701 of the 2015 Act, 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. Required data for the most recent four-quarter period (January to December 2018, unless otherwise noted) are provided in Table 1 (p. 20) and Table 2 (p. 39).

As noted earlier, Treasury reviews developments in the 21 largest trading partners of the United States whose bilateral goods trade exceeds \$40 billion annually; these economies account for more than 80 percent of U.S. trade in goods in 2018. This includes all U.S. trading partners whose bilateral goods surplus with the United States in 2018 exceeded \$20 billion. Treasury's goal is to focus attention on those economies whose bilateral trade is most significant to the U.S. economy and whose policies are the most material for the global economy.

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

	Bilateral Trade	Current Account			FX Intervention			
	Goods Surplus with United States (USD Bil., Trailing 4Q) (1)	Balance (% of GDP, Trailing 4Q) (2a)	3 Year Change in Balance (% of GDP) (2b)	Balance (USD Bil., Trailing 4Q) (2c)	Net Purchases (% of GDP, Trailing 4Q) (3a)	Net Purchases (USD Bil., Trailing 4Q) (3b)	Net Purchases (USD Bil., Trailing 2Q) (3c)	Net Purchases 6 of 12 Months† (3d)
China	419	0.4	-2.4	49	-0.2	-32	-38	Yes
Mexico	82	-1.8	0.8	-22	0.0	0	0	No
Germany	68	7.4	-1.1	298				
Japan	68	3.5	0.4	176	0.0	0	0	No
Ireland	47	9.2	4.8	35				
Vietnam*	40	5.4	3.0	12	1.7	4	-7	No
Italy	32	2.5	1.2	52				
Malaysia	27	2.1	-0.9	8	-3.1	-11	-8	No
India	21	-2.4	-1.3	-65	-1.7	-47	-25	No
Canada	20	-2.7	0.9	-45	0.0	0		No
Thailand	19	7.0	-1.0	35	0.0	0	-1	No
Switzerland	19	10.2	-1.0	72	0.3	2	1	No
Korea	18	4.7	-2.9	76	-0.2	-3	-2	No
France	16	-0.3	0.1	-9				
Taiwan	16	12.2	-1.7	72	0.4	2	0	Yes
United Kingdom	-5	-3.8	1.1	-109	0.0	0		No
Singapore	-6	17.9	0.7	65	4.6	17	6	Yes
Brazil	-8	-0.8	2.2	-15	-2.6	-49	-11	No
Belgium	-14	-1.3	-0.3	-7				
Netherlands	-25	10.8	4.3	99				
Hong Kong	-31	4.3	1.0	16	-1.4	-5	-14	No
<i>Memo</i> : Euro Area	152	2.9	0.2	398	0.0	0	0	No

Table 2. Major Foreign Trading Partners Evaluation Criteria

Note: Current account balance measured using BOP data, recorded in U.S. dollars, from national authorities.

Sources: Haver Analytics; 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 6 of the 12 months to have met the threshold.

* Current account data for Vietnam are only available through 2018Q2.

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' 21 largest trading partners for the four quarters ending December 2018.¹⁸ China has the largest trade surplus with the United States by far, after which the sizes of the bilateral trade surpluses decline 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 10 major trading partners that have a bilateral surplus that meets this threshold over the most recent four quarters. Table 3 provides additional contextual information on bilateral trade, including services trade, with these trading partners.

	Bilateral Trade							
	Goods Surplus with United States (USD Bil., Trailing 4Q) (1a)	Goods Surplus with United States (% of GDP, Trailing 4Q) (1b)	Goods Trade (USD Bil., Trailing 4Q) (1c)	Services Surplus with United States (USD Bil., Trailing 4Q)* (1d)	Services Surplus with United States (% of GDP, Trailing 4Q)* (1e)	Services Trade (USD Bil., Trailing 4Q)* (1f)		
	E	conomies with quart	erly services tra	ade data through 2018				
China	419	3.1	660	-41	-0.3	77		
Mexico	82	6.6	612	-9	-0.7	59		
Germany	68	1.7	184	-2	0.0	68		
Japan	68	1.4	218	-11	-0.2	80		
Italy	32	1.5	78	4	0.2	23		
India	21	0.8	88	3	0.1	55		
Canada	20	1.2	617	-27	-1.6	97		
Korea	18	1.1	131	-12	-0.8	37		
France	16	0.6	89	-3	-0.1	39		
Taiwan	16	2.7	76	-2	-0.3	18		
United Kingdom	-5	-0.2	127	-14	-0.5	135		
Singapore	-6	-1.6	60	-12	-3.4	30		
Brazil	-8	-0.4	71	-21	-1.1	33		
Netherlands	-25	-2.7	74	-5	-0.6	30		
Hong Kong	-31	-8.5	44	-3	-0.7	24		
<i>Memo</i> : Euro Area	152	1.1	618	-40	-0.3	283		
Economies with annual services trade data through 2017								
Ireland	47	12.4	68	-30	-8.9	70		
Vietnam	40	16.0	59	-1	-0.5	4		
Malaysia	27	7.4	52	-2	-0.6	5		
Thailand	19	3.8	44	1	0.2	7		
Switzerland	19	2.7	63	-10	-1.5	64		
Belgium	-14	-2.7	49	0	0.0	11		

