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

June 2022

Contents

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 management and staff in preparing this Report.

Executive Summary

Following a steep contraction of the global economy in 2020 due to the impact of COVID-19, recovery began to take hold in 2021, and has been most pronounced in economies that undertook strong macroeconomic policy support and where a larger share of the population has been vaccinated. In 2022, however, Russia's unprovoked and unjustifiable war against Ukraine has upended the global outlook. Most importantly, Russia's war is having a devastating human toll, from lives lost, to families displaced internally or becoming refugees. It is also imperiling the global recovery through supply disruptions and rising commodity prices, as well as increasing food insecurity and inequality. The IMF projects global growth to slow from an estimated 6.1% in 2021 to 3.6% in both 2022 and 2023, which is 0.8 and 0.2 percentage points lower for 2022 and 2023 than the IMF's projections in January 2022.

Countries will experience varying degrees of spillovers from the war depending on the breadth and depth of their economic ties with Russia and Ukraine, reliance on net imported commodities, and pre-war macroeconomic policies and vulnerabilities. Macroeconomic policy responses should therefore be carefully calibrated. Countries most affected by the war should redeploy targeted fiscal support to protect the most vulnerable, while net commodity exporters should build fiscal buffers during the upswing in prices and investment in economic diversification where appropriate. Meanwhile, the COVID-19 pandemic is not yet behind us and actions to support the global rollout and distribution of vaccines are vital to minimize the divergence in growth that has started to take place**.** An uneven global recovery is not a resilient recovery. It intensifies inequality, exacerbates global imbalances, and heightens risks to the global economy.

Growth and monetary outlooks have diverged against the backdrop of the war, the pandemic, as well as rising, broad based inflationary pressures. These combined factors have impacted major currencies since the beginning of 2022. The dollar strengthened against most major trading partners' currencies during this period, reflecting strong U.S. growth and rising interest rate differentials. In particular, the nominal trade-weighted dollar had appreciated roughly 5% in the year through mid-May, though it has retraced somewhat since. The Japanese yen depreciated roughly 11% against the dollar over this period, largely due to widening interest rate differentials as the Bank of Japan has maintained its highly accommodative stance that includes yield curve control measures. Additionally, the Chinese renminbi depreciated sharply in mid-April 2022, weakening about 6% against the dollar between end-2021 and mid-May amid portfolio capital outflows, a darkening growth outlook, and a growing divergence in expectations for monetary policy between China and the United States. Meanwhile, the euro has gradually depreciated since March as Russia's war against Ukraine has impacted the energy landscape and raised concerns about economic activity, weakening about 8% against the dollar since end-2021.

After being roughly stable over the past several years, global current account imbalances — the sum of current account surpluses and deficits globally — widened due to the trade distortions associated with the COVID-19 pandemic. The IMF April 2022 World Economic

Outlook (WEO) indicates that, at the global level, current account surpluses widened for the second consecutive year to 1.9% of world GDP in 2021, up 0.1 percentage points from 2020. The IMF estimates that global imbalances widened further in 2021 largely because of ongoing pandemic-related factors and elevated oil prices. The IMF expects current account balances to remain elevated in the near term though the future path is subject to uncertainty surrounding the pandemic, the war, and high commodity prices. Among major U.S. trading partners, the very large surpluses of Germany, Korea, Ireland, Taiwan, Netherlands, and Singapore have each remained significant as a share of GDP in 2021. Over the four quarters through December 2021, Japan's current account surplus was slightly smaller than in 2020 as a share of GDP, but in dollar terms was comparatively high at $141 billion. China's surplus was even higher in dollar terms at $317 billion over the same period, remaining at elevated levels. Meanwhile, a strong U.S. policy response to the COVID-19 pandemic, and the resulting pick-up in demand, caused the U.S. current account deficit to rise to 3.6% of GDP in 2021. In general, and especially at a time of recovering global growth, adjustments to reduce excessive imbalances should occur through a symmetric rebalancing process that sustains global growth momentum rather than through asymmetric compression of demand in deficit economies — the channel which too often has dominated in the past.

The Biden Administration strongly opposes attempts by the United States' trading partners to artificially manipulate currency values to gain unfair advantage over American workers. Treasury remains concerned by certain economies raising the scale and persistence of foreign exchange intervention to resist appreciation of their currencies in line with economic fundamentals. Treasury continues to press other economies to uphold the exchange rate commitments they have made in the G-20, the G-7, and at the IMF. All G-20 members have agreed that strong fundamentals and sound policies are essential to the stability of the international monetary system.[2] All IMF members have committed to avoid manipulating their exchange rates to gain an unfair competitive advantage over other members.

Nevertheless, certain economies have conducted foreign exchange market intervention in a persistent, one-sided manner. Over the four quarters through December 2021, two major U.S. trading partners — Singapore and Switzerland — intervened in the foreign exchange market in a sustained, asymmetric manner to limit upward pressure on their currencies.

Treasury Analysis Under the 1988 and 2015 Legislation

This Report assesses developments in international economic and exchange rate policies over the four quarters through December 2021. The analysis in this Report is guided by Section 3001-3006 of the Omnibus Trade and Competitiveness Act of 1988 (1988 Act) and Sections 701 and 702 of the Trade Facilitation and Trade Enforcement Act of 2015 (2015 Act) as discussed in Section 2.

[2] For a list of further commitments, see the April 2021 Report on Macroeconomic and Exchange Rate Policies of Major Trading Partners. Available at: https://home.treasury.gov/system/files/206/April_2021_FX_Report_FINAL.pdf.

Under the 2015 Act, Treasury is required to assess the macroeconomic and exchange rate policies of major trading partners of the United States for three specific criteria. Treasury sets the benchmark and threshold for determining which countries are major trading partners, as well as the thresholds for the three specific criteria in the 2015 Act.

In this Report, Treasury has reviewed the 20 largest U.S. trading partners[3] against the thresholds Treasury has established for the three criteria in the 2015 Act:

(1) A significant bilateral trade surplus with the United States is a goods and services trade surplus that is at least $15 billion.
(2) A material current account surplus is one that is at least 3% of GDP, or a surplus for which Treasury estimates there is a current account "gap" of at least 1 percentage point of GDP using Treasury's Global Exchange Rate Assessment Framework (GERAF). Current account gaps are defined in this Report as the deviation of a given current account balance — stripping out cyclical factors — from an estimated optimal current account balance given the economy's economic fundamentals and the appropriate mix of macroeconomic policies.
(3) Persistent, one-sided intervention occurs when net purchases of foreign currency are conducted repeatedly, in at least 8 out of 12 months, and these net purchases total at least 2% of an economy's GDP over a 12-month period.[4]

In accordance with the 1988 Act, Treasury has also evaluated in this Report whether trading partners have manipulated 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.

Because the standards in the 1988 Act and the 2015 Act are distinct, a trading partner could be found to meet the standards identified in one of the statutes without necessarily being found to meet the standards identified in the other. Section 2 provides further discussion of the distinctions between the 1988 Act and the 2015 Act.

Treasury Conclusions Related to the 2015 Act

Switzerland has exceeded the thresholds for all three criteria over the four quarters through December 2021, and therefore Treasury is conducting enhanced analysis of Switzerland's macroeconomic and exchange rate policies in this Report. Switzerland had previously exceeded the thresholds for only two of the three criteria under the 2015 Act over the four quarters through June 2021 as noted in the December 2021 Report, in which Treasury conducted an in-depth analysis of Switzerland. Previous to that, Switzerland exceeded the thresholds for all three criteria under the 2015 Act, as noted in the April 2021 and December 2020 Reports, in each of which Treasury conducted an enhanced analysis of Switzerland. Since Switzerland has again exceeded the thresholds for all three criteria,

[3] Based on total bilateral trade in goods and services (i.e., imports plus exports).
[4] 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.

Treasury will continue its enhanced bilateral engagement with Switzerland, which commenced in early 2021, to discuss the Swiss authorities' policy options to address the underlying causes of its external imbalances.

Both Vietnam and Taiwan exceeded the thresholds of fewer than three criteria over the four quarters through December 2021. Vietnam had previously exceeded the thresholds for all three criteria as noted in the December 2021, April 2021, and December 2020 Reports, in each of which Treasury conducted enhanced analysis of Vietnam. Taiwan had previously exceeded the thresholds for all three criteria as noted in the December 2021 and April 2021 Reports, in each of which Treasury conducted enhanced analysis of Taiwan.

Though Vietnam and Taiwan no longer meet all three criteria for enhanced analysis, Treasury will continue to conduct an in-depth analysis of these economies' macroeconomic and exchange rate policies until they do not meet all three criteria under the 2015 Act for at least two consecutive Reports.

In early 2021, Treasury commenced enhanced bilateral engagement with Vietnam in accordance with the 2015 Act. As a result of discussions through the enhanced engagement process, Treasury and the State Bank of Vietnam (SBV) reached agreement in July 2021 to address Treasury's concerns about Vietnam's currency practices.[5] Treasury continues to engage closely with the SBV to monitor Vietnam's progress in addressing Treasury's concerns and is thus far satisfied with progress made by Vietnam.

In May 2021, Treasury commenced enhanced bilateral engagement with Taiwan in accordance with the 2015 Act. These productive discussions have helped develop a common understanding of the policy issues related to Treasury's concerns about Taiwan's currency practices. Treasury continues to engage closely with Taiwan's authorities.

Treasury Assessments of Other Major Trading Partners

Treasury has found in this Report that no major trading partner other than Switzerland met all three criteria under the 2015 Act during the four quarters ending December 2021.

Treasury has also 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, Treasury will add and retain on the Monitoring List any major U.S. trading partner that accounts for a large and disproportionate share of the overall U.S. trade deficit even if that economy has not met two of the three criteria from the 2015 Act. **In this Report, the Monitoring List comprises China, Japan, Korea, Germany, Italy, India, Malaysia, Singapore, Thailand, Taiwan, Vietnam, and Mexico.**

[5] See "Joint Statement from the U.S. Department of the Treasury and the State Bank of Vietnam." Available at: https://home.treasury.gov/news/press-releases/jy0280.

All except Taiwan and Vietnam (which were subject to enhanced engagement) were on the Monitoring List in the December 2021 Report.

Ireland 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.

China's economy faces downside risks, primarily due to a surge in COVID-19 cases in early 2022 that has led to an acceleration of lockdowns of major cities and generated further uncertainty and supply chain disruptions. China's failure to publish foreign exchange intervention and broader lack of transparency around key features of its exchange rate mechanism make it an outlier among major economies, and the activities of China's state-owned banks in particular warrant Treasury's close monitoring.

Treasury Conclusions Related to the 1988 Act

The 1988 Act requires Treasury to consider whether any economy manipulates the rate of exchange between its currency and the U.S. dollar for purposes of preventing effective balance of payments adjustments or gaining unfair competitive advantage in international trade. **In this Report, Treasury has concluded that no major trading partner of the United States engaged in conduct of the kind described in Section 3004 of the 1988 Act during the relevant period.** This determination has taken account of a broad range of factors, including not only trade and current account imbalances and foreign exchange intervention (the 2015 Act criteria), but also currency developments, exchange rate practices, foreign exchange reserve coverage, capital controls, and monetary policy.

Treasury continues to carefully track the foreign exchange and macroeconomic policies of U.S. trading partners under the requirements of both the 1988 Act and the 2015 Act, and to review the appropriate metrics for assessing how policies contribute to currency misalignments and global imbalances. The Administration has strongly advocated for our major trading partners to carefully calibrate policy tools to support a strong and sustainable global recovery. Treasury also continues to stress the importance of all economies publishing data related to external balances, foreign exchange reserves, and intervention in a timely and transparent fashion.

Section 1: Global Economic and External Developments

This Report covers economic, trade, and exchange rate developments in the United States, the global economy, and the 20 largest trading partners of the United States for the four quarters through December 2021 and, where monthly data are available, through end-April 2022 and, where quarterly data are available, through end-March 2022. Total goods and services trade of the economies covered with the United States amounted to more than $4.6 trillion in the four quarters through December 2021, almost 80% of all U.S. trade during that period.

U.S. Economic Trends

Gross domestic product (GDP) in United States recovered to, and surpassed pre-pandemic economic activity in 2021, supported by federal financial assistance, healthy household balance sheets, favorable financial conditions, and mass distribution of vaccines—even as more contagious coronavirus variants emerged, and supply-chains were strained. As a result, real GDP rose 5.5% over the four quarters of 2021—marking the fastest annual pace of growth in 37 years—while firms added 6.7 million new jobs, the most jobs created in a single year on record. At the same time, inflation accelerated throughout 2021: as measured by the consumer price index (CPI), the 12-month change in prices was 7.1% in December 2021 as demand recovered faster than supply during the year.

In the first quarter of 2022, real GDP declined 1.5% at an annual rate, according to the advance (first) estimate. This reflected a much slower inventory build, a surge in imports, and declines in government spending at all levels. Nonetheless, demand by households and businesses strengthened growth in final private domestic purchases accelerated to a healthy 3.7% rate. Firms added another 2.1 million jobs in the first four months of the year, and the unemployment rate (U-3) was 3.6% in April, only 0.1 percentage points above the five-decade low just before the pandemic. Moreover, the prime-age (ages 25 to 54) labor force participation rate (LFPR) has increased by a net 0.5 percentage points in the first four months of 2022. Meanwhile inflation further accelerated in the first four months: inflation as measured by the personal consumption price index—the Federal Reserve's preferred measure was up 6.3% over the year ending April 2022. However, year-on-year inflation is likely to slow in the coming months as monthly rates moderate relative to year-earlier rates and monetary policy accommodation is expeditiously removed.

Despite a decline in real GDP during this year's first quarter, the outlook for 2022 as a whole remains positive—though risks to the outlook remain, particularly uncertainty related to the illegal Russian invasion of Ukraine, continued supply chain disruptions due to COVID-19 lockdowns in Asia, and rising interest rates. As of May, private forecasters project real GDP to grow 1.5% over the four quarters of 2022.

Economic Performance in 2021

Economic activity in 2021 was marked by two distinct patterns of growth in each half of the year. The first half of 2021 was noteworthy for the development and distribution of vaccines, as well as the disbursement of additional pandemic aid packages—the COVID-Related Tax Relief Act of 2020 and the American Rescue Plan (ARP) Act. These packages secured additional funding to address COVID-19 infections and vaccinate the population, ensured financial security for low- and middle-income households, and provided liquidity for small businesses as well as state, local, and tribal governments. In addition, consumers' assessments of the near-term outlook improved and businesses reopened, even as inflation continued to accelerate. As a result, real GDP surged by 6.5% during the first half of the year—the strongest half-year pace since 1984, notwithstanding the unprecedented pace seen in the initial post-shutdown recovery—and by the end of the second quarter of 2021, real GDP rose above its pre-pandemic level.

The second half of the year was marked by the winding down of fiscal support as well as the emergence of two new COVID-19 variants (Delta and Omicron) that increased disruptions to supply chains and boosted inflation. Real GDP growth slowed to a still-brisk pace of 4.6% at an annual rate during the latter half of 2021, with much of the growth due to the rebuilding of inventories as private domestic final demand—that is, household consumption, business fixed investment, and residential investment—grew more slowly.

Real growth in private domestic final demand (PDFD) slowed to 2.0% at an annual rate during the second half of 2021, after jumping by 11.0% in the first half. All categories of PDFD showed slower or negative growth in the second half of 2021. Real personal consumption expenditures increased by 2.2% during the second half of 2021, a considerably slower pace than the stimulus-boosted 11.7% jump during the first half of the year, as real PCE was close to pre-pandemic trend. Business fixed investment (BFI) similarly slowed, gaining just 2.3% in the latter half of 2021 after rising 11.1% in the first half. The slower growth of BFI was primarily due to a drop in in structures investment (-6.2%) as well as a minimal increase in spending on equipment (0.2%). Investment in intellectual property product also slowed (9.0%), but less drastically than the other two categories of BFI. Residential investment was the one category of PDFD to outright decrease; it declined 2.9% during the second half of 2021, after a flat reading during the first half. Nevertheless, both residential investment and business equipment investment remain well ahead of pre-pandemic trend.

Meanwhile, private inventory accumulation turned positive in the third quarter of 2021, due to a reduced drawdown in inventories, and the contribution increased in the final quarter of the year as firms began to rebuild inventories. In the two quarters combined, the change in private inventories added an average 3.8 percentage points to GDP growth in the latter half of 2021, after subtracting 1.9% points in the first two quarters of 2021.

The remaining major components of GDP subtracted from economic growth in the second half of 2021. The impulse from total government spending turned negative as federal pandemic programs waned—particularly the Paycheck Protection Program, which ceased purchasing services from financial institutions to service small business loans. Total government consumption and investment declined 0.9% after rising by 1.1% during the first half. Meanwhile, the contribution of net exports to real GDP growth remained modestly negative in the second half of 2021—though less so than in the first. Net exports subtracted an average 0.7 percentage points from GDP growth in the second half of 2021, after being a 0.9% drag on growth in the first. Although growth of exports turned strongly positive in the fourth quarter, the contribution was offset by a third quarter decline in exports as well as strong domestic demand for foreign goods and services. The continued rise in imports in the second half of 2021 was likely driven by inventory restocking and continued strong domestic demand for foreign goods.

The labor market recovery was consistently solid throughout 2021, and the pace of job creation picked up a bit during the latter half of the year. Payroll job creation averaged 534,000 per month during the first half of 2021, then accelerated somewhat to 590,000 per month during the second half. By December 2021, a total of 6.7 million jobs had been added over the year, and the unemployment rate had fallen to 3.9%, or 2.8 percentage points lower than the December 2020 level, the fastest calendar year decline in the unemployment rate on record. Improvement in the LFPR was slower than in payrolls or the unemployment rate, but some progress was made by the end of 2021. The overall LFPR was range-bound between 61.4% and 61.7% during the first half of last year, as a sizeable 0.7 percentage point increase in the prime-age LFPR was offset by stable or negative changes in LFPRs for non-prime age cohorts. However, total LFPR resumed recovery in the last two months of 2021, rising to 61.9%—though still 1.5 percentage points below the high of 63.4% in early 2020—driven in part by a 0.2 percentage point gain in the prime-age LFPR to 81.9%, which was 1.2 percentage points below the January 2020 high of 83.1%.

Inflation began picking up early in 2021. Throughout the year, many factors helped drive prices higher, including a slow recovery in global energy production, supply-chain disruptions and related shortages of specific inputs, persistently strong demand for durable goods, rising costs of food supply-chain inputs, brisk growth in house prices, and increased demand for pandemic-sensitive services (such as travel, leisure, and hospitality) as the economy reopened. Although inflation eased modestly in the third quarter, it again accelerated by the end of the year. Over the year through December 2021, the headline consumer price index CPI rose by 7.1% reflecting in part a nearly 50% jump in gasoline prices and a 6.3% increase in the food CPI. In addition, growth in the CPI for core goods and services rose by 5.5% over the year through December 2021, boosted by soaring prices for new and used motor vehicles—with yearly gains of 11.8% and 37.3%, respectively—and a 4.1% jump in the shelter index over the same period.

Economic Developments Since December 2021

Real GDP growth declined by 1.5% at an annual rate in the first quarter of 2022, reflecting a much slower inventory build, a larger drag from net exports, and declines in government spending at all levels. However, real growth in PDFD accelerated during the first quarter to 3.9% at an annual rate. Among its components, real PCE grew 3.1%, as growth in spending on services accelerated to 4.8%, offsetting a flat reading in consumption of goods. Business fixed investment jumped 9.2% at an annual rate in the first quarter. Although investment in structures declined 3.6% and posed a small drag, equipment investment surged by 13.2% and spending on intellectual property products grew by 11.6%. Private residential investment grew by 0.4%. Despite healthy activity in much of the domestic economy, slower growth in inventories during the first quarter subtracted 1.1 percentage points from real GDP, and the widening of the trade deficit, due to surging imports and weaker demand for U.S. exports pared 3.2 percentage points from growth. Real government spending declined 2.7% at an annual rate in the first quarter, partly reflecting a decline in federal expenditures as well as surging construction prices for state and local governments which has lowered real investment.

Labor markets remained tight in the early months of 2022. Firms added 2.1 million jobs during the first four months of the year, and the unemployment rate (U-3) was 3.6% in April, only 0.1 percentage points above the five-decade low just before the pandemic. The primary source of labor supply has recovered moderately in recent months: the prime-age LFPR has risen by 0.5 percentage points so far this year. At 82.4%, the prime-age LFPR was just 0.6 percentage points below pre-pandemic levels. Some alternative measures of labor market tightness are even outperforming 2019 levels, suggesting markets are even tighter than before the pandemic, which has pushed up wage growth—particularly in lower-wage industries. Since August 2021, the ratio of job-openings to unemployed has held at a historically low rate, such that there are roughly two job openings per unemployed person—a ratio even below that seen in 2019. Similarly, the quits rate has risen to a historically high level of 3.0% of the labor force, or 0.6 percentage points above previous peak set in 2019.

Inflationary pressures accelerated during the first few months of 2022. Over the year ending April 2022, inflation as measured by the CPI was 8.3%. The food price index was up 9.4% over the twelve months through April 2022, and the energy index rose 30.3% over the same period. The core CPI inflation was 6.2% over the year through April and is becoming increasingly broad-based. Inflation from shelter has been rising at a rapid clip on a monthly basis, and over the year through April, reached 5.1%. The Federal Reserve's preferred measure of inflation, the PCE price index, has shown a similar pattern of acceleration as compared with the CPI (headline rate of 6.3% over the year through April) but prints at a slower rate due to differences in computation. The PCE measure is reweighted monthly and shows substitution effects, whereas the CPI measure is reweighted every two years and does not adjust for substitution of lower-priced products. Although headline and core inflation by both measures have started to slow on a year-over-year basis, the Russian invasion of Ukraine and COVID-related shutdowns in China present upside risk to the inflation outlook as they will elevate energy prices, which are likely to feed through to food prices as agricultural supply-chains rely on diesel and natural gas. Moreover, shutdowns in China are likely to lengthen the duration of supply-chain disruptions, keeping inventories lean and prices elevated.

Federal Finances

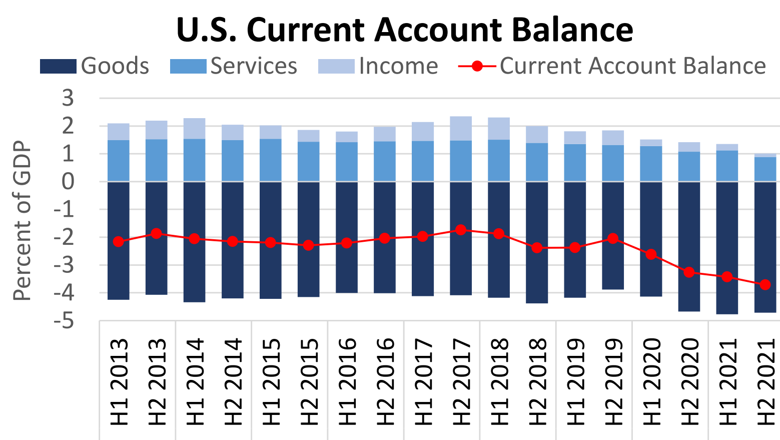
The federal government's deficit and debt were trending higher before the pandemic but rose sharply as a result of the various fiscal responses to combat the pandemic's effect on the economy.

At the end of FY 2021, the federal government's budget deficit was $2.78 trillion (12.4% of GDP), declining from $3.13 trillion (15.0% of GDP) at the end of FY 2020 but still $1.79 trillion higher than in FY 2019. Federal receipts totaled $4.05 trillion in FY 2021, up $626 billion (18.3%) from FY 2020. Net outlays for FY 2021 were $6.82 trillion, up $266 billion (4.1%) from FY 2020, primarily due to the fiscal aid measures enacted in late 2020 and early 2021. At the end of FY 2021, gross federal debt was $28.4 trillion, up from $26.9 trillion at the end of FY 2020. Federal debt held by the public, which includes debt held by the Federal Reserve but excludes federal debt held by government agencies, rose from $21.0 trillion at the end of FY 2020 (100.3% of GDP) to $22.3 trillion by the end of FY 2021 (99.7% of GDP).

Federal finances have improved thus far in FY 2022 as federal fiscal aid programs have wound down. In the first seven months of FY 2022, the federal deficit totaled $0.36 trillion, down from $1.93 trillion in the comparable period in FY 2021. Receipts for the fiscal year to date are $0.84 trillion higher than last year, while outlays are $0.73 trillion lower. At the end of April 2022, gross federal debt stood at $30.4 trillion while debt held by the public was $23.8 trillion.

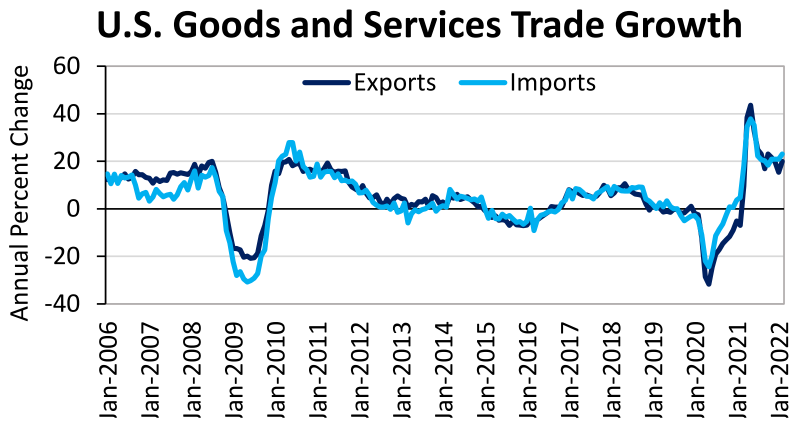
U.S. Current Account and Trade Balances

The current account deficit rose in the second half of 2021 to 3.7% of GDP, up 0.3 percentage point from the previous half. This was the largest deficit as a share of GDP since the end of 2008. In the second half of 2021, the goods deficit increased while services and income surpluses fell. From 2013 to 2020, the headline U.S. current account deficit had been quite stable, around 2-2.5% of GDP.



Sources: Bureau of Economic Analysis, Haver

While U.S. domestic demand recovered quickly, demand in the rest of the world did so more moderately, resulting in a widening trade deficit – both in nominal terms and as a share of GDP. Steep goods trade recovery, with both exports and imports back to pre-pandemic levels in 2021, reflected control over the pandemic and robust fiscal policy that boosted economic output. The U.S. goods and services trade deficit was 3.8% of GDP in the second half of 2021, slightly wider than in the first half of 2021, as growth in U.S. imports of both goods and services outpaced export growth.

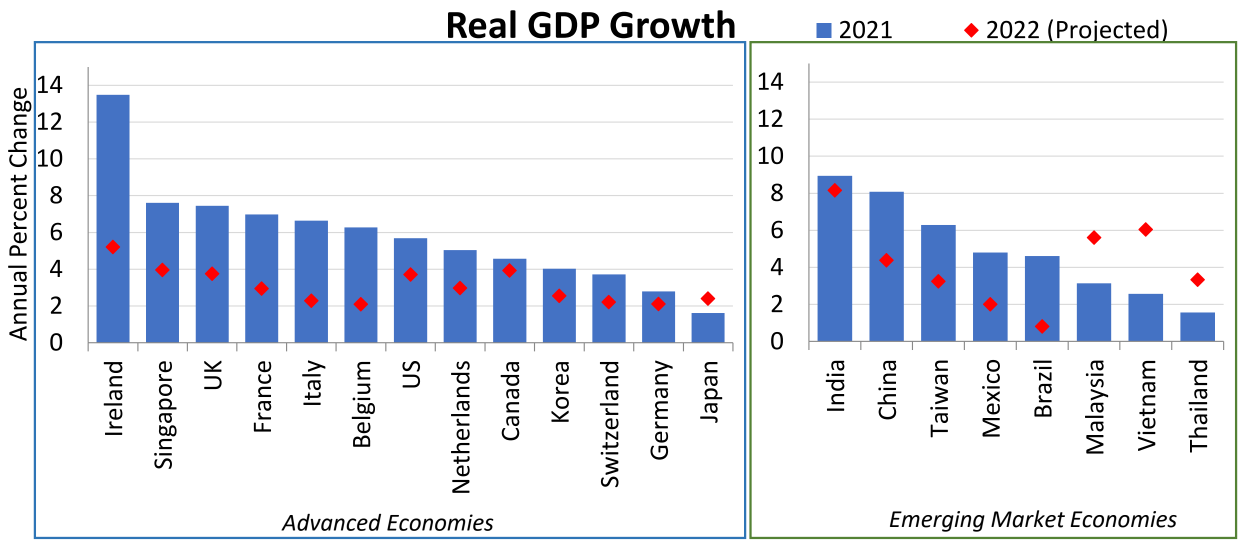


Source: U.S. Census Bureau

At the end of 2021, the U.S. net international investment position marked a net liability of $18.1 trillion (a record 75% of GDP), a deterioration of $2.2 trillion compared to first half of 2021. The value of U.S.-owned foreign assets was $35.2 trillion, while the value of foreign-owned U.S. assets stood at $53.3 trillion. Deterioration in the net position was due in part to the outperformance of U.S. equity markets relative to global peers.

International Economic Trends

Following a steep contraction of the global economy in 2020, global output grew 6.1% in 2021 according to the IMF as real GDP in most advanced economies recovered to pre-pandemic levels of output. In contrast, many emerging markets and developing economies have faltered in regaining their footing back to their pre-pandemic trajectories both in terms of output and labor market recovery. The recovery was most pronounced in economies that undertook strong policy support and where large shares of the population have been vaccinated—though the Delta and Omicron variants complicated the full resumption in economic activity for most. In addition, much of the world is contending with elevated inflation rates due to faster-than-expected demand growth and supply chain disruptions. As inflation has accelerated, some governments have been left with tough policy decisions on whether to support the recovery or stem rising prices. Select countries, most notably in the Asia-Pacific region, have not seen inflation accelerate as much as the rest of the world as renewed COVID-19 cases and lockdowns continue to drag down their economies. These factors – rising inflation, available scope and efficiency of policy support, containment of the virus, and pre-existing vulnerabilities – all form countries' unique economic contexts and risks contributing to further inequality within and across countries.



Sources: IMF World Economic Outlook April 2022

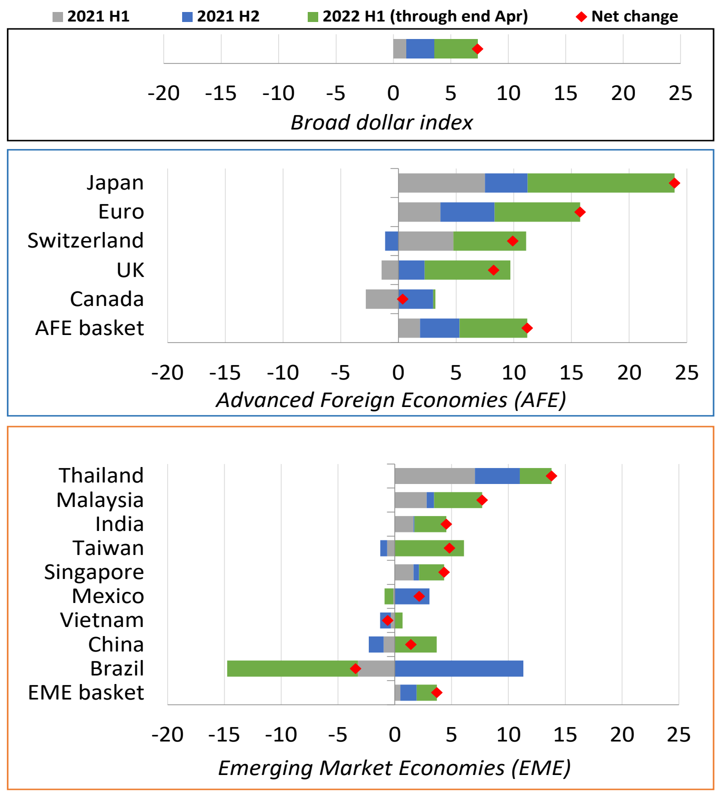
The IMF projects global economic growth will slow in 2022 to 3.6% primarily as a result of Russia's war against Ukraine and continued outbreaks of COVID-19. In addition to the tremendous human cost of Russia's war and the devastation it is having on the Ukrainian economy, regional and global spillovers are significant. Trade disruptions and rising commodity prices are boosting inflation and increasing food insecurity. Downside risks to the outlook include a potential acceleration of the war, as well as further COVID-related lockdowns in China and potential new variants. Given this additional uncertainty, countries should balance targeted policy responses where possible, with keeping medium-term inflation expectations anchored. Countries that still have low vaccination uptake and high COVID-19 case loads should prioritize health measures and maintain fiscal, monetary, and macroprudential support policies where there is policy space and is warranted by macroeconomic conditions.

Foreign Exchange Markets[6]

Even against the backdrop of geopolitical shocks and monetary tightening, capital outflows from emerging markets and currency valuation fluctuations remained relatively orderly and subdued. The nominal trade-weighted dollar strengthened moderately by 7.3% from the end of December 2020 to end April 2022. The dollar appreciated by 11.2 % against the currencies of other major advanced economies over this period, most notably against the euro and the Japanese yen. In contrast, the dollar appreciated by only 3.7% against major emerging economies' currencies. Since the end of December 2020, the dollar depreciated against the Brazilian real the most of all major trading partners' currencies; after a dramatic decline in Brazilian real value in the second half of 2021, it retraced much of its value this year to date.

U.S. Dollar vs. Major Trading Partner Currencies

(+ denotes dollar appreciation)
Contribution to percent change relative to end-Dec 2020



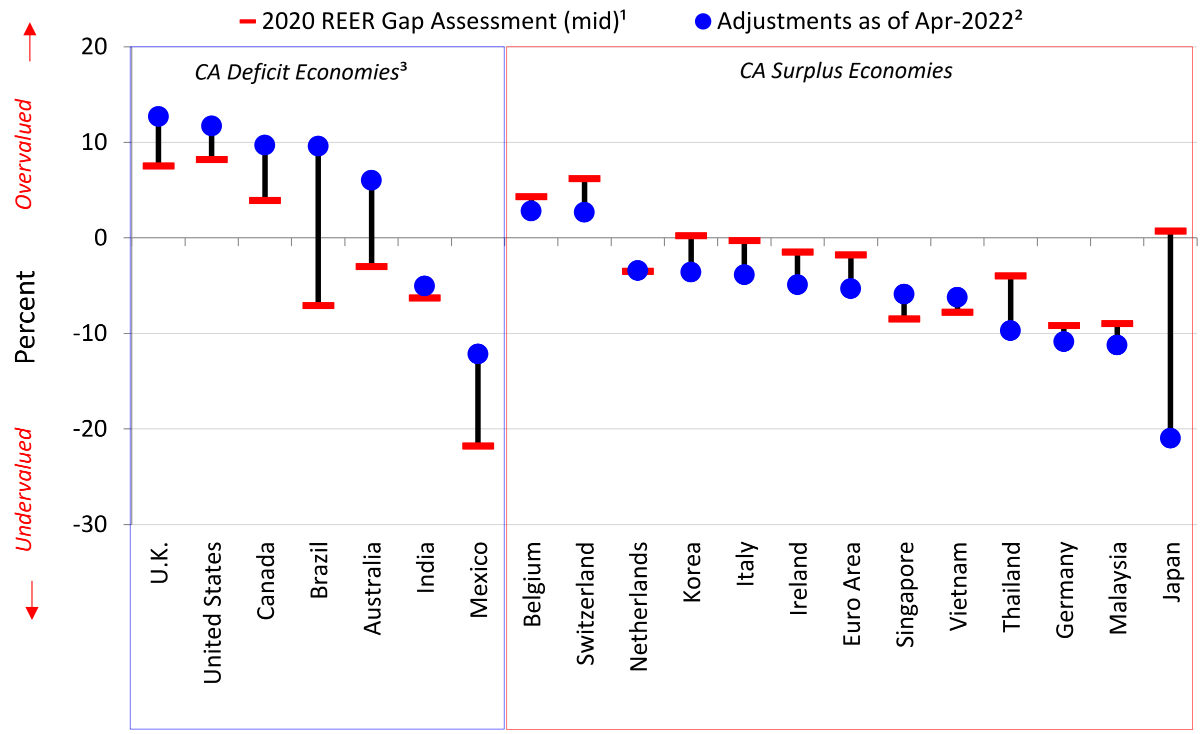
Sources: FRB, Haver

In the first half of 2021, the nominal trade weighted dollar strengthened by 1.2%. The upward climb of the dollar continued into the second half of 2021 by 2.4% though there were smaller downward movements against the Swiss franc, Chinese renminbi, Vietnamese dong, and the New Taiwan Dollar. Between end-2021 and end-April 2022, among U.S. major trading partner currencies, the dollar has depreciated against the Brazilian real and to a lesser extent, against the Mexican peso, while appreciating against all other major trading partners' currencies. The Brazilian real has benefited from rising commodities prices and from interest rate hikes. During this period, the dollar has appreciated most significantly against the Japanese yen and Taiwanese dollar.

[6] 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 all other currencies in this Report is calculated using monthly frequency data from the Bank for International Settlements (BIS) or JP Morgan if BIS data are unavailable.

On a real effective basis, the dollar appreciated 7.2% from end-December 2020 to end-April 2022. The real broad dollar is almost 9% above its 20-year average as of end-April 2022. The IMF continues to judge the dollar to be overvalued on a real effective exchange rate basis. Meanwhile, the real effective exchange rates of several surplus economies that the IMF assessed to be undervalued in 2020 have adjusted minimally or depreciated through April 2022, relative to the 2020 average (e.g., Germany, Malaysia, and Thailand). However, these adjustments only provide partial information about current exchange rate misalignments.

IMF Estimates of Exchange Rate Valuation and Recent Developments

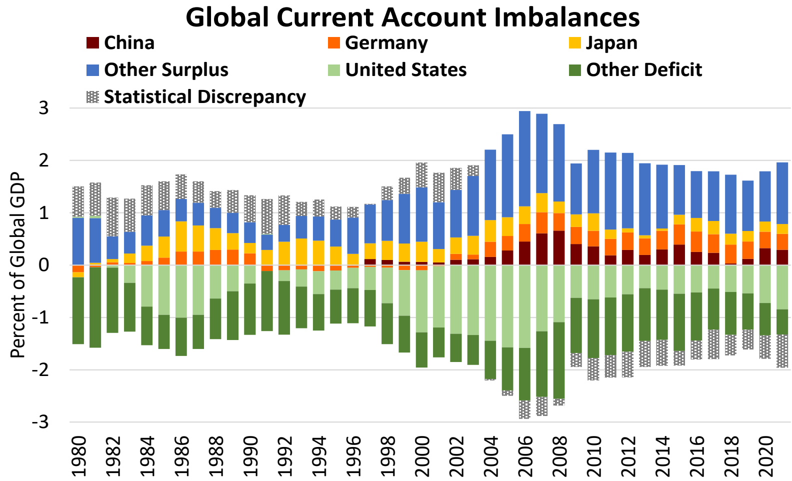


Sources: IMF 2021 External Sector Report, IMF 2021 Article IV Consultation Staff Report for Ireland, IMF 2020 Article IV Consultation Staff Report for Vietnam, BIS REER Indices, JP Morgan, FRB
1/The IMF's estimate of real effective exchange rate (REER) gap (expressed as a range) compares the country's average REER in 2020 to the level consistent with the country's medium-term economic fundamentals and desired policies. The midpoint of the gap range is depicted above. REER gap for Vietnam uses 2019 REER Gap.
2/Change between 2020 average REER and end-April 2022. Because the REER level consistent with the country's medium-term economic fundamentals and desired policies changes over time, these adjustments provide partial information about current exchange rate misalignments.
3/Economies sorted based on whether they were more frequently in deficit or surplus over the past five years.
Note: The IMF does not provide an estimate of Taiwan's REER gap.