Table 3. Major Foreign Trading Partners - Expanded Trade Data

Source: U.S. Census Bureau, Bureau of Economic Analysis

*Quarterly services data is through Q4 2018. For trading partners where quarterly bilateral services trade data are not available, annual services data through 2017 is used. Services data is reported on a balance of payments basis (not seasonally adjusted), while goods data is reported on a census basis (not seasonally adjusted).

¹⁸ 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.

Criterion (2) - Material current account surplus:

Treasury assesses current account surpluses in excess of 2 percent of GDP to be "material" for the purposes of enhanced analysis. Highlighted in red in column 2a of Table 2 are the 13 economies that had a current account surplus in excess of 2 percent of GDP for the four quarters ending December 2018. In the aggregate, these 13 economies accounted for more than two-thirds of the value of global current account surpluses in 2018. Column 2b 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.¹⁹ Columns 3a and 3d in Table 2 provide Treasury's assessment of this criterion.²⁰ In economies where foreign exchange interventions are not published, Treasury uses estimates of net purchases of foreign currency to proxy for intervention. Singapore met this criterion for the four quarters ending December 2018, per Treasury estimates.

Summary of Findings

Pursuant to the 2015 Act, Treasury finds that no major trading partner met all three criteria in the current reporting period based on the most recent available data. Eight major trading partners, however, met two of the three criteria for enhanced analysis under the 2015 Act in this Report or in the October 2018 Report. Additionally, one major trading partner, China, constitutes a disproportionate share of the overall U.S. trade deficit. **These nine economies – China, Japan, Korea, Germany, Italy, Ireland, Singapore, Malaysia, and Vietnam – constitute Treasury's Monitoring List.**

• 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.

¹⁹ 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.

²⁰ Treasury uses 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 uses 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.

- Japan and Germany have met two of the three criteria in every Report since the April 2016 Report (the initial Report based on the 2015 Act), having material current account surpluses combined with significant bilateral trade surpluses with the United States.
- Korea met two of the three criteria in every Report between April 2016 and October 2018 having a material current account surplus and a significant bilateral trade surplus with the United States and it met one of the three criteria in this Report, a material current account surplus. Korea must demonstrate that improvements against the criteria are durable before it will be removed from the Monitoring List.
- Italy, Ireland, Malaysia, and Vietnam met two of the three criteria in this Report, having a material current account surplus and a significant bilateral trade surplus with the United States.
- Singapore met two of the three criteria in this Report, having a material current account surplus and engaged in persistent, one-sided intervention in the foreign exchange market.

Treasury will closely monitor and assess the economic trends and foreign exchange policies of each of these economies.

In both Switzerland and India, there was a notable decline in 2018 in the scale and frequency of foreign exchange purchases. Neither Switzerland nor India met the criteria for having engaged in persistent, one-sided intervention in either the October 2018 Report or this Report. Both Switzerland and India have been removed from the Monitoring List.

Further, 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.

Notwithstanding the welcome decline in the scale and persistence of foreign exchange intervention among many major U.S. trading partners in recent years, the Administration remains deeply concerned by the very large trade imbalances in the global economy. The U.S. trade deficit widened further in 2018, and bilateral trade deficits with several major trading partners, particularly China, remain extremely large. The United States is committed to working towards a fairer and more reciprocal trading relationship with China.

Further, global growth is neither sufficiently strong nor balanced. Very large trade and current account surpluses have persisted in several major economies for many years. These imbalances pose risks to future growth, risks which are intensified by the persistence of imbalances. Treasury will continue to press major U.S. trading partners that have maintained large and persistent external surpluses to support stronger and more balanced global growth by reorienting macroeconomic policies to support stronger domestic demand growth, while durably avoiding foreign exchange and trade policies that facilitate unfair competitive advantage.

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.