Global Imbalances

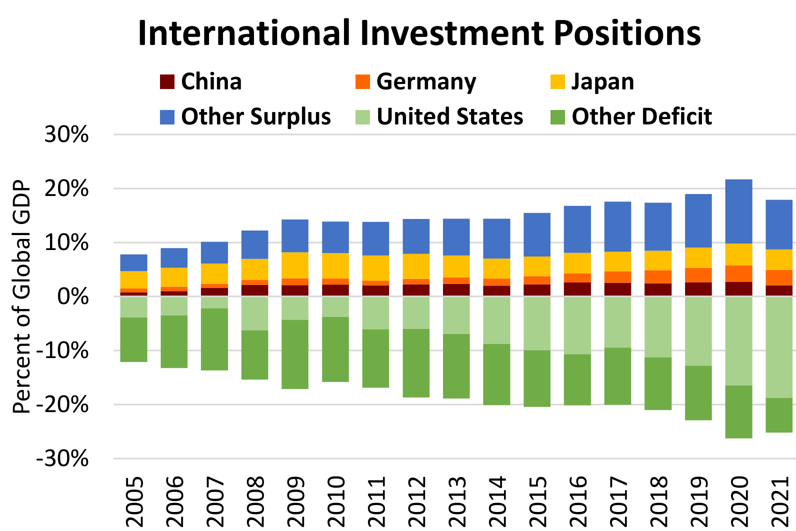
Global current account imbalances were broadly stable in the few years prior to the pandemic. The IMF April 2022 WEO indicates that, at the global level, current account surpluses widened for the second consecutive year to 1.9% of world GDP in 2021, up 0.1 percentage points from 2020, with the latest estimates of excessive current account surpluses and deficits at 1.2% of world GDP in 2020.[7] The efforts to contain the COVID-19 virus and its effects led to extraordinary policy responses that continue to influence global trade and shifts in saving and investment, and are driving increases in global imbalances.

Supply demand imbalances were especially problematic in the past year as the pandemic came under control in many parts of the world while other countries continued to intermittently lock down. A stronger recovery in advanced economies, especially in the United States, created external demand that has fueled the recovery in many emerging and developing economies.



Sources: IMF WEO, Haver

External stock positions widened to a historical peak in 2020. The IMF estimates that this was due to changes in net foreign asset positions that were larger than explained by current account balances in a number of cases, reflecting large valuation changes, including those driven by asset price and currency movements. Since then, stocks of foreign assets and liabilities have decreased but still remain at historic highs.

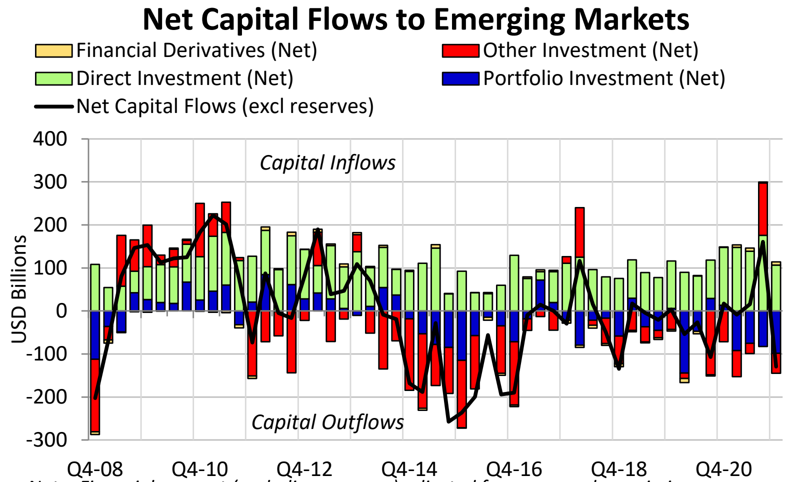


Note: The difference between aggregate creditor and debtor positions reflect any missing country-level data, as well as the global statistical discrepancy.
Sources: IMF, Central Bank of China (Taiwan)

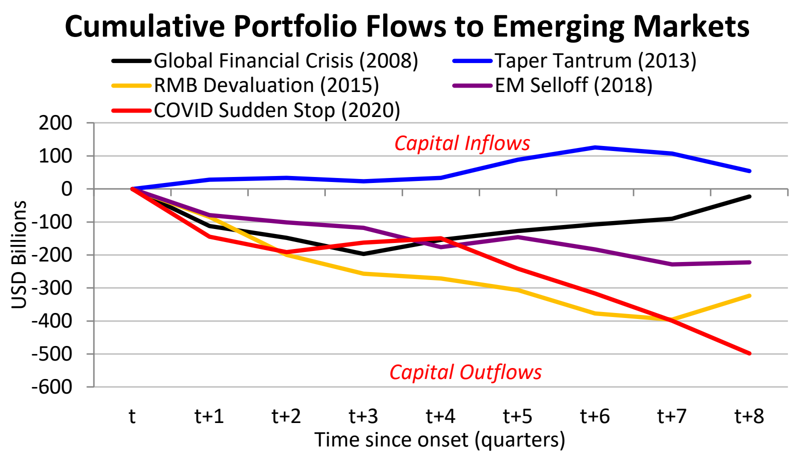
[7] See the Annex of this Report for a more detailed discussion of when current account surpluses and deficits may be considered excessive and the evolution and drivers of global current account surpluses and deficits over time.

Capital Flows to Emerging Market Economies

Net capital flows to emerging market economies remained mixed during 2021. Over the four quarters through December 2021, net outflows of portfolio and other investment totaled $357 billion, just $25 billion less than the same period in 2020. Throughout the year, nonresident net flows remained positive, suggesting that foreign investor demand for emerging market economy assets recovered as the global economic recovery took hold, but were offset by resident net outflows. On a cumulative basis since the onset of the pandemic, net portfolio flows have continued to decline further, reaching roughly $500 billion below pre-pandemic levels. Excluding China, net outflows of portfolio investment to emerging markets have been more pronounced, with a cumulative decline of $644 billion compared to pre-pandemic levels.



Note: Financial account (excluding reserves) adjusted for errors and ommissions. 2021 reflects data through the end-December where available.
Source: National Authorities, U.S. Department of the Treasury Staff Calculations



Note: Depicts net resident and nonresident portfolio investment flows on a cumulative basis following particular shock episodes. 2021 reflects data through the end-December where available.
Source: National Authorities, U.S. Department of the Treasury Staff Calculations

On balance, total net capital flows continued their recovery over the first three quarters of 2021. Continued robust foreign direct investment, along with decelerating outflows of other investment, kept net flows relatively buoyant over the first half of the year. Net other investment flows further accelerated this rebound in capital flows during the third quarter. During this time, net portfolio outflows remained persistent and driven by net resident outflows.[8] Since then, net other investment outflows resumed in the fourth quarter of 2021, weighing on net aggregate flows along with accelerating net portfolio outflows. Amid nascent signs of tightening global financial conditions, these combined net outflows

[8] In particular, large resident portfolio outflows from China in the first quarter of 2021 totaled more than $70 billion. Resident portfolio outflows from China have since decelerated but continued during the rest of the year, in line with the broader trend of net resident portfolio flows since 2014.

reached $145 billion over the fourth quarter, approaching levels last seen in early 2021 and early 2020.

Higher frequency data (from sources beyond quarterly balance of payments data) suggest that, since end-2021, nonresident portfolio flows to emerging markets continue to be mixed and remain relatively volatile. Monetary policy tightening brought about from rising, broad based inflationary pressures, geopolitical uncertainty brought on by Russia's war against Ukraine, and an expected slowdown in global growth have all contributed to tightening financial conditions across emerging market economies. Net foreign portfolio flows collapsed after Russia's invasion — with the speed and scale of cumulative outflows during the early weeks of the war matching the March 2020 COVID-19 selloff — but have since leveled off. These data also suggest that nonresident portfolio outflows from China may have reached record highs in March 2022 driven by these same factors, along with a worsening outlook for China's economy amid tightening lockdown measures.

Foreign Exchange Reserves

Global foreign currency reserves increased by $231 billion over the four quarters through December 2021, reaching $12.9 trillion. Estimated net purchases of $516 billion in foreign exchange were offset partly by a $301 billion decline due to valuation effects from dollar appreciation over the year. Meanwhile, estimated interest income contributed minimally to the rise in reserves.

Although there is no single commonly accepted standard for assessing reserve adequacy, Treasury assess that 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 of these economies are more than sufficient to cover short-term external liabilities and anticipated import costs. Moreover, the most recent IMF assessments of adequacy based on composite metrics across emerging market economies for 2020 suggest reserves are broadly adequate.

Credible and effective macroeconomic policy frameworks, rather than intervention to accumulate reserves beyond adequate levels, should serve to buffer external shocks. This is particularly relevant for economies with other reserve-like resources such as swap lines, sovereign wealth funds, and credit lines from international financial institutions that can serve as additional buffers. Moreover, foreign exchange intervention should not substitute for warranted macroeconomic adjustment.

Table 1: Foreign Exchange Reserves

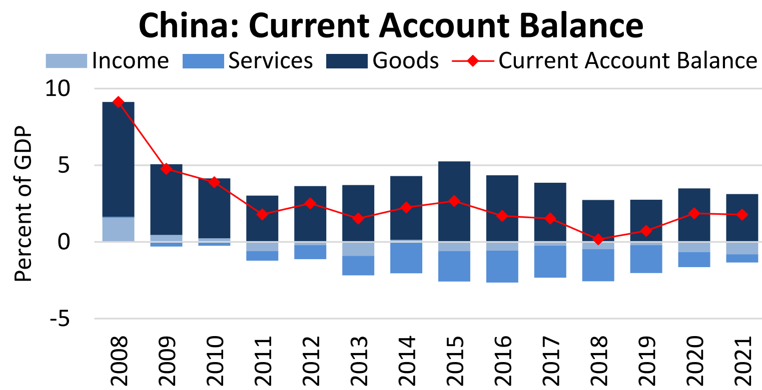
	FX Reserves (USD Bns)	1Y Δ FX Reserves (USD Bns)	FX Reserves (% of GDP)	FX Reserves (% of ST debt)	FX Reserves (% of IMF ARA Metric)*
China	3,250.2	33.6	18%	238%	120%
Japan	1,283.3	-29.5	26%	41%	..
Switzerland	1,033.8	20.6	127%	81%	..
India	569.9	27.7	18%	497%	191%
Taiwan	548.4	18.5	71%	278%	..
Korea	438.3	8.2	24%	264%	99%
Singapore	408.3	48.9	103%	33%	..
Brazil	330.9	-11.8	21%	420%	164%
Thailand	224.8	-21.2	44%	357%	251%
Mexico	180.8	-3.4	14%	364%	129%
UK	127.8	-11.8	4%	2%	..
Malaysia	107.2	4.5	29%	114%	118%
Vietnam	107.4	13.0	30%	338%	..
Canada	78.1	1.3	4%	8%	..
France	53.6	-1.5	2%	2%	..
Italy	48.6	2.0	2%	4%	..
Australia	37.4	5.3	2%	9%	..
Germany	37.0	0.1	1%	1%	..
Belgium	11.2	0.2	2%	2%	..
Netherlands	5.3	-0.6	1%	1%	..
Ireland	5.9	0.9	1%	1%	..
United States	40.7	-3.8	0%	1%	..
World	12,915.2	218.4	n.a.	n.a.	..

Foreign exchange reserves as of end-December 2021.
GDP caluclated as sum of rolling 4Q GDP through Q4-2021.
Short-term debt consists of gross external debt with original maturity of one year or less, as of the end of Q4-2021; Vietnam as of Q1-2021; Ireland as of Q2-2020.
** IMF Assessing Reserve Adequacy Metric, a composite measure of reserve adequacy, as of end-2020. China's reserves are compared to the IMF's capital controls-adjusted metric. The IMF assesses reserves between 100-150% of the ARA metric to be adequate.*
Sources: National Authorities, World Bank, IMF, BIS.

Economic Developments in Selected Major Trading Partners

China

China's economy continued to recover from the pandemic in 2021, with real GDP increasing 8.1% year-on-year, but economic activity slowed in the latter half of 2021 due to property sector stress and energy supply disruptions. Private consumption remains weak, reflecting poor consumer confidence amid slowing growth momentum, periodic large-scale lockdowns to curb the spread of COVID-19, and other pandemic-related uncertainty. Subdued private consumption also reflects the unbalanced nature of China's macroeconomic policy response to the pandemic, which has favored infrastructure investment and support for firms rather than direct support to households. In 2021, the authorities significantly tightened their fiscal stance and moderately tightened monetary policy relative to 2020. The economic outlook for this year is subject to large downside risks, primarily due to a large surge in COVID-19 cases starting in March 2022 that has led to an acceleration in lockdowns of major cities.



Sources: SAFE, Haver

China's current account surplus was stable, increasing slightly to 1.8% of GDP in 2021 from 1.7% of GDP in 2020, in part reflecting continued strong global demand for manufactured goods, buoyed by China's ability to expand and maintain manufacturing capacity despite pandemic-related supply chain disruptions. As such, goods exports increased by 28% last year. Goods imports grew by an even more rapid 33% last year, in part reflecting higher commodity prices. China's services trade deficit remained subdued at 0.6% of GDP last year (compared to 1.0% of GDP in 2020) largely due to continued restrictions on outbound travel. Treasury assesses that in 2021, China's external position was broadly in line with economic fundamentals and desirable policies, with an estimated current account gap of 0.3% of GDP.[9]

China's bilateral goods trade surplus with the United States remains the largest by far of any U.S. trading partner, growing to $355 billion in 2021 from $310 billion in 2020. While export growth to the United States was broad based, electrical machinery and other manufactured goods saw the largest increases last year. China ran a bilateral services trade deficit with the United States of $15 billion last year. Overall, China's bilateral goods and services surplus with the United States reached $340 billion in 2021, compared with $285 billion in 2020.

China's financial account swung into a surplus of $38 billion in 2021 from a deficit of $61 billion in 2020, amplifying appreciation pressures on the RMB. Net FDI inflows strengthened to $206 billion from $99 billion in the prior year. Net portfolio inflows moderated to $51 billion in 2021 from $96 billion in 2020 but showed an accelerating trend over the course of the year as residents' purchases of foreign securities moderated while non-residents' purchases of Chinese securities remained fairly strong. These capital inflows were partially offset by a net other investment deficit of $230 billion, primarily driven by large outflows of "currency and deposits" and loans.[10] A net errors and omissions deficit of $167 billion provided another balancing outflow and suggests strong undocumented capital outflows not captured in identified components of the financial account, in line with previous years.

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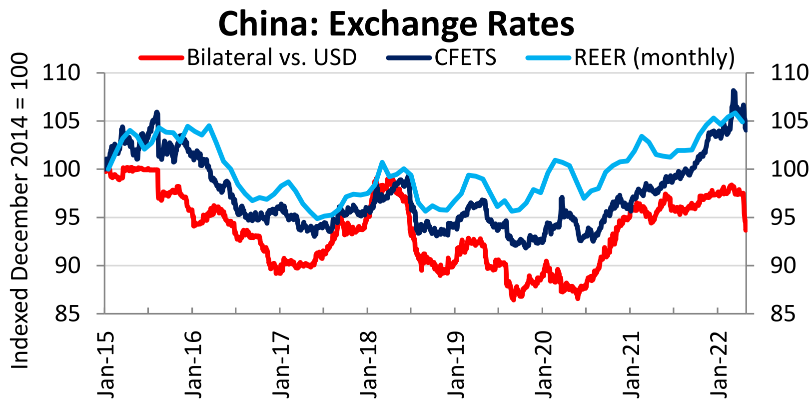
[9] The estimated current account gap reflects offsetting factors, where pandemic related factors—specifically adjustments for temporarily high levels of tourism, transportation, and medical goods flows—counteracted the effect of macroeconomic policy distortions on China's current account.

[10] Excluding China's SDR allocation, the "other investment" deficit was $271 billion.

The RMB appreciated by 2.7% against the dollar and 7.9% against the People's Bank of China's (PBOC) China Foreign Exchange Trade System (CFETS) nominal basket in 2021.[11] The real effective exchange rate strengthened by 4.4% last year. The RMB experienced its sharpest appreciation against the dollar in the second and fourth quarters of 2021 and saw its largest gains on a nominal effective basis during periods in which the broad dollar was also strengthening, particularly the first and fourth quarters of 2021. The RMB's appreciation trend persisted in early 2022 but reversed sharply in mid-April, when the RMB depreciated by 5.4% against the dollar in just three weeks amid portfolio capital outflows, a darkening growth outlook, and a growing divergence in expectations for monetary policy between China and the United States.



Sources: CFETS, FRB, BIS

In 2021, the authorities implemented several regulatory measures that had the aggregate effect of counteracting RMB appreciation pressures. In late May 2021, following two months of nearly continuous appreciation of the RMB against the dollar, the PBOC announced that it would raise the foreign currency required reserve ratio from 5% to 7% for the first time since 2007, tightening onshore FX liquidity conditions. In December 2021, as the RMB neared a three-year high against the dollar, the PBOC again raised this ratio by two percentage points, and Chinese state media explicitly described this adjustment as a tool to "deal with the appreciation of Chinese currency." In 2021, the State Administration of Foreign Exchange increased outbound investment quotas under the qualified domestic institutional investment (QDII) program seven times, following three increases in 2020. The quota increases over 2020-2021 opened headroom for an additional $54 billion in capital outflows, more than the cumulative quota increases over the 11 years prior. In September 2021, the PBOC launched the Southbound Bond Connect scheme, which permits mainland investors to purchase up to $75 billion in Hong Kong-traded bonds annually.

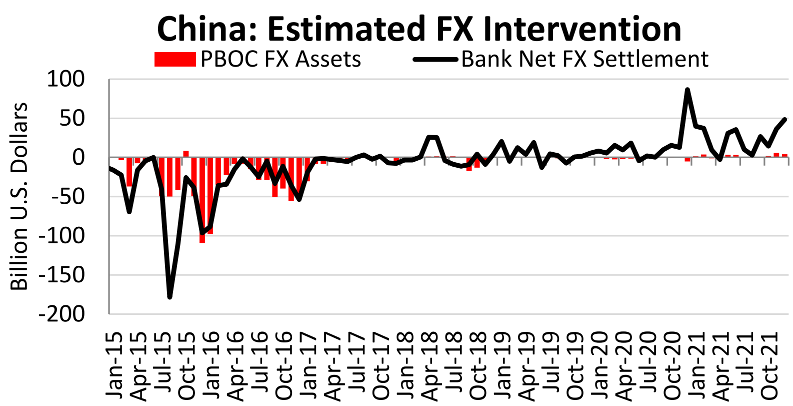
China provides very limited transparency regarding key features of its exchange rate mechanism, including the policy objectives of its exchange rate management regime, the relationship between the PBOC and foreign exchange activities of the state-owned banks, and its activities in the offshore RMB market. The PBOC manages the RMB through a range of tools including setting the central parity rate (the "daily fix") that serves as the midpoint of the trading band against which the onshore RMB is allowed to trade within 2% in either direction. Chinese authorities can directly intervene in foreign exchange markets as well as influence the interest rates of RMB-denominated assets that trade offshore, the timing and

[11] The CFETS RMB index is a trade-weighted basket of 24 currencies published by the PBOC.

volume of forward swap sales and purchases by China's state-owned banks, and the conversion of foreign exchange proceeds by state-owned enterprises.

The authorities have also used verbal intervention and their control over the daily fix to influence the exchange rate. In May and November 2021, amid strong appreciation pressure, PBOC statements sought to guide market expectations, emphasizing the need for two-way movements in the exchange rate.[12] In January 2022, amid continued appreciation pressure, PBOC Deputy Governor Liu Guoqiang forecast that both "market and policy factors" will correct deviations in the exchange rate from the equilibrium level.[13] Meanwhile, over the course of last year both the frequency and magnitude of deviations between the "daily fix" and market expectations increased, sending a signal to market participants. China's lack of transparency and use of a wide array of tools complicate Treasury's ability to assess the degree to which official actions are designed to impact the exchange rate. Treasury will continue to closely monitor China's use of exchange rate management, capital flow, and regulatory measures and their potential impact on the exchange rate.

China is an outlier among the economies covered in this Report in not disclosing its foreign exchange market intervention, which forces Treasury staff to estimate China's direct intervention in the foreign exchange market.



Sources: PBOC, SAFE, U.S. Treasury Estimates

China's headline foreign exchange reserves increased by $34 billion over the course of 2021, ending the year at $3.3 trillion. Last year, the PBOC's foreign exchange assets booked at historical cost also increased on an annual basis for the first time since 2014, growing by $24 billion. Meanwhile, net foreign exchange settlement data, another proxy measure for foreign exchange intervention that includes the activities of China's state-owned banks, indicates net foreign exchange purchases of nearly $290 billion (1.6% of GDP) in 2021, adjusted for changes in outstanding forwards. The precise causes for the large divergence between monthly changes in the PBOC's foreign exchange assets and net foreign exchange settlement data remain unclear.[14] As noted in previous

[12] PBOC, "Deputy Governor Liu Guoqiang Answers Press Questions on RMB Exchange Rate," May 23, 2021, http://www.pbc.gov.cn/en/3688110/3688172/4157443/4253138/index.html ; PBOC, "The Eighth Working Meeting of the National Foreign Exchange Market Self-Discipline Mechanism was Held," November 18, 2021, http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4392338/index.html.

[13] PBOC, "Transcript of the Press Conference on Financial Statistics in 2021," January 18, 2022, http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4451702/index.html.

[14] Historically, monthly changes in the PBOC's foreign exchange assets and net FX settlement data have provided roughly similar estimates of the direction and size of Chinese foreign exchange intervention. The

Treasury FX Reports, the divergence between these proxy measures could be an indication that monthly changes in the PBOC's foreign exchange assets are not adequately capturing the full range of China's intervention methods, including official intervention conducted through the state-owned banks. Overall, these developments highlight the need for China to improve transparency regarding its foreign exchange intervention activities.

In formulating near-term macroeconomic policy, the authorities will need to balance support for economic growth against long-term reform needs and continued risks to financial stability. Near-term support for the property sector to prevent broader contagion should be accompanied by measures to improve resolution and insolvency frameworks in a timely manner. In that respect, the authorities' introduction of a draft Financial Stability Law is a welcome development. On the fiscal front, the central government retains space for more accommodation; channeling this stimulus through its own budget would also mitigate stresses on local government balance sheets. Directing additional support to Chinese households would help to support private consumption amid ongoing pandemic-related uncertainty. The authorities should refrain from exacerbating economic imbalances through policies that stimulate exports and investment-led growth. Instead, the authorities should prioritize measures to support household consumption, expand the social safety net, and renew efforts to reduce the role of state-owned enterprises and state intervention in the economy.

Japan

Japan's economy rebounded in 2021, growing 1.7% following the substantial 4.5% contraction in 2020 amid the COVID-19 pandemic. Vaccinations reaching 80% of the population and an easing of pandemic-related supply chain constraints supported the recovery. Although growth was positive overall in 2021, growth contracted on a quarter-by-quarter basis in both the first and third quarters owing to pandemic-related retrenchments in spending and investment. GDP growth should advance incrementally in 2022, although a terms of trade shock in commodities and a potential slowdown among regional trade partners pose downside risks. Though inflation has risen recently, monetary policy remains highly accommodative on the expectation that inflation will not sustainably breach the 2% target.

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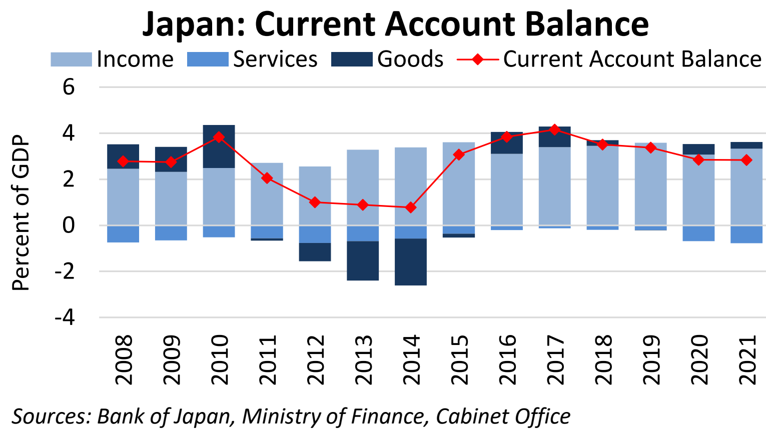
divergence between these indicators continued to widen in 2021, and the gap reached a six-year high on an annual basis last year.

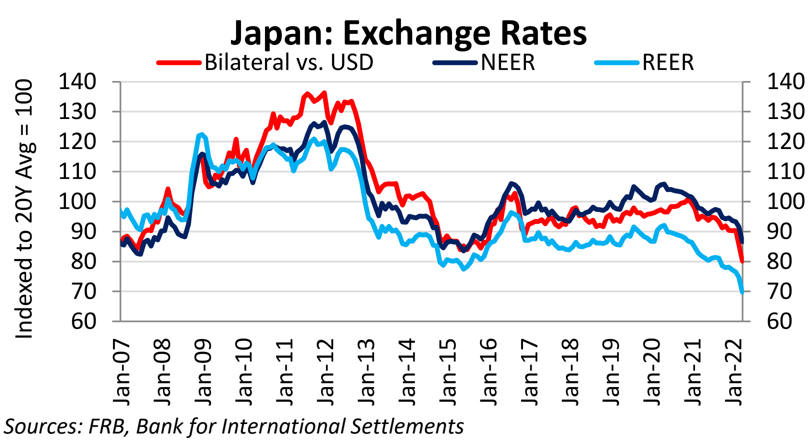
Japan's current account surplus was stable, remaining at 2.9% of GDP in 2021 as in 2020. This is slightly below the 3% surplus level the current account has averaged since 2000. The goods trade surplus moderated to 0.3% of GDP in 2021 amid rising commodity prices. Likewise, the services balance remained in deficit, widening slightly to 0.8% of GDP, due largely to pandemic-related retrenchment in the tourism sector. Japan's substantial net foreign income balance continues to drive the current account surplus. At 3.3% of GDP, net income flows for 2021 are moderately greater than the four quarters ending June 2021 when net inflows tallied 3.1% of GDP. Both primary and secondary income components increased marginally compared to totals ending in the second half of 2021, with primary income rising to 3.8% of GDP and secondary income rising to -0.4% of GDP. Last year, primary income outflows were 2% of GDP, a modest level for a country of Japan's size and development, which reflects, in part, a low stock of FDI within Japan.[15] Treasury assesses that in 2021, Japan's external position was stronger than warranted by economic fundamentals and desirable policies, with an estimated current account gap of 2.0% of GDP.[16] The goods and services trade surplus with the United States was $60 billion in 2021, up 8%, or $4.4 billion, compared to 2020.



Sources: Bank of Japan, Ministry of Finance, Cabinet Office

Japan experienced net capital outflows of 1.9% of GDP in 2021, driven by sizeable direct investment abroad (2.4% of GDP) and loan and trade credit outflows (1.9%) that were partly offset by net portfolio inflows (4.5% of GDP) that occurred amidst a sustained depreciation of the yen.

The yen depreciated 10.4% against the U.S. dollar in 2021, largely on widening interest rate differentials between the United States and Japan. Last year's depreciation is a marked contrast with 2020 when the yen strengthened 5.3%. Since the beginning of the year, the yen has continued to decline, depreciating an additional



Sources: FRB, Bank for International Settlements

15 In 2021 Japan's primary income outflows were the lowest among G7 economies, which averaged 4.2% of GDP in 2021, more than twice that of Japan.
16 Treasury's estimate of the current account gap assumes that Japan's depressed tourism flows over the course of the pandemic are largely transitory in nature and will dissipate over the medium term.

11.3% as interest rate differentials with the United States continue to widen and Japanese monetary authorities maintain yield curve control operations. On a real effective basis, the yen depreciated 10.0 % last year and currently sits near 50-year lows.

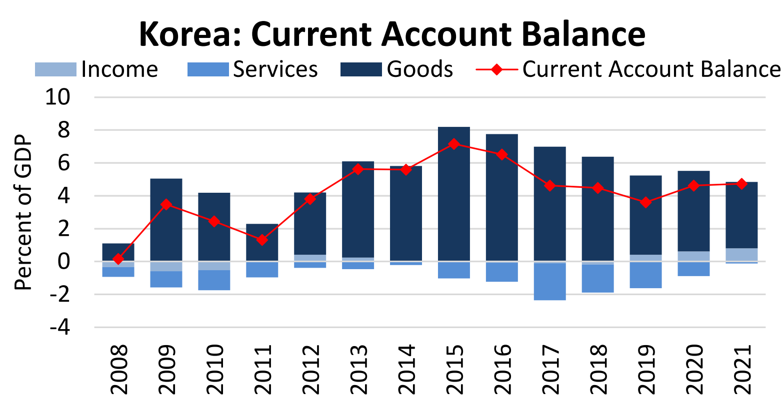
Japan is transparent with respect to foreign exchange operations, regularly publishing its foreign exchange interventions each month. It has not intervened in foreign exchange markets since 2011. Treasury's firm expectation is that in large, freely traded exchange markets, intervention should be reserved only for very exceptional circumstances with appropriate prior consultations.

Japanese policymakers have provided an appropriately sizable fiscal and monetary response to support the economy amid the pandemic. Japan should remain responsive to new developments that warrant additional support but renew its focus on implementing structural reforms that would lift investment and improve potential growth. To achieve this, policymakers could promote labor mobility to enhance the productivity of firms and raise wage growth; support digitalization across industries, particularly small and medium enterprises; further promote career development and advancement among female workers who disproportionately suffer from underemployment; and advance enduring corporate governance reforms.

Korea

Korea's real GDP grew by 4% in 2021 after a modest 1% contraction in 2020. Robust growth in 2021 was led by a strong recovery in private consumption and government spending, both supported by fiscal and public health measures designed to contain, and now adapt to, the COVID-19 pandemic. The Korean government maintained an expanded 2021 budget that kept the fiscal deficit at 4.4% of GDP, roughly consistent as the year before. The government has kept fiscal policy accommodative in 2022 to support the recovery, with an expected fiscal deficit of 3.3%. With a low debt-to-GDP ratio of approximately 50%, Korea has ample fiscal space to continue to support economic growth while paring down pandemic relief. Korea's central bank began to steadily tighten monetary policy from August 2021 to address financial imbalances and above-target inflation, implementing its fourth quarter-point policy rate increase to 1.75% in May 2022.

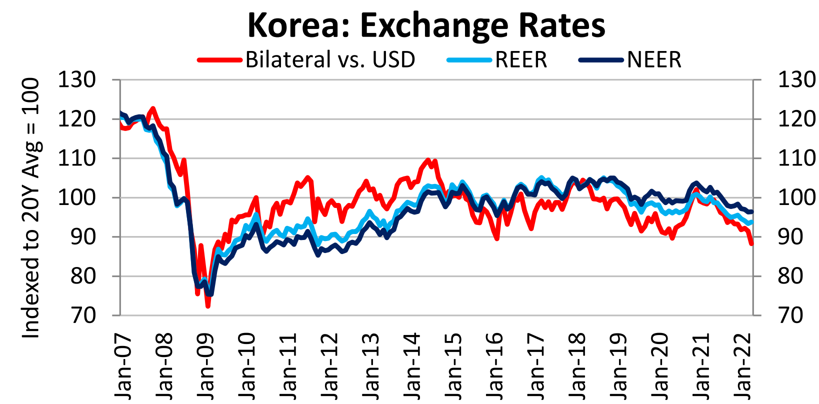
Korea's current account surplus widened to 4.9% of GDP in 2021 from 4.6% a year prior. The increase was driven by a narrowing in the services deficit, which continued to be affected by pandemic induced distortions in transportation and tourism balances, and a structural increase in the income balance due to Korea's



Sources: Bank of Korea, Haver

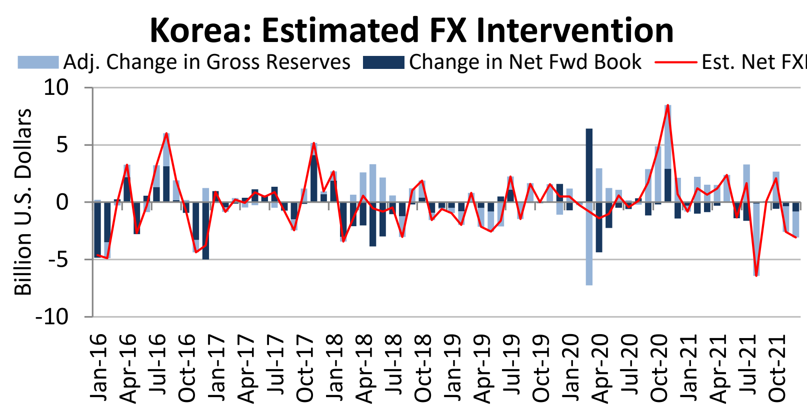
growing net foreign assets. Korea's bilateral trade surplus with the United States, inclusive of goods and services, increased to $22 billion in 2021, up from $17 billion over the same period in the year prior. Treasury assesses that in 2021, Korea's external position was weaker than warranted by economic fundamentals and desirable policies, driven in part by the effect of demographics on national saving.

The Korean won depreciated steadily throughout 2021, weakening 8.6% against the dollar and 5.3% on a real effective basis. The won has continued to weaken since the beginning of 2022, depreciating a further 5.4% against the dollar by end-April. Moderation in Korea's goods trade balance driven by rising commodity prices as well as sizeable equity outflows stemming from rising global interest rates and elevated geopolitical uncertainty have been factors in persistent won weakness. Korea's national pension fund's total foreign asset holdings increased by around $60 billion in 2021, from $270 billion to $330 billion, predominantly driven by valuation changes.



Sources: FRB, Bank for International Settlements

Korea reported net foreign exchange sales of $14 billion (0.8% of GDP) in the spot market, which had the effect of stemming won depreciation in 2021. Treasury estimates that the Korean authorities made most of these sales in the second half of 2021, when the won depreciated 5.1% against the dollar. Korea maintains ample foreign exchange reserves at $437 billion as of February 2022, equal to 2.6 times gross short-term external debt. Korea publicly reports its foreign exchange intervention on a quarterly basis.[17] Korea has well-developed institutions and markets and should limit currency intervention to only exceptional circumstances of disorderly market conditions.



Sources: Bank of Korea, U.S. Treasury estimates

[17] Treasury's estimates are monthly and are based on interest-adjusted changes in foreign currency reserves from monthly balance of payments statistics as well as changes in the central bank's forward position. Treasury estimated $5 billion in estimated net foreign exchange sales in 2021. Differences in estimated Bank of Korea operating profits drove the gap between Treasury's estimate and the Korean authorities' reported intervention figure.

Korea has supported the recovery through a mix of fiscal, monetary, and public health policies. Going forward, the authorities should encourage strong, equitable, and green medium-term growth. Progress on structural reforms, including strengthening social safety net programs and addressing labor market duality, would help secure economic opportunity for young workers and reduce old-age poverty while increasing potential growth over the long term.

The Euro Area

The pace of the euro area recovery was strong in 2021, with real GDP expanding by 5.4% year over year. Rising vaccination rates, a rollback of lockdown measures, and continued policy support propelled the recovery. Domestic demand grew significantly, led by a dramatic pick-up in private consumption expenditure. This reflected a combination of rising real disposable income and a declining savings rate from substantially above-trend levels at the height of the crisis in 2020. Net exports also made a positive contribution to economic growth over 2021, rising alongside the improvement in global economic conditions. While the recovery decelerated during the fourth quarter due, in part, to the spread of the Omicron variant, euro area real GDP nevertheless exceeded its pre-crisis level by the end of the year and the unemployment rate reached a record low. The recovery's continued momentum is now threatened by Russia's war against Ukraine, which has imparted substantial uncertainty into the economic picture, exacerbated supply chain woes, and reduced real disposable incomes through rising energy costs. In addition, COVID-19 case counts have increased in many parts of the euro area during the early months of 2022. The IMF expects the euro area economy to grow 2.8% in 2022, a downgrade of 1.1 percentage points from its January projection.

The unprecedented monetary and fiscal policy response launched to counter the pandemic was instrumental in setting the foundation for a robust recovery and remained a key support in 2021. According to European Commission estimates, fiscal support at the national level amounted to 5.2% of euro area GDP in 2021. While the European Commission expects temporary measures, such as job retention schemes, to wind down in 2022, it projects measures supporting the recovery, such as public investment, to increase. These recovery-support measures will be funded in part through the roughly $847 (€807) billion Next Generation EU (NGEU) pandemic recovery package agreed in July 2020.[18] NGEU is now operational, with $66 (€63) billion in funds from the Recovery and Resilience Fund (RRF)—the main component of the NGEU—distributed to member states in 2021. The RRF consists of up to $355 (€338) billion in grants and $405 (€386) billion in loans. While member states have applied for all of the RRF's grants, roughly $236 (€225) billion in lending capacity remains. The fiscal picture will also be impacted by Russia's war against Ukraine, as governments attempt to shield consumers and businesses from record energy prices, accelerate the drive toward energy independence, bolster defense spending, and respond to the influx of refugees.

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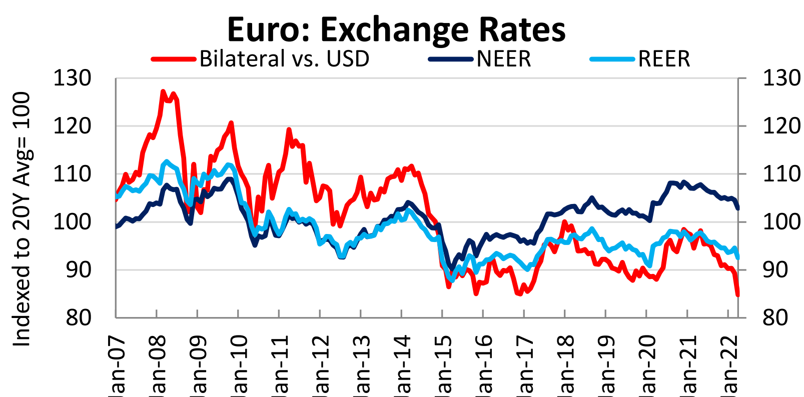
[18] NGEU is €750 billion in 2018 prices, which is equivalent to roughly €807 billion in current prices.

The ECB maintained a highly accommodative stance in 2021, with the key elements of its crisis response package still in full force. Net asset purchases under its Pandemic Emergency Purchase Program (PEPP) and Asset Purchase Program (APP) in July reached the highest pace since June 2020, reflecting a commitment by the Governing Council to conduct purchases "at a significantly higher pace than during the first months of the year" in the second and third quarters of 2021. The pace of net purchases slowed as of end-October, in line with a decision at the September 9 policy meeting that "favorable financing conditions can be maintained with a moderately lower pace of net asset purchases under the [PEPP] than in the previous two quarters."[19] In December, the ECB announced that PEPP net purchases would slow further in the first quarter of 2022 and end in March 2022. With respect to its other tools, the ECB's Targeted Longer-Term Refinancing Operations (TLTROs), which had its last tranche in December 2021, continued to make funding available to euro area lenders at interest rates as low as -1.0%, helping offset some of the pressure on net interest rate margins from negative policy rates. While the recovery gained momentum, so too did inflation, with headline inflation accelerating to 5.0% year over year in December. Though some of the inflationary forces are likely transitory factors, Russia's war against Ukraine has added substantial new pressure to prices. In its March projections, the ECB forecasts headline inflation of 5.1% in 2022 in its baseline scenario, though a more severe scenario could see inflation at 7.1%. Despite this surge, the ECB anticipates that inflation will return to around its target level by the end of its forecast window in 2024.

The euro area current account surplus rose to 2.4% of GDP in 2021, from 1.9% in 2020. While supply chain disruptions and COVID-19 outbreaks continued to affect trade, the euro area nevertheless saw increases in real exports of both goods and services in 2021 of roughly 10% relative to 2020. Treasury assesses that in 2021, the euro area's external position was broadly in line with economic fundamentals and desirable policies.

The euro depreciated by 7.5% against the dollar in 2021, with widening interest rate differentials between the United States and Europe, supporting dollar strength. The euro real effective exchange rate depreciated by 3.5% over 2021, reflecting in part rising inflation among major trading partners. During the first four months of 2022, the euro depreciated 6.9% against the dollar, as Russia's war against Ukraine has



Sources: FRB, Bank for International Settlements

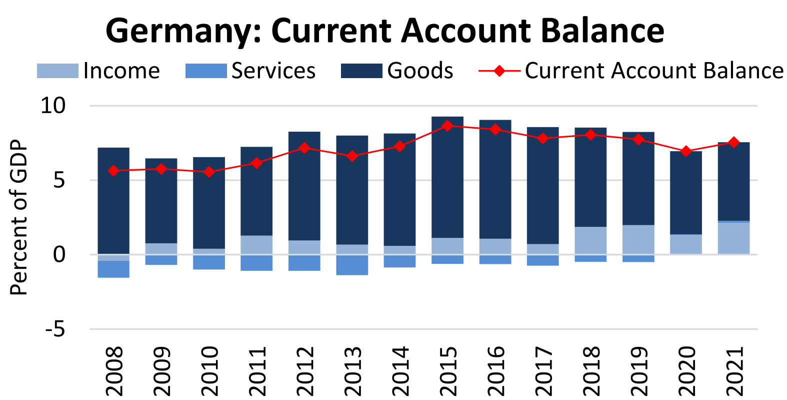
[19] The Governing Council reiterated this stance in its October 28, 2021 decision. "Press Release: Monetary policy decisions." September 9, 2021. Available at: https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.mp210909~2c94b35639.en.html. "Press Release: Monetary policy decisions." October 28, 2021. Available at: https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.mp211028~85474438a4.en.html.

impacted the energy landscape and raised concerns about economic activity. In real effective terms, the euro depreciated 2.2% during the first four months of 2022. The ECB publishes its foreign exchange intervention and has not intervened in foreign exchange markets since 2011.

Germany

Germany's economic recovery was faltering from continued COVID-related disruptions even prior to Russia's war against Ukraine. Although German economic activity started to accelerate in the second quarter of 2021—driven by an increase in consumer spending, industrial production, and increasing demand for German exports—ongoing pandemic restrictions, supply chain disruptions, and high energy prices led to a contraction of -0.3% of economic activity in the fourth quarter of 2021, pulling down overall 2021 GDP growth to 2.9%. With Russia's war creating new economic headwinds across Europe, the IMF's April WEO forecasts show German real GDP growth to decelerate to 2.1% in 2022; first quarter growth was just 0.2%. The planned 2022 German federal budget and $109 (€100) billion special fund for military modernization will extend Germany's 2020-21 period of greater utilization of its fiscal space, although the IMF expects the general government deficit to narrow to 3.3% of GDP in 2022. German headline inflation continued to rise in early 2022 largely due to energy prices and supply constraints. The increase in inflation may already be weighing on consumer confidence, with inflation expectations continuing to rise and consumer sentiment dropping markedly in March due to both inflation and Russia's war against Ukraine.

After narrowing somewhat in 2020 due to the impact of the pandemic on global trade, Germany's current account surplus increased to 7.6% for the four quarters through December 2021, as net exports recovered faster than domestic demand. Germany's bilateral goods and services trade surplus with the United States stood at $73 billion for the four quarters through December 2021, up from $57 billion in the same period in 2020. Treasury assesses that in 2021, Germany's external position was stronger than warranted by economic fundamentals and desirable policies, with an estimated current account gap of 3.8% of GDP.

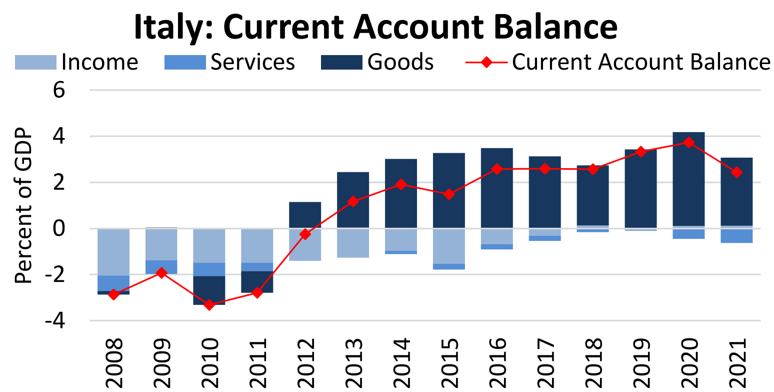


Source: Deutsche Bundesbank

The German government took bold fiscal measures in response to COVID-19 and Russia's war against Ukraine, including the continued suspension of the national fiscal rules to allow for new debt issuance. However, Germany still needs to improve its chronic spending under-execution, which contributed to persistent fiscal surpluses pre-pandemic. Treasury encourages the Scholz government to continue to deploy its substantial fiscal space, including through strengthening efforts to combat climate change, enhance energy security, and reinvigorate investment—which would help external rebalancing proceed at a reasonable pace.

Italy

Italy suffered one of the worst growth contractions in Europe in 2020, with lockdowns and other restrictive measures resulting in a real GDP contraction of -9.0%. Despite facing multiple waves of COVID-19 in 2021, Italian real GDP grew 6.6% last year, spurred by increases in domestic demand, net exports, and public investment partially supported by EU funding. The IMF projects that this recovery will slow significantly in 2022, with expected economic growth dropping to 2.3% due in part to economic spillovers from Russia's war against Ukraine. To tackle the COVID-19 crisis in 2020-21, Italy passed six fiscal packages totaling around $155 billion (€142 billion or 9% of GDP) in direct fiscal stimulus and authorized up to $437 billion (€400 billion or 25% of GDP) in loan guarantees, of which $266 billion (€248 billion) had been issued by end-2021. In part due to these measures, the fiscal deficit reached 9.6% of GDP in 2020 and 7.2% in 2021, pushing Italian government debt—already the second-highest in the EU—to over 150% of GDP.



Sources: Ufficio Italiano dei Cambi, Banca d'Italia

Italy's current account surplus contracted to 2.5% of GDP for the four quarters through December 2021 (down from 3.8% of GDP during the same period in 2020). The United States is Italy's third-highest export destination after Germany and France, and Italy's trade surplus with the United States was $35 billion for the four quarters through December 2021. Treasury assesses that in 2021, Italy's external position was weaker than warranted by economic fundamentals and desirable policies, driven in part by the effect of demographics on national saving.

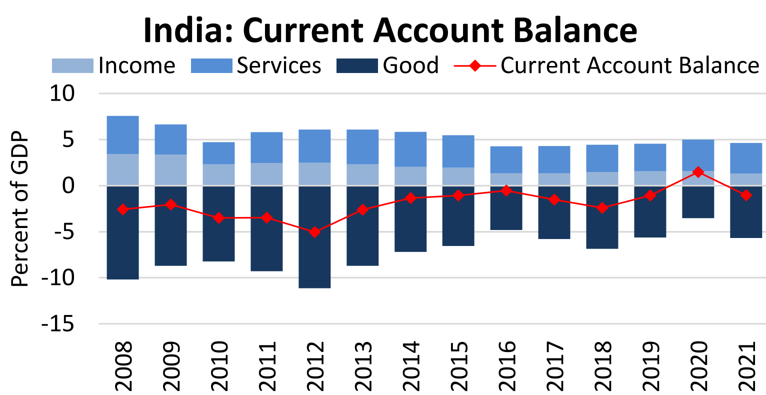
Italy's persistently anemic growth and high debt load even prior to the pandemic underscores the difficult road to economic recovery. Once immediate support measures required by ongoing risks end, Italy should address longer-term structural issues and inequalities. EU-level fiscal support—including Next Generation EU (NGEU) funding—should help Italy recover from the pandemic crisis and improve the foundation for achieving stronger future growth. As part of the NGEU, Italy is set to receive around $240 billion in grants and loans in the coming years and has already received its first disbursement of around $31 billion. COVID-19 and economic spillovers from Russia's war against Ukraine have only further demonstrated the need for Italy to undertake fundamental reforms to tackle deep-rooted structural rigidities and boost competitiveness.

In that vein, Treasury welcomes the Draghi government's efforts to diversify its energy supply and reform Italy's public administration, judicial system, and tax system to help raise long-term growth.

India

Since the onset of the global pandemic, India has faced three significant outbreaks of COVID-19. India's acute second wave weighed heavily on growth through the middle of 2021, delaying its economic recovery. However, economic activity rebounded strongly in the second half of the year as India's vaccination rollout accelerated. As of the end of 2021, about 44% of India's population was fully vaccinated. After contracting 7% in 2020, output returned to pre-pandemic levels by the second quarter of 2021, with full-year 2021 growth of 8%. Since the beginning of 2022, India has contended with a third major outbreak driven by the Omicron variant, but the number of deaths and broader economic fallout has been limited.

The Indian government continued to provide fiscal support for the economy against the backdrop of the pandemic in 2021. The authorities estimate that the overall fiscal deficit will reach 6.9% of GDP for the 2022 fiscal year,[20] which is higher than deficits prior to the pandemic. The Reserve Bank of India (RBI) has kept its key policy rate unchanged at 4% since May 2020, but in January 2021 the RBI began to gradually unwind the extraordinary liquidity measures designed to support growth during the early part of the global pandemic.



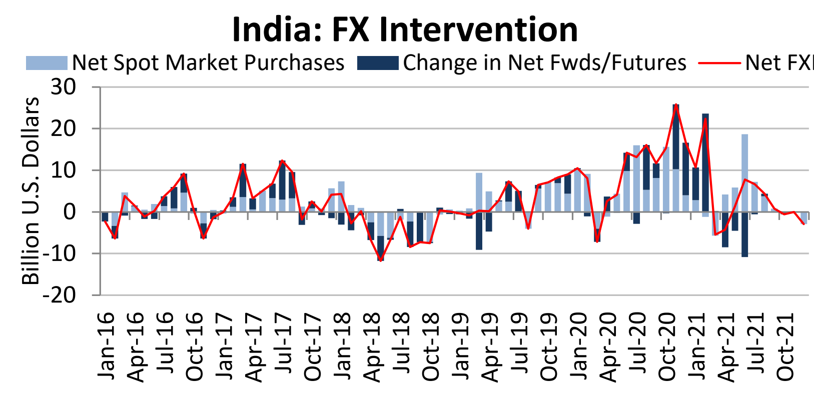
Source: Reserve Bank of India

After recording a current account surplus of 1.3% of GDP in 2020, its first surplus since 2004, India returned to a current account deficit of 1.1% of GDP in 2021. The return to a current account deficit was driven by a sharp deterioration in India's trade deficit, which widened to $177 billion in 2021 from $95 billion the previous year. Goods imports rose particularly sharply in the second half of 2021 amid the economic recovery and rising commodity prices, particularly energy prices, leading imports to increase 54% year-on-year in 2021. India's exports also rose in 2021, though at a lower rate than imports, increasing 43%. India's services trade surplus (3.3% of GDP) and income surplus (1.3% of GDP) partially offset the wider goods trade deficit. Remittances grew around 5% in 2021, reaching $87 billion, or 2.8% of GDP. Treasury assesses that in 2021, India's external position was broadly in line with economic fundamentals and desirable policies, with an estimated current account gap of 0.3% of GDP.

[20] India's fiscal year 2022 ended in March.

India's bilateral trade surplus with the United States has expanded significantly in the past year. Between 2013 and 2020, India ran bilateral goods and services trade surpluses of about $30 billion with the United States. In 2021, the goods and services trade surplus reached $45 billion, a material increase from $34 billion in the four quarters through December 2020. India's bilateral goods trade surplus reached $33 billion (up 37%), while the bilateral services surplus grew to $12 billion (up 29%) in 2021. The expansion has been driven primarily by elevated U.S. demand, particularly for goods, as the U.S. economy recovered strongly in 2021.

India has been exemplary in publishing its foreign exchange market intervention, both monthly spot purchases and sales and net forward activity, with a two-month lag. RBI's net purchases of foreign exchange reached $41 billion, or 1.3% of GDP, in 2021. The RBI intervenes frequently in both directions, and in 2021 the RBI purchased foreign exchange on net in 7 of 12 months. The RBI made large monthly purchases in January and February of 2021, followed by modest sales in the spring as a COVID-19 outbreak took hold. Net purchases ticked back up during the summer but tapered off as the rupee came under greater depreciation pressure against the U.S. dollar in the latter part of 2021.

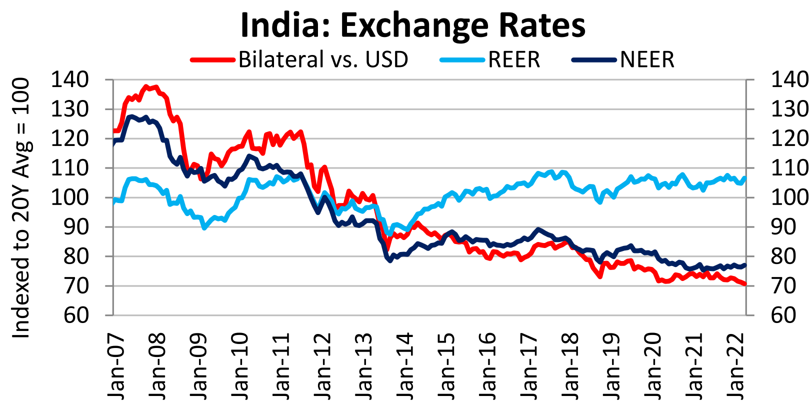


Source: Reserve Bank of India

RBI foreign exchange purchases in recent years have resulted in an elevated level of reserves. As of December 2021, foreign exchange reserves totaled $570 billion, equivalent to 18% of GDP and 209% of short-term external debt at remaining maturity.[21] In the 2021 External Sector Report, the IMF judged that India's reserves at the time stood at 197% of the IMF's reserve adequacy metric as of end-2020.

[21] Foreign exchange reserves were equivalent to 497% of short-term external debt at original maturity. Both the remaining maturity and original maturity figures rely on short-term external debt data as of December 2021.

Similar to many Asian emerging market peer currencies, the rupee weakened against the U.S. dollar over the course of 2021, depreciating by 1.9%. Rupee volatility was pronounced during the first half of 2021 as the economy contended with the large, second COVID-19 outbreak; subsequently, the rupee depreciated steadily against the dollar during most of the second half of the year. By contrast, the rupee held up relatively well compared to the currencies of many India's regional trading partners—on a nominal effective and real effective basis, the rupee appreciated 0.8% and 2.2% over 2021, respectively.



Sources: FRB, Bank for International Settlements

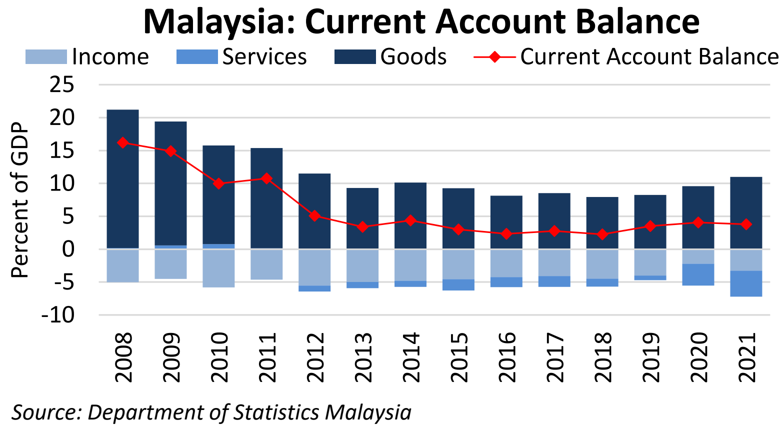
The authorities should allow the exchange rate to move flexibly to reflect economic fundamentals, limit foreign exchange intervention to circumstances of disorderly market conditions, and refrain from further significant reserve accumulation. As the economic recovery progresses, the authorities should continue to pursue structural reforms that can help lift productivity and living standards, while supporting an inclusive and green recovery.

Malaysia

Malaysia's economy recovered gradually in 2021 with 3.1% real GDP growth, though activity was weighed down through the middle of the year by a rapid resurgence of COVID-19 cases. In response to the surge in cases, the authorities reimposed strict nationwide containment measures, while allowing key economic sectors to continue operating. As a result, sectors facing fewer restrictions, including the export-oriented manufacturing sector, underpinned growth in 2021, whereas other sectors were slower to recover. Activity was particularly weak in contact-intensive industries, including tourism, and in the agriculture sector, which faced labor shortages amid slow migrant flows. For 2022, the authorities project stronger growth, in line with the IMF's projection of 5.6% real GDP growth, amid a resumption of domestic activities, further improvements in the labor market, continued policy support, and an expansion in external demand.

The authorities have provided substantial policy support to buffer the shock from the pandemic. After providing around 2.7% of GDP in COVID-related fiscal support in 2020, the authorities in 2021 provided an additional $9.3 billion (2.6% of GDP) of fiscal measures, including support for wage subsidies and direct transfers. They have also indicated that some support measures will remain in place to facilitate Malaysia's economic recovery, budgeting another $5.5 billion (1.4% of GDP) in COVID-related support for 2022. After keeping a steady policy rate of 1.75% since the beginning of the pandemic, Bank

Negara Malaysia took its first step to tighten monetary policy in its scheduled policy meeting in May, raising its policy rate 25 basis points.

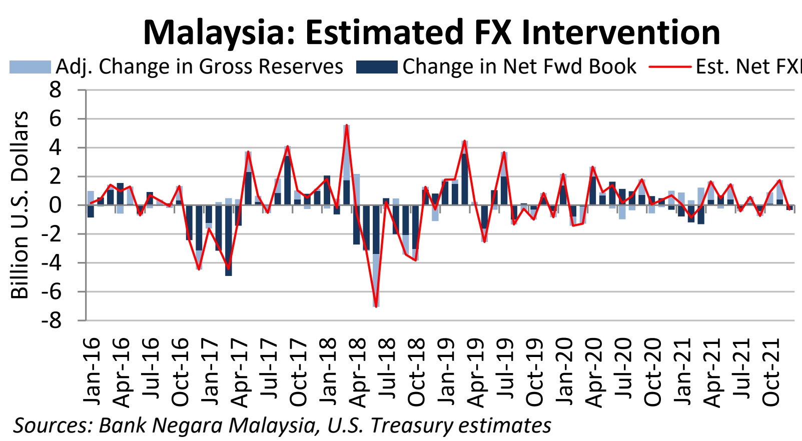


Source: Department of Statistics Malaysia

Malaysia has consistently maintained current account surpluses over the last several years, with the current account registering a 3.8% of GDP surplus in 2021. Since the onset of the pandemic, Malaysia's goods surplus has widened as exports recovered faster than imports on the back of stronger global demand and a sluggish domestic recovery. The uptick in the goods surplus has been offset by a wider income deficit as earnings of foreign investors were buoyed by strong demand for manufactured goods, as well as the wider services deficit amid still-subdued travel-related receipts.

Treasury assesses that in 2021, Malaysia's external position was broadly in line with economic fundamentals and desirable policies. The IMF over the last decade has consistently assessed Malaysia's external position to be stronger than the level consistent with medium-term fundamentals and desired policies.

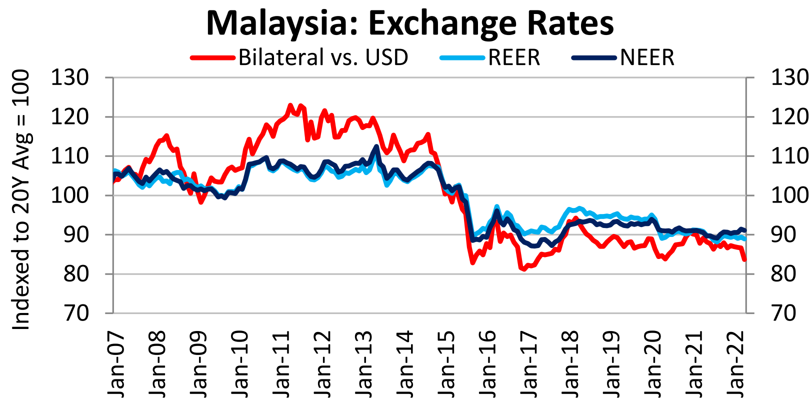
Malaysia's goods and services trade surplus with the United States reached $41 billion in 2021. Malaysia and the United States have strong supply chain linkages in key industries, particularly electronics and related parts. Surging electronics exports helped push Malaysia's bilateral goods trade surplus to $41 billion in 2021. Conversely, Malaysia engages in relatively limited bilateral services trade with the United States—about $4 billion in gross bilateral services trade flows in 2021—and bilateral services trade was roughly balanced in 2021.



Sources: Bank Negara Malaysia, U.S. Treasury estimates

Malaysia has established a history of two-way intervention in the foreign exchange market. Malaysia does not publish data on its foreign exchange intervention; however, the authorities have conveyed credibly to Treasury that net purchases of foreign exchange in 2021 were $0.8 billion or 0.2% of GDP. Foreign exchange reserves stood at around $103.1 billion in March 2022, up $3.4 billion compared to end-2020. Reserves are broadly adequate according to standard adequacy metrics, including that of the IMF.

Like many regional peer currencies, the ringgit faced downward pressure over 2021 amid a surge in COVID-19 cases and weakened economic outlook. On net, the ringgit depreciated 3.8% against the U.S. dollar over 2021 and depreciated 0.9% and 1.2% on a nominal and real effective basis, respectively, over the same period.



Sources: FRB, Bank for International Settlements

The authorities should continue to provide targeted fiscal policy support for vulnerable populations and hard-hit sectors to support Malaysia's economic recovery and reduce risks of economic scarring and inequality. In addition, upgrades to the scale and coverage of Malaysia's social protection system would support external rebalancing while also fostering an inclusive recovery. The authorities should continue to allow the exchange rate to move to reflect economic fundamentals and limit foreign exchange intervention to circumstances of disorderly market conditions, while avoiding excessive accumulation of reserves.

Singapore

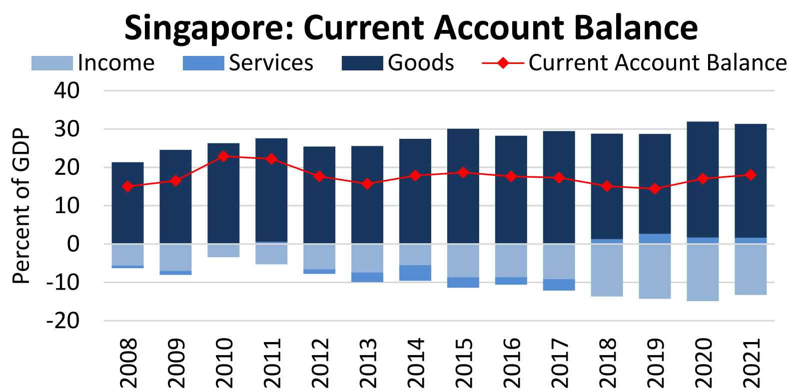
Singapore recovered strongly in 2021 with 7.6% real GDP growth, owing to effective COVID-19 containment measures, a rebound in external demand, and robust domestic consumption. Looking ahead, the authorities anticipate continued above-trend growth for 2022, in line with the IMF's projection of 4.0% real GDP growth, supported both by sustained external demand as well as recovery in domestic-oriented and travel-related sectors as COVID-related restrictions are further relaxed.

After providing extraordinary fiscal policy support in 2020 to help offset the economic shock from the pandemic, the authorities have shifted toward fiscal consolidation in their last two budgets. The authorities' fiscal year 2022 budget[22] calls for the deficit to narrow to 0.5% of GDP, from 0.9% of GDP the year prior. In addition to the wind down of COVID-related fiscal support, the narrower deficit reflects projected increases in both operating revenues and investment returns (used in part to support the budget). The authorities are maintaining plans to raise the goods-and-services tax from 7% to 9% over the next two

[22] Singapore's 2022 fiscal year is April 1, 2022 to March 31, 2023.

years to help offset future health and other expenditure increases, though implementation remains on hold for now due to rising price pressures.

The Monetary Authority of Singapore (MAS) has been one of the first central banks in the region to start gradually tightening monetary policy. Amid accumulating external and domestic cost pressures, MAS took its first step to tighten policy since the pandemic in its scheduled policy meeting in October 2021. Subsequently, MAS again tightened monetary policy in a surprise, off-cycle move in January 2022, and again in their regularly scheduled policy meeting in April, citing increased cost pressures owing to recovering global demand and persistent supply disruptions.

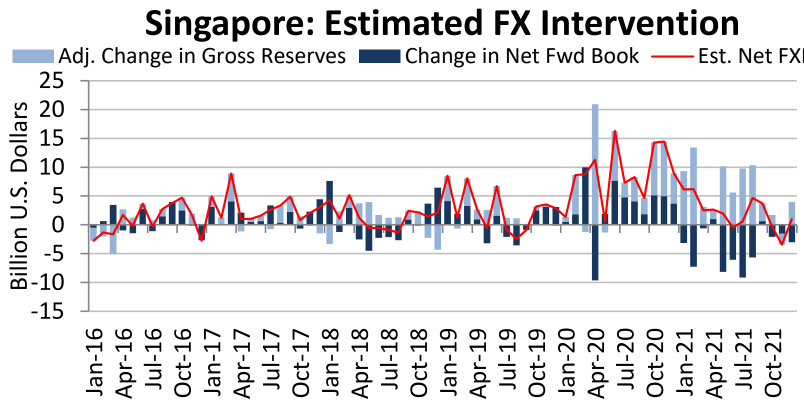


Sources: Monetary Authority of Singapore, Department of Statistics

Singapore's outsized current account surplus averaged 17% of GDP over the last decade, and reached 18.1% of GDP in 2021, owing primarily to a massive goods surplus, offset in part by a sizable income deficit. Treasury assesses that Singapore's external position was substantially stronger than warranted by economic fundamentals and desirable policies in 2021, with an estimated current account gap of 6.3% of GDP. The IMF in recent years has consistently assessed Singapore's external position to be substantially stronger than warranted by economic fundamentals and desirable policies. Singapore's long history of large current account surpluses has pushed its net international investment position to around 260% of GDP, one of the highest levels in the world.

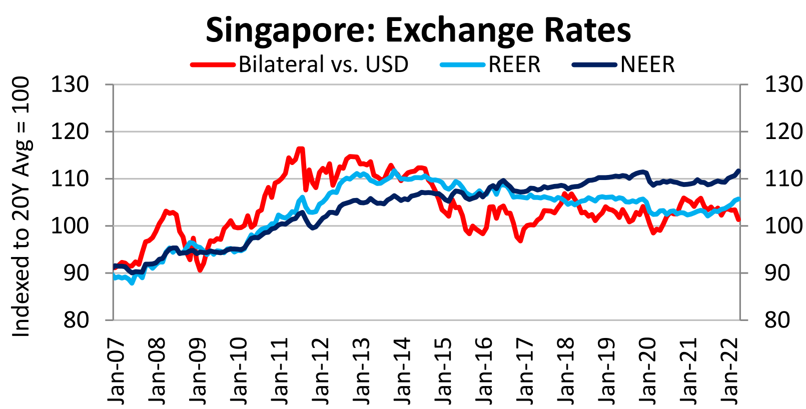
Singapore's bilateral goods and services trade deficit with the United States was $21 billion in 2021, driven primarily by a deficit in services trade. Singapore has long run a bilateral services deficit with the United States, and this deficit has widened in the last decade to reach $15 billion in 2021. Key Singaporean services imports from the United States include research and development, intellectual property, and professional and management services. Singapore's bilateral goods trade balance with the United States returned to a deficit in 2021 of $6 billion, after registering a surplus in 2020 for the first time in two decades, owing to a normalization of trade flows from the pandemic and a substantial increase in fuel and commodity imports from the United States. The Singapore goods deficit with the United States reflects in part Singapore's role as a regional transshipment hub, with some of Singapore's imports from the United States ultimately intended for other destinations in the region.

MAS uses the nominal effective exchange rate of the Singapore dollar (the S$NEER) as its primary tool for monetary policy and uses foreign exchange intervention to help manage the S$NEER and implement its policy. In October 2021 and April 2022, MAS published data on intervention covering the first and second halves of 2021, respectively, indicating total net purchases of $29 billion in foreign currency in 2021, equivalent to 7.3% of GDP. Official foreign exchange reserves held by MAS registered $371 billion (93% of GDP) at end-March 2022, after the authorities transferred $55 billion to GIC, one of Singapore's sovereign wealth and investment funds, in March 2022. Absent the transfer, reserves as of end-March would have grown by $67 billion relative to end-2020. In addition to the reserves held by MAS, Singapore's government also has access to substantial official foreign assets managed by GIC and a second sovereign wealth and investment fund, Temasek.



Sources: Monetary Authority of Singapore, U.S. Treasury estimates

The Singapore dollar depreciated modestly over 2021 against the U.S. dollar, in line with many regional currencies, as markets became optimistic about U.S. economic growth. On net, the Singapore dollar depreciated 2.3% against the U.S. dollar over 2021. Conversely, the Singapore dollar showed relative strength in 2021 against the currencies of many other trading partners as Singapore's economic growth outperformed compared to many regional peers. Consequently, Singapore's NEER and REER appreciated 0.4% and 0.9%, respectively, in 2021. These trends have extended into 2022, with the Singapore dollar depreciating 2.2% against the U.S. dollar since the beginning of the year through-end-April.



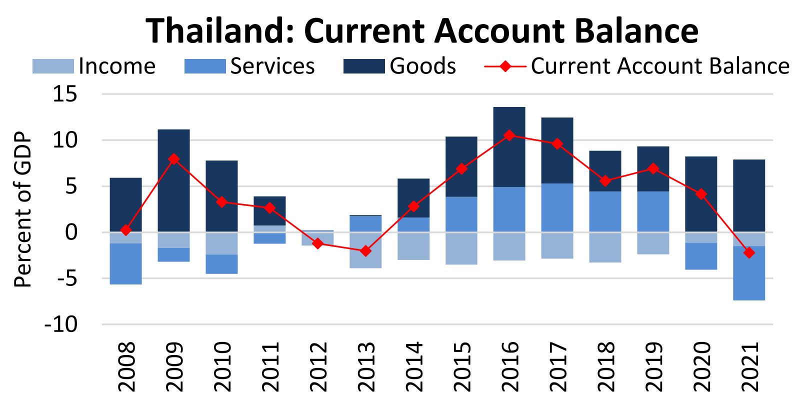
Sources: FRB, Bank for International Settlements

The authorities should consider several fiscal and monetary policies to address Singapore's large and persistent external imbalances and the public sector's large net foreign asset position. Further appreciation of the nominal and the real effective exchange rate over the medium term, consistent with economic fundamentals, should continue to play a role in facilitating external rebalancing. The authorities should also loosen fiscal policy on a structural basis, including by reconsidering fiscal policy rules that drive a tighter than warranted fiscal stance across the economic cycle and tax policies that may dampen domestic demand. A sustained expansion in the provision and coverage of social services would help reduce incentives for private saving and support stronger consumption. In addition, reforms to the pension system, including reducing the high rates for mandatory contributions to the government pension scheme and managing official assets in a way that transfers more wealth to Singaporean households, would have similar benefits in strengthening domestically driven growth. Consistent with the government's stated goals, substantial new infrastructure investment could help build resilience to threats from climate change while also supporting greater domestic demand.

Thailand

Thailand's economic recovery has lagged regional peers, with real GDP expanding by 1.6% in 2021 following a 6.1% contraction in 2020. A rapid acceleration in local transmission of COVID-19 starting in April 2021 and peaking in mid-August prompted the authorities to impose increasingly stringent restrictions on domestic travel and economic activity. These restrictions helped to control the spread of the virus but weighed on domestic demand, while external demand remains subdued due to ongoing disruptions to the tourism sector.

In response to these developments, the authorities accelerated their vaccine procurement timeline, authorized an additional 3.1% of GDP in emergency government borrowing in a supplemental 2021 fiscal package (on top of 6.4% of GDP in emergency borrowing authorized earlier in 2021), and extended forbearance for pandemic-affected firms and households struggling to meet debt service obligations. These efforts supported a sharp acceleration in economic activity in the final quarter of 2021, helping Thailand weather the rapid transmission of the Omicron variant and providing a significant boost to annual output for 2021. GDP growth is broadly projected to accelerate further in 2022, although headwinds from the global commodity price shock have tempered expectations somewhat. The IMF currently projects the economy to expand by 3.3% in 2022 as activity restrictions ease and tourism recovers.



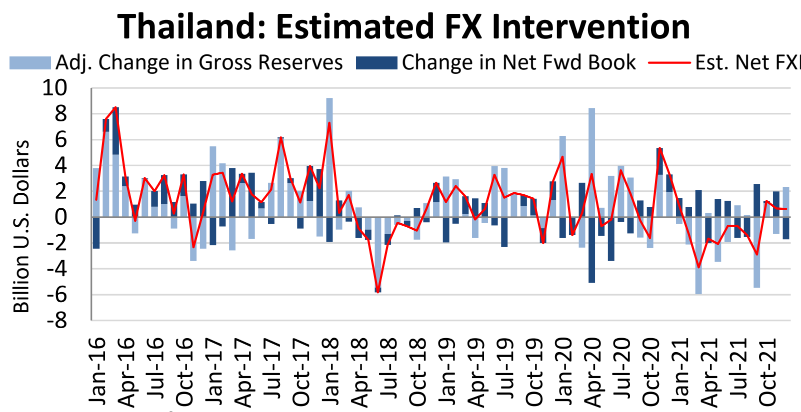
Sources: Bank of Thailand, National Economic & Social Development Board

Thailand recorded a current account deficit of 2.1% of GDP in 2021, contrasting sharply with the elevated current account surpluses Thailand ran in the five years before the COVID-19 pandemic. This large swing in the current account has been due to a rapid widening deficit in the services balance, to 5.9% of GDP in 2021 from 2.9% in 2020, after averaging a surplus of 4.6% of GDP between 2015 and 2019. The steep drop in tourism receipts has been the primary contributor to the swing in the services balance, but rising payments for freight transportation linked to a sharp increase in global freight costs have also contributed. Thailand's goods trade surplus narrowed modestly to

7.9% of GDP last year from 8.2% of GDP in 2020, as the recovery in imports outpaced the rise in exports. Treasury assesses that in 2021, Thailand's external position was broadly in line with economic fundamentals and desirable policies, with an estimated current account gap of 0.1% of GDP.[23]

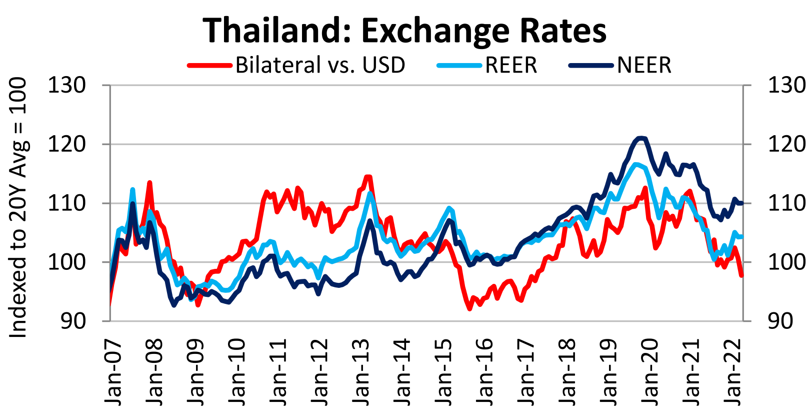
Thailand's bilateral goods and services trade surplus with the United States widened to $33 billion in 2021, an increase of $7 billion from 2020. Thailand's merchandise exports to the United States grew by more than 25% during this period, led by the sustained growth of electronic and electric equipment exports. During the same period, goods imports from the United States increased by 13%, primarily due to rising manufactures imports, including chemicals and computers and electronic products.

Thailand intervenes frequently in foreign exchange markets. Intervention activity was skewed heavily toward purchases of foreign currency between 2016 and 2020, a period that generally coincided with appreciation pressures on the baht. Conversely, the baht faced sustained depreciation pressure for much of 2021. The Thai authorities have credibly conveyed to Treasury that net sales of foreign exchange were 2.2% of GDP in 2021. That figure is equivalent to about $11 billion.



Sources: Bank of Thailand, U.S. Treasury estimates

The baht depreciated by 9.9% against the dollar in 2021, underperforming major regional peers. Over the same period, the baht depreciated by 7.5% and 8.7% on a nominal effective and real effective basis, respectively. The baht's depreciation trend occurred amid the large swing in Thailand's current account, a record surge in resident portfolio capital outflows (facilitated by recent easing of restrictions on resident investment abroad), and a shift in investor sentiment tied to the substantial increase in Thailand's COVID-19 caseload in 2021.



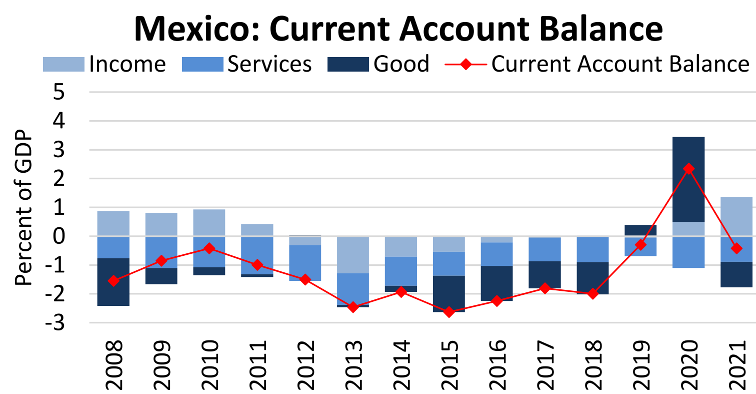
Sources: FRB, Bank for International Settlements

[23] The estimated current account gap is subject to higher-than-usual uncertainty given the large swing in the services trade balance and associated uncertainty about the appropriate adjustments to account for pandemic-related factors.

The authorities should sustain macroeconomic policy support until a strong, self-sustaining recovery takes hold, and should take steps to durably strengthen the social protection system, which also will help mitigate incentives for precautionary saving. Thailand should allow the exchange rate to move flexibly in line with economic fundamentals and, when intervening, continue to do so in a broadly symmetric manner when facing either appreciation or depreciation pressures.

Mexico

Following an 8.2% contraction in 2020, Mexico's economy grew by 4.8% in 2021, but the recovery stalled in the second half of the year, leaving real per capita GDP 5% below pre-pandemic levels, severely lagging regional peers' recoveries. Investment, in particular, remains depressed at 15% below its level prior to the current administration's tenure, which began in late 2018. Commodity price shocks, following Russia's war against Ukraine, will add further pressure to stubbornly-high inflation: core price increases accelerated from 4.7% in 2021 to 6.9% year-on-year in March 2022—well outside of the Bank of Mexico's (Banxico's) target band of 3±1%. In response to rising inflation, Banxico has raised its policy rate by 300 basis points since June 2021 and foreshadowed further hikes to keep medium-term expectations anchored, which will weigh on 2022 growth.

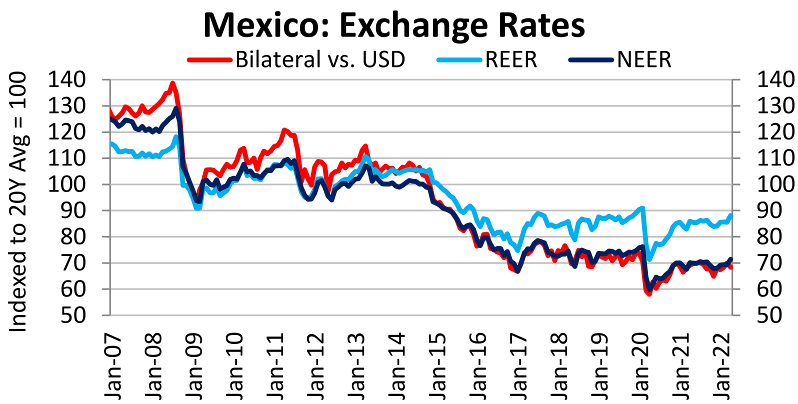


Sources: Banxico, INEGI, Haver

Mexico's current account balance returned to deficit (0.4 % of GDP) in 2021 following a temporary surplus in 2020. Despite Mexico's tepid recovery in 2021, import growth outpaced export growth throughout the year. A 20% appreciation of the real effective exchange rate from its pandemic low also supported import demand. In contrast to the significant reversion of Mexico's global balance on goods and services, Mexico's bilateral goods and services surplus with the United States (the second largest after China) in 2021 was virtually unchanged from 2020 at $112 billion.

A gradual recovery in domestic demand, along with rising food and commodity prices, will tend to push Mexico's current account balance lower this year toward its historical trend of moderate deficits, but continued growth in record remittances ($52 billion or 4.0% of GDP in 2021) and a sluggish growth outlook may limit the extent of external adjustment. The IMF forecasts a current account deficit of 0.6% of GDP for 2022, gradually increasing to a deficit of 1.1% by 2027. Treasury assesses that in 2021, Mexico's external position was broadly in line with economic fundamentals and desirable policies.

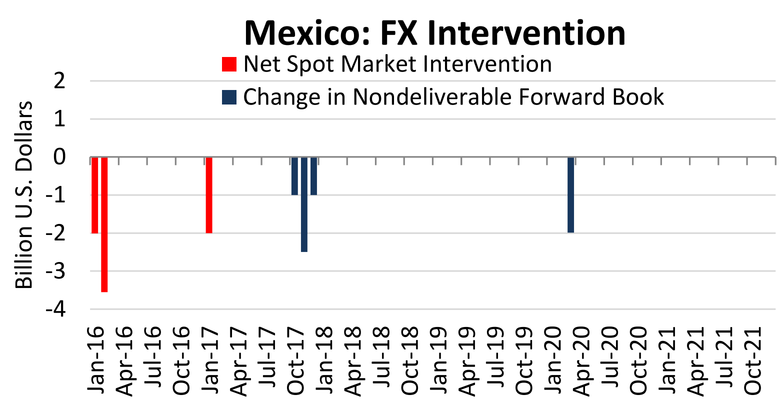
The Mexican peso is a freely traded currency. The real effective peso has largely tracked Mexico's terms of trade over the past 15 years. After depreciating significantly early in the COVID-19 pandemic, the peso has regained most of its value: relative to end-2019, the peso in April 2022 was 7.4% weaker against the dollar and 0.9% weaker on a real effective basis.



Sources: FRB, Bank for International Settlements

Mexico has intervened in foreign exchange markets only minimally since 2017. Almost all of its interventions over the past decade have been foreign exchange sales that have strengthened the currency. Mexico is open to capital flows, has refrained from capital flow management measures, and has a highly liquid currency, allowing the peso to act as an important shock absorber for Mexico. As of March 2022, Mexico has $210 billion in foreign exchange reserves, together with $62 billion in available swap and credit lines,[24] to add to its external buffers. In its latest External Sector Report, the IMF assessed that Mexico's foreign exchange reserves levels are adequate across a range of metrics, with reserves reaching 129% of the IMF's adequacy metric as of end-2020.

Mexico is timely in publishing its foreign exchange market intervention, disclosing monthly purchases and sales with about a one-week lag and providing intervention data from 1996 onwards. Banxico typically conducts its foreign exchange transactions with the private sector under rules-based, transparent programs to counter volatility or accumulate reserves.[25] The country's inflation-targeting monetary policy framework and flexible exchange rate regime remain crucial pillars of the macroeconomic framework for Mexico's resilience to shocks.



Sources: Banxico, U.S. Treasury estimates

[24] These comprise a $50 billion IMF Flexible Credit Line and swap lines under the North American Framework Agreement (NAFA) with the Federal Reserve and U.S. Treasury of $3 billion and $9 billion, respectively.

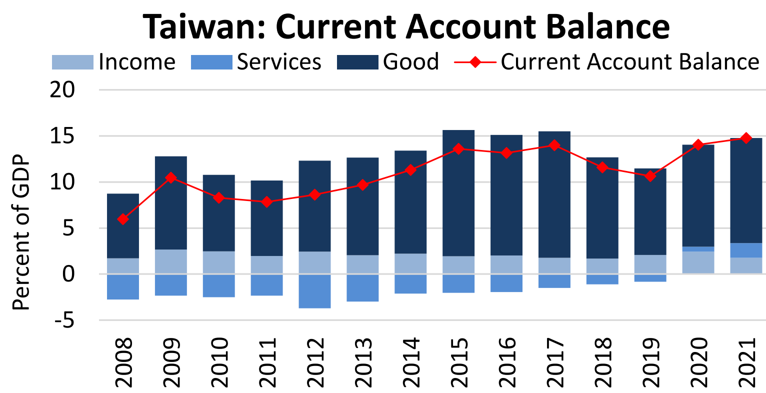
[25] See "Reserves Management and FX Intervention in Mexico" by Banxico Deputy Governor Javier Guzmán Calafell, available at https://www.banxico.org.mx/publicaciones-y-prensa/discursos/%7BEA88E47F-8EC7-14F7-9B19-B4649E0EE3E6%7D.pdf.

Deteriorating structural policies will continue to weigh on Mexico's growth for the foreseeable future. The IMF expects growth to decelerate to 2.0% in 2022, which would leave the economy close to 1.8% below its level in 2019. Mexico's efforts to increase the market dominance of loss-making state energy firms displace public resources from essential spending and discourage investment in renewable energy that would reduce user costs and free fiscal space for more productive investment and social protection. Policies outside the energy sector that have led to major project cancelations, or have otherwise displaced the private sector, further threaten to delay the recovery and reduce Mexico's long-term growth potential by perpetuating a trend of private sector under-investment.

In-Depth Analysis

Taiwan

Taiwan's real GDP grew by 6.4% in 2021, up from 3.4% in 2020. The external sector, as well as an increase in fixed asset investment, drove growth in 2021. Taiwan tightly managed the COVID-19 pandemic, successfully containing an outbreak that took place in mid-2021. The authorities complemented public health measures with targeted fiscal relief to offset the effects of the pandemic, including expanded unemployment benefits and direct transfers to impacted households. Taiwan passed its fifth special budget for pandemic relief in December 2021, bringing cumulative COVID-related fiscal spending in 2021 to $15 billion (1.9% of GDP). Monetary authorities kept policy accommodative throughout the pandemic and began policy normalization with a 25 bp hike in March 2022.



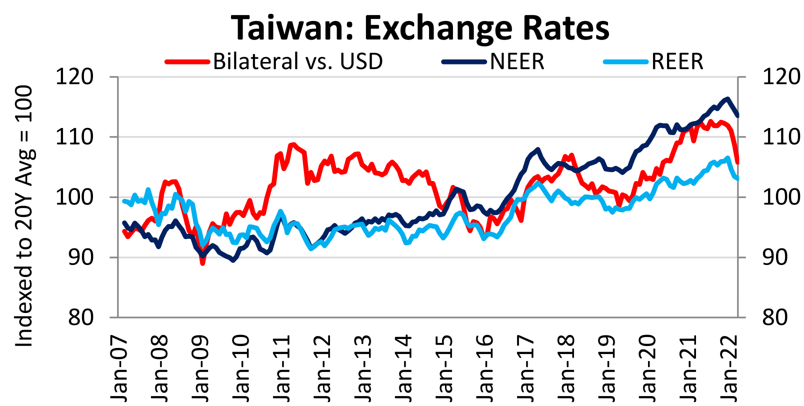
Sources: Taiwan central bank, Haver

Taiwan's current account surplus was $115 billion (14.8% of GDP) in 2021, up from $95 billion (14.2% of GDP) a year prior. The current account surplus was driven by Taiwan's $89 billion goods trade surplus (11.4% of GDP), rising from $75 billion (11.1% of GDP) a year prior. Goods exports continued to surge due to pandemic-induced shifts in patterns of global demand and the ongoing global semiconductor shortage, as electrical machinery exports rose to $219 billion, up 25% from a year prior. Import growth was modest, driven in part by Taiwan's sluggish recovery of private consumption. Imports may increase and the overall goods surplus may deteriorate in 2022 amid rising prices of imported commodities and a potential easing of global supply chain bottlenecks.

Taiwan's services balance stood at $12.5 billion (1.6% of GDP) in 2021, following a near-decade long strengthening trend that began after a record services deficit of 3.7% of GDP in 2012. Nevertheless, Taiwan's transition to a surplus economy on the services front over the last two years is the result of pandemic distortions, namely the decline in overseas tourism spending along with an increase in freight transport service exports. Taiwan's services surplus is likely to moderate as international travel restrictions are loosened and shipping constraints moderate.

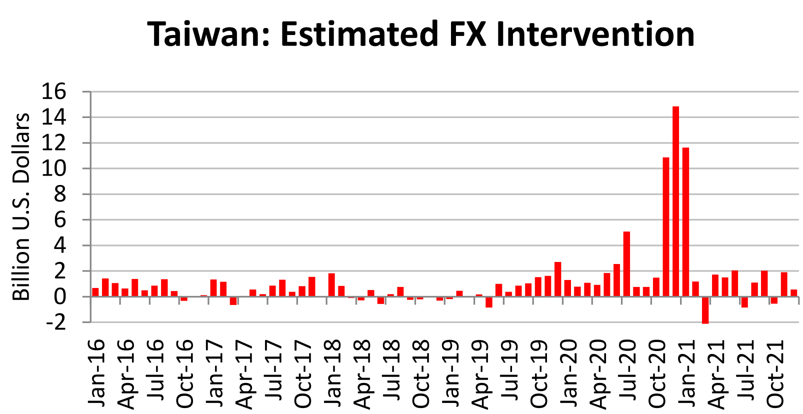
Treasury assesses that in 2021, Taiwan's external position was substantially stronger than warranted by economic fundamentals and desirable policies, with an estimated current account gap of 7.4%.

Taiwan recorded a $40 billion bilateral trade surplus with the United States in 2021, up from $28 billion in 2020. The trade surplus was composed entirely of goods trade and was driven by semiconductors and electronic goods exports. Taiwan's bilateral services trade with the United States balanced to roughly zero in 2021, from a $3 billion deficit a year before.



Sources: FRB, Bank for International Settlements

The New Taiwan Dollar (TWD) strengthened steadily throughout 2021, appreciating 1.2% against the dollar and 3.6% on a real effective basis, supported by Taiwan's very large external surplus. Taiwan's exchange rate depreciated sharply in February 2022, driven by geopolitical uncertainty associated with Russia's war against Ukraine, and rising commodity prices, and has since depreciated 5.7% against the dollar since the beginning of the year through April 2022. Large portfolio equity outflows moderated appreciation pressures throughout 2021, while the acceleration of equity outflows in the wake of Russia's war against Ukraine drove significant TWD depreciation.



Sources: Taiwan central bank, U.S. Treasury estimates

The stated policy of the central bank is to maintain a "managed float" exchange rate, in principle determined by market forces but with flexibility to maintain an orderly foreign exchange market. The central bank publicly disclosed $9.1 billion (1.2% of GDP) in foreign exchange purchases in 2021, $8.7 billion of which occurred in the first half the year. Treasury estimates the majority of these purchases occurred in January 2021, after which Taiwan significantly scaled back its purchases or sold foreign exchange. Taiwan publishes its data on foreign exchange intervention on a semi-annual basis, with a three-month lag.

Treasury conducted enhanced analysis of Taiwan in its April 2021 and December 2021 FX Reports and began enhanced bilateral engagement in May 2021.[26] In May 2021, Treasury commenced enhanced bilateral engagement with Taiwan in accordance with the 2015 Act. These productive discussions have helped develop a common understanding of the policy issues related to Treasury's concerns about Taiwan's currency practices. Treasury continues to engage closely with Taiwan's authorities.

Vietnam

After successfully keeping COVID-19 case counts contained at very low levels over the first year of the pandemic, Vietnam was hit by a lengthy COVID-19 outbreak which began in April 2021. The authorities responded to the outbreak with severe movement restrictions and lockdown measures, which sharply curbed production in the country's southern manufacturing hub. Vietnam's economy contracted by 6.2% year-on-year in the third quarter of 2021, the worst quarterly decline since the data release began in 2000. The authorities responded by lifting some restrictions and shifting from a zero-COVID policy to a "new normal" in which businesses and households co-exist with the virus. The government also quickly ramped up the national vaccination effort and by December 2021 about 70% of the population was fully vaccinated. As a result, economic activity bounced back sharply in the fourth quarter of 2021, with quarterly GDP up 5.2% year-on-year, and factory operations in the industrial hub had broadly returned to normal levels by early 2022. Full-year 2021 growth reached 2.6%, down slightly from 2.9% in 2020.

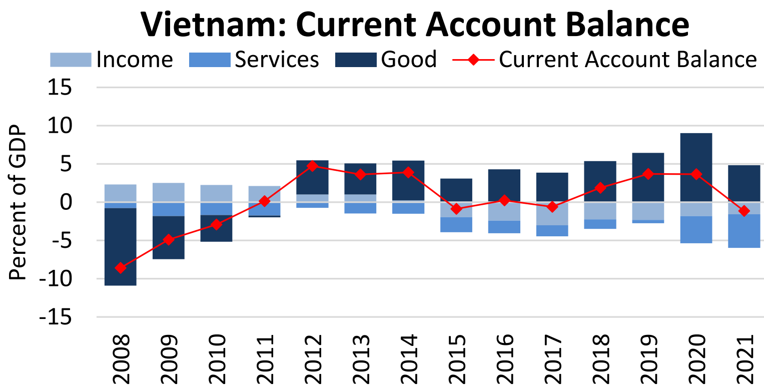
Starting in February 2022, COVID-19 cases accelerated rapidly due to an outbreak of the Omicron variant. Unlike in previous surges, however, severe cases and deaths have remained contained, and high-frequency measures suggest that economic activity has been holding up. As of mid-April, it appears Vietnam passed the peak of the outbreak. The IMF forecasts real GDP to grow by 6% in 2022.

Despite facing much larger outbreaks, the government provided relatively less pandemic-related fiscal support in 2021 compared to the prior year. COVID-related fiscal measures totaled 4.5% of GDP in 2020; by comparison, announced measures in 2021 totaled 2.5% of GDP, of which only around 1.8% of GDP was ultimately delivered due to implementation challenges. As of end-2021, Vietnam's debt-to-GDP ratio was estimated at 44%, up slightly from its end-2019 level of 43% but still well below the 65% debt ceiling set by the National Assembly.

SBV maintained its accommodative monetary posture in 2021, keeping its benchmark policy rate at 4% and urging commercial banks to reduce or waive fees for firms negatively impacted by the pandemic. SBV also continued forbearance measures on loans issued in the wake of the April 2021 outbreak. With forbearance measures in place, non-performing

[26] *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, pp. 46-48 (December 2021), available at https://home.treasury.gov/system/files/206/December-2021-FXR-FINAL.pdf

loans have remained less than 10% of banking sector assets, though the full impact of the pandemic on asset quality may become apparent only as measures are lifted.



Sources: IMF BOP statistics, State Bank of Vietnam

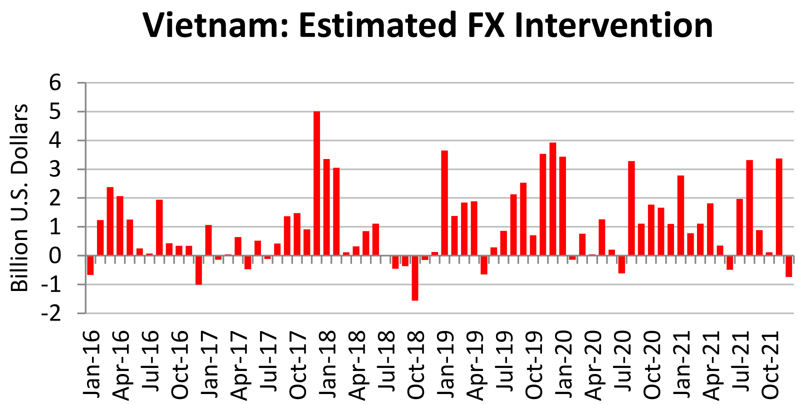
The pandemic had a major impact on Vietnam's balance of payments in 2021. Vietnam recorded a current account deficit of 1.1% of GDP in 2021, contrasting sharply with the surplus of 3.6% of GDP that Vietnam ran in 2020. Prior to 2021, Vietnam had recorded current account surpluses for three consecutive years amid a rising goods trade surplus. The 2021 swing into deficit was driven primarily by the goods balance, with merchandise imports growth (26% year-on-year) outpacing merchandise exports (19% year-on-year). The deteriorating goods trade balance was associated with the major export slowdown due to Vietnam's lockdown measures, while imports expanded over the year largely reflecting rising import prices due to higher commodity price and shipping costs while internal demand remained robust.

Vietnam posted an overall services trade deficit of $16 billion in 2021 — widening from $12.1 billion in 2020 — as services exports continued to be deeply affected by foreign travel restrictions and the related lack of tourism. The income deficit was relatively stable in 2021, as the primary income deficit remained steady at $16 billion while the secondary income surplus grew slightly to $10.2 billion. Remittances were resilient and are estimated to have contributed about $18 billion to the current account in 2021.

Treasury assesses that in 2021, Vietnam's external position was stronger than warranted by economic fundamentals and desirable policies, with an estimated current account gap of 1.4% of GDP.

Vietnam's bilateral trade surplus with the United States has expanded dramatically in recent years, primarily driven by growth in goods trade. In the four quarters through December 2021, the bilateral goods trade surplus reached $91 billion, compared to $70 billion in the four quarters through December 2020. Vietnam now has the third largest goods surplus with the United States. Since the beginning of the pandemic in 2020, electronics and machinery have become the key drivers of Vietnam's export growth, as work-from-home practices and social distancing shifted external demand — including from the United States — from low-tech products to more advanced goods. As with exports to other regions, goods exports to the United States slowed during Vietnam's lockdown in the third quarter of 2021, but subsequently rebounded by the end of the year. Vietnam has modest bilateral services trade with the United States and has long run a small bilateral services trade deficit. In the four quarters through December 2021, that services deficit was $1.4 billion.

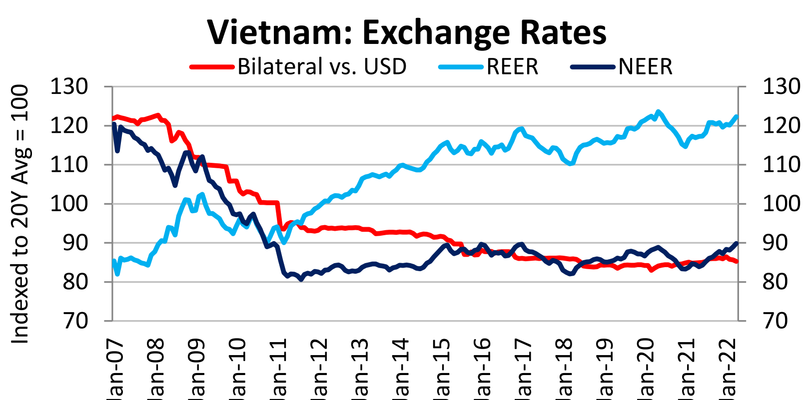
Vietnam does not publish data on its foreign exchange intervention. The authorities have conveyed credibly to Treasury that net purchases of foreign exchange in the four quarters through December 2021 were about 2.8% of GDP. That figure is equivalent to about $10 billion. Purchases in 2021 were concentrated at the beginning of the year in January and February and net purchases largely tapered off in the second half of the year, particularly after the July 2021 agreement between the SBV and Treasury was reached. While net purchases exceeded 2% of GDP over the year, the authorities have credibly conveyed that net purchases were undertaken in fewer than 8 of 12 months. In this context, and given the progress the authorities have made thus far in addressing Treasury's concerns, Treasury does not assess Vietnam to have breached the criterion for "persistent, one-sided" intervention in 2021.



Sources: State Bank of Vietnam, U.S. Treasury estimates

Headline foreign exchange reserves increased about $13 billion over the 12 months through December 2021 to $107 billion. The continued build-up of reserves in recent years has brought Vietnam's reserves into the range the IMF considers adequate based on its reserve adequacy metric for fixed exchange rate regimes.[27]

Since January 2016, the SBV's exchange rate policy has been to allow the dong to float +/- 3% against the U.S. dollar relative to the central reference rate of the trading band. The central reference rate is reset daily based on the movements of a basket of currencies, among other factors. The dong spot rate against the dollar generally appreciated over 2021, with bilateral appreciation peaking at 2.1% in mid-November. The dong has subsequently been more volatile, and as of end-April the dong stood 0.7% stronger against the dollar compared to end-2020 (and was down 0.8% in April since the beginning of 2022). On net, the dong appreciated 4.6% and 3.8% over 2021 on a nominal effective basis and real effective basis, respectively.



Sources: Vietcombank, JP Morgan

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[27] Reserve adequacy would be higher if assessed on the basis of the IMF's reserve adequacy metric for floating exchange rate regimes.

Treasury conducted enhanced analysis of Vietnam in its December 2020, April 2021, and December 2021 FX Reports. In early 2021, Treasury commenced enhanced bilateral engagement with Vietnam in accordance with the 2015 Act.[28] As a result of discussions through the enhanced engagement process, Treasury and the State Bank of Vietnam (SBV) reached agreement in July 2021 to address Treasury's concerns about Vietnam's currency practices. Treasury continues to engage closely with the SBV to monitor Vietnam's progress in addressing Treasury's concerns and is thus far satisfied with progress made by Vietnam.

Enhanced Analysis Under the 2015 Act

Switzerland

Treasury conducted enhanced analysis of Switzerland in its December 2020 and April 2021 FX Reports and in-depth analysis in its December 2021 Report. In early 2021, Treasury commenced enhanced bilateral engagement with Switzerland in accordance with the 2015 Act.[29] Since Switzerland meets all the thresholds for all three criteria under the 2015 Act during the period covered by this Report, an enhanced analysis of recent economic developments is provided below, along with an update on Treasury's enhanced bilateral engagement with the Swiss authorities.

While Switzerland was hit early and hard by the COVID-19 pandemic, economic growth began to improve in the second half of 2020. Increased case counts over the winter led to renewed restrictions to combat COVID-19 at the start of 2021 and a 0.5% quarter-over-quarter contraction in real GDP activity in the first quarter. A relaxation of virus restrictions and strong manufacturing and service sector activity led to a resumption of growth, and the economy grew by 3.7% in 2021 overall.

Uncertainty over the outlook remains high given the continued spread of COVID-19 variants and Russia's war against Ukraine and associated adverse spillovers including inflationary pressures and refugee flows. Thus far the war in Ukraine has primarily affected the Swiss economy through an increase in commodity prices, which is likely to

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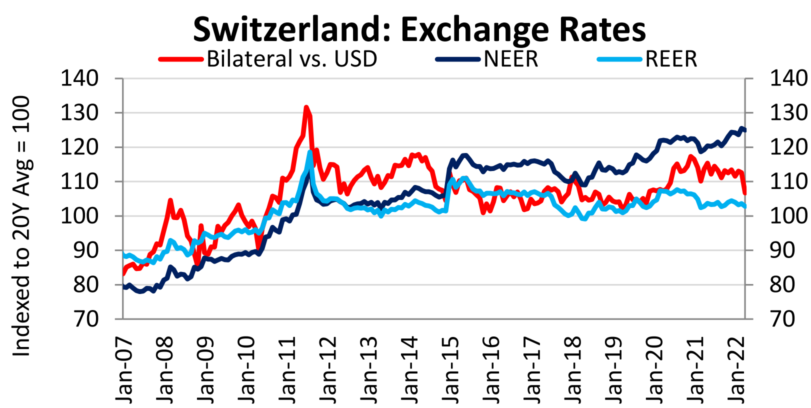
[28] *Report to Congress: Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States*, U.S. Department of the Treasury, Office of International Affairs, pp. 48-55 (Dec. 2020), available at https://home.treasury.gov/system/files/206/December-2020-FX-Report-FINAL.pdf, and *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, pp. 47-50 (Apr. 2021), available at https://home.treasury.gov/system/files/206/April_2021_FX_Report_FINAL.pdf.

[29] *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, pp. 48-55 (Dec. 2020), available at https://home.treasury.gov/system/files/206/December-2020-FX-Report-FINAL.pdf, and
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, pp. 50-53 (Apr. 2021), available at https://home.treasury.gov/system/files/206/April_2021_FX_Report_FINAL.pdf.
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, pp. 42-45 (Dec. 2021), available at https://home.treasury.gov/system/files/206/December-2021-FXR-FINAL.pdf

increase companies' production costs and constrain consumption. The Swiss National Bank's (SNB) baseline scenario for 2022 is GDP growth of 2.5%, slightly higher than the IMF's forecast of 2.2%.

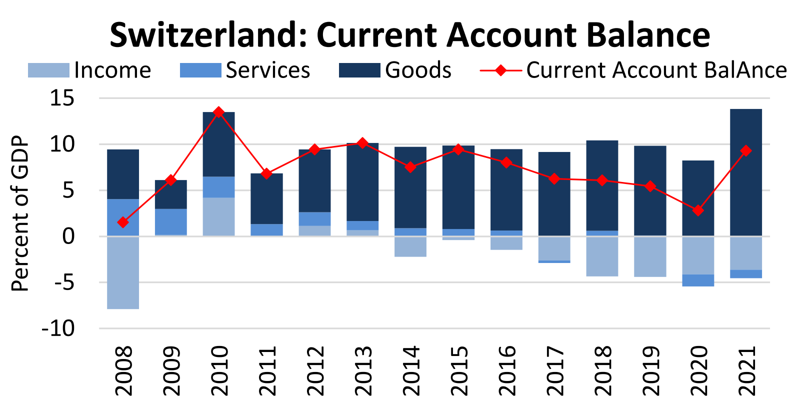
Government employment assistance has helped to limit unemployment and bolster consumer spending, with the unemployment rate averaging 3.0% in 2021. Since the beginning of the COVID-19 crisis, the IMF estimates that Switzerland's COVID-related fiscal response amounted to up to 10% of GDP, including both direct and indirect measures, although less than half of the funds made available had been used by the end of 2021. Even with relatively large announced fiscal stimulus, Switzerland's general government deficit only reached 3.0% in 2020 (significantly smaller than in neighboring countries) and subsequently narrowed to 0.7% in 2021. The defeat of a revised CO_2 law in a June 13, 2021 referendum, which if passed, would have helped Switzerland to cut CO_2 emissions, also limits the potential for an increase in fiscal spending to meet climate targets in the near term, although the authorities are advancing emissions-reductions actions through extending laws on targets through 2024 and will revise proposals for 2025-2030.

Higher inflation in trading partners and expected monetary tightening in other European economies and the United States eased pressures on the franc in 2021. The Swiss franc depreciated 3.3% against the dollar and appreciated 4.5% against the euro. On a nominal effective and real effective basis, the Swiss franc appreciated by 1.5% and depreciated 1.9%, respectively, over the same period. However, the Swiss National Bank has pledged to intervene in currency markets to curb an excessive rise in the franc.



Sources: FRB, Bank for International Settlements

The Swiss authorities have a history of restrained macroeconomic management, particularly a fiscal policy approach that has prioritized debt reduction over the last two decades. Moreover, the country's highly competitive corporate tax system has made Switzerland a destination for multinational enterprises, contributing to Switzerland's outsized role in some high value-added global



Sources: Swiss National Bank, Haver

industries (e.g., pharmaceuticals and merchanting).[30] These factors have contributed to persistent, and often extremely large, current account surpluses during recent decades. In 2021 the current account surplus rebounded to 9.3% of GDP, following an unusually small surplus of 2.7% of GDP during 2020.[31] The 2021 current account surplus was almost entirely due to higher exports of goods and merchanting, with an increase in foreign demand for watches, precision instruments, and pharmaceuticals. Despite the large recent current account surpluses, Switzerland's net international investment position declined relative to GDP from 108% in 2020 to 90% in 2021, making it a smaller net lender to the rest of the world when compared to the size of its economy.[32]

Switzerland's tight fiscal policy is a result, in part, of its federal "debt brake" rule that calls for a structural fiscal balance on an *ex-ante* basis, and in the case of *ex post* spending overruns, requires offsetting structural surpluses in the following years. The federal debt brake rule is reinforced further by separate fiscal rules implemented by Swiss cantons, which vary substantially. The federal debt brake rule's design and implementation tend to skew towards tighter fiscal policy than warranted, due to consistently conservative forecasting of structural revenue and under-execution of expenditures. Switzerland ends almost each year with a larger budget surplus than planned, and Switzerland has seen significant debt reduction since implementing the debt brake rule, rather than the original intent of debt stabilization. In addition, the rule is applied asymmetrically, as it mandates an offset requirement in case of *ex post* overspending, but not for *ex post* underspending.

Due to these factors, Switzerland's fiscal policy has consistently overperformed the rule's objective, thereby weighing on economic growth, complicating efforts to maintain positive inflation, and contributing to external surpluses. In response to the COVID-19 crisis, however, the authorities have put forward for Parliamentary debate a measure to utilize profits of the SNB and extend the timeframe for reduction of the remainder of COVID-related debt until 2035. This would avoid any expenditure cuts or measures to increase tax revenue. The Swiss have also undertaken measures to limit spending underruns in the future.

In addition to consistent government saving, other structural factors play a role in Switzerland's historically large current account surpluses, including high per capita income; a large share of prime-aged savers and an aging population; a high household savings rate, which is almost double the advanced economy average per OECD data; relatively limited domestic investment opportunities; measurement issues; and a large positive net international investment position, for which returns further raise the income balance. Treasury assesses that in 2021, Switzerland's external position was stronger than

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[30] Anecdotal evidence from the Swiss authorities suggests that pharmaceuticals and merchanting may be insensitive to exchange rate changes, and increased trade in these sectors can potentially lead to increased current account balances even when exchange rates appreciate.
[31] At the time of the December 2021 Report, the 2020 current account surplus totaled just 1.2% of GDP.
[32] This decline reflects valuation effects.

warranted by economic fundamentals and desirable policies, with an estimated current account gap of 1.7% of GDP.[33]

Increased public investment would lower government net saving, help Switzerland meet its long-term challenges associated with an aging population, and help rebalance the policy mix, easing pressure on monetary policy. The high level of household saving could also be addressed via amending the pension system to reduce barriers to working longer, equalizing and then raising male and female retirement ages, and continuing efforts to contain rising healthcare costs. While Switzerland is considering measures to address some of these challenges, it is unclear whether any will be implemented in the near term as policy making often requires approval through referendum.

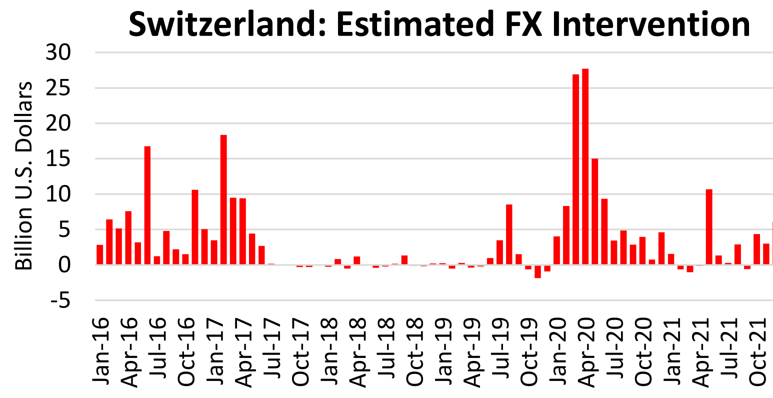
Switzerland's bilateral goods and services trade surplus with the United States declined to $21 billion in 2021 from $36 billion in 2020. Switzerland's goods trade surplus with the United States declined to $39 billion in 2021, versus $57 billion in 2020. Switzerland maintains a large goods trade surplus with the United States, but this traditionally has been mirrored largely by a services trade deficit. Switzerland's bilateral services trade deficit with the United States stood at $18 billion in 2021, down slightly from $21 billion in 2020. Until 2020, the United States' trade deficit with Switzerland in recent years had been closer to balance when including services data. Part of the increase in the trade deficit over the past two years compared to previous years is attributable to large gold exports to the United States that continued well into the pandemic, while services imports from the United States did not increase by the same magnitude.

Switzerland is a small, open economy with significant exposure to external factors, and exchange rate movements can often have a major impact on inflation. The Swiss franc has also long been a safe haven currency that investors acquire during periods when global risk appetite recedes, or financial volatility accelerates, which can pose challenges for Swiss macroeconomic policymakers. The Swiss franc is a managed-floating currency, and the SNB sets monetary policy with the aim of keeping inflation stable. In times of heightened regional and global risk, the large safe haven inflows can put considerable appreciation pressure on the franc, and sustained appreciation can weigh on domestic inflation.

Over the last 15 years, the franc has been subject to notable pressures from large swings in global risk appetite, particularly emanating from the global financial crisis, the euro area sovereign debt crisis, and the COVID-19 pandemic. The SNB has employed a range of tools to try to offset appreciation pressure on the franc and limit negative impacts on inflation

[33] The estimated current account gap primarily reflects the effect of Switzerland's large net foreign asset position, in particular its relatively large stock of official foreign exchange reserve holdings, on the path of Switzerland's current account over the medium term. Pandemic-related factors, specifically adjustments for temporarily high levels of pharmaceutical and gold exports, partially offset this effect.

and domestic growth. Since the start of the COVID-19 pandemic, for instance, the SNB has maintained negative interest rates to limit franc appreciation and combat deflationary risks. As the interest rate is at the effective lower bound and with limited space for quantitative easing due to a shallow market for debt security issuance,



Sources: Swiss National Bank, U.S. Treasury estimates

foreign exchange intervention becomes the remaining effective tool for the SNB to meet its inflation objectives. With the exception of May 2021, the SNB's net foreign exchange purchases have broadly moderated since the onset of the pandemic in early 2020. Based on the SNB's published intervention figures, SNB intervention in 2021 amounted to $23 billion, or 2.8% of GDP, compared with $115 billion or 15.3% of GDP in 2020. By the end of 2021, Switzerland's foreign currency reserves stood at $1.03 trillion, up slightly from $1 trillion at end-2020. As of end 2021, reserves covered 81% of short-term debt and 127% of GDP.

In its March 24, 2022 monetary policy assessment, the SNB announced that it maintained its main policy rate at -0.75% to foster price stability and support Swiss economic recovery. Switzerland's inflation rate increased to 0.6% in 2021. The SNB attributes the increase to the rise in prices for oil products and to global supply bottlenecks. In their latest communication, the SNB projects inflation to reach 2.1% in 2022 and 0.9% in 2023, near or below its 2% ceiling, based on the assumption that the policy rate remains at -0.75% over the forecast horizon.

Since early 2021, Treasury has been conducting enhanced bilateral engagement with Switzerland in accordance with the 2015 Act and has been discussing with the Swiss authorities the policy options to address the underlying causes of Switzerland's external imbalances. We expect these productive discussions to continue to help us reach a deeper understanding of the policy issues related to Switzerland's external imbalances. Treasury and the Swiss authorities have begun a related but separate Standing Macroeconomic and Financial Dialogue to discuss macroeconomic issues.

Section 2: Intensified Evaluation of Major Trading Partners

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 may encompass analysis of a broad range of factors, including not only trade and current account imbalances and foreign exchange intervention (the criteria evaluated under the 2015 Act), but also currency developments, the design of exchange rate regimes and exchange rate practices, foreign exchange reserve coverage, capital controls, monetary policy, and trade policy actions, as well as foreign exchange activities by quasi-official entities that may be undertaken on behalf of official entities, among other factors.

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 macroeconomic and exchange rate 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 requires the President, through the Secretary of the Treasury, to "commence enhanced bilateral engagement with each country for which an enhanced analysis" is included in the report. The Act also provides for the possible imposition of penalties if, within one year of commencement of enhanced bilateral engagement, the Secretary determines that a country "has failed to adopt appropriate policies to correct the undervaluation and surpluses" that triggered the enhanced analysis and enhanced bilateral engagement

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 period of review (the four quarters through December 2021, unless otherwise noted) are provided in Table 1 (p. 18) and Table 2 (p. 55).

As noted earlier, Treasury reviews developments in the 20 largest trading partners of the United States, along with other trading partners that remain on the Monitoring List over the period of review. These economies accounted for almost 80% of U.S. trade in goods and services over the four quarters through December 2021. This includes all U.S. trading partners whose bilateral goods and services surplus with the United States in 2021 exceeded $15 billion.

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

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

Column 3 in Table 2 provides the bilateral goods and services trade balances for the United States' 20 largest trading partners for the four quarters through December 2021.[34] 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 and services surplus of at least $15 billion have a "significant" surplus. Highlighted in red in column 3 are the 14 major trading partners that have a bilateral surplus that met this threshold for the four quarters through December 2021. Table 3 provides additional contextual information on total and bilateral trade, including individual goods and services trade balances, with these trading partners. Because the Report now incorporates services trade, Table 3, which provides disaggregated goods and services trade data, will be essential for comparison with past Reports that focus on goods trade.

Criterion (2) – Material current account surplus:

Treasury assesses current account surpluses of at least 3% of GDP or a surplus for which Treasury estimates there is a current account "gap" of at least 1 percentage point of GDP to be "material" for the purposes of enhanced analysis. Highlighted in red in column 2a and 2d of Table 2 are the 9 economies that met these thresholds over the four quarters through December 2021.[35] 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.

In the case of estimating current account gaps in 2021, Treasury applied one-off, multilaterally consistent adjustments to its estimates to assess more accurately an economy's underlying current account given the uneven impacts of the pandemic on external balances. These adjustments include controlling for the effects of abrupt shifts in external flows such as tourism and remittances experienced over the course of the pandemic. Such adjustments to control for the COVID-19 shock are necessary for providing more intuitive estimates of excess imbalances.

[34] 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.

[35] See Box 2 in the December 2021 Report on Macroeconomic and Exchange Rate Policies of the United States' Major Trading Partners for a summary of how Treasury estimates current account gaps.

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

Treasury assesses net purchases of foreign currency, conducted repeatedly, in at least 8 out of 12 months, totaling at least 2% of an economy's GDP, to be persistent, one-sided intervention.[36] Columns 1a and 1c in Table 2 provide Treasury's assessment of this criterion.[37] In economies where foreign exchange interventions are not published, Treasury uses estimates of net purchases of foreign currency as a proxy for intervention. Highlighted in red in column 1a and 1c are the two major trading partners that met this criterion for the four quarters through December 2021, per Treasury estimates.

[36] 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.

[37] 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 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.

Table 2. Major Foreign Trading Partners Evaluation Criteria

	FX Intervention			Current Account				Bilateral Trade
	Net Purchases (% of GDP, Trailing 4Q) (1a)	Net Purchases (USD Bil., Trailing 4Q) (1b)	Net Purchases 8 of 12 Months† (1c)	Balance (% of GDP, Trailing 4Q) (2a)	3 Year Change in Balance (% of GDP) (2b)	Balance (USD Bil., Trailing 4Q) (2c)	2021 GERAF CA Gap (% of GDP) (2d)	Goods and Services Surplus with United States (USD Bil., Trailing 4Q) (3)
Canada	0.0	0	No	0.1	2.4	1	-5.7	**25**
Mexico	0.0	0	No	-0.4	1.6	-5	-0.9	**106**
China	0.1 — 1.6 *	24 — 290	Yes	1.8	1.6	317	0.3	**340**
Japan	0.0	0	No	**2.9**	-0.7	141	**2.0**	**55**
Germany	0.0	0	No	**7.6**	-0.5	319	**3.8**	**73**
United Kingdom	0.0	0	No	-2.6	1.3	-83	-1.5	-17
Korea	-0.8	-14	No	**4.9**	0.4	88	**-2.7**	**22**
Ireland	0.0	0	No	**14.1**	8.9	70	**11.0**	11
Switzerland	**2.8**	23	**Yes**	**9.3**	3.2	75	**1.7**	**21**
India	1.3	41	No	-1.1	1.3	-35	0.3	**45**
Taiwan	1.2	9	Yes	**14.8**	3.2	115	**7.4**	**40**
Netherlands	0.0	0	No	**9.5**	-1.3	97	**0.6**	-24
France	0.0	0	No	-0.8	0.0	-23	-1.9	**22**
Vietnam	2.8 **	10	No	-1.1	-3.0	-4	1.4	**90**
Singapore	**7.3**	29	**Yes**	**18.1**	3.0	72	**6.3**	-21
Brazil	-1.9	-30	Yes	-1.7	0.9	-28	1.2	-26
Italy	0.0	0	No	2.5	-0.1	52	-3.2	**39**
Malaysia	0.2 **	1	No	**3.8**	1.6	14	**-1.0**	**41**
Thailand	-2.2 **	-11	No	-2.1	-7.7	-11	0.1	**33**
Belgium	0.0	0	No	-0.4	0.4	-2	-5.7	-12
Memo: Euro Area	0.0	0	No	2.4	-0.6	340	0.3	**132**

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; Bureau of Economic Analysis; and U.S. Department of the Treasury Staff Estimates.

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

* China does not publish FX intervention, forcing Treasury staff to estimate intervention activity from monthly changes in the PBOC's foreign exchange assets and monthly data on net foreign exchange settlements, adjusted for changes in outstanding forwards. Based on either the PBOC's foreign exchange assets data or net foreign exchange settlements data, intervention was persistent.

** Authorities do not publish FX intervention. Authorities have conveyed bilaterally to Treasury the size of net FX purchases during the four quarters ending December 2021.

Table 3. Major Foreign Trading Partners - Expanded Trade Data

	USD Bil., Trailing 4Q						% of GDP, Trailing 4Q					
	Total Trade			Trade Surplus with United States			Total Trade			Trade Surplus with United States		
	Goods and Services (1a)	Goods (1b)	Services (1c)	Goods and Services (2a)	Goods (2b)	Services (2c)	Goods and Services (3a)	Goods (3b)	Services (3c)	Goods and Services (4a)	Goods (4b)	Services (4c)
Canada	750	665	86	25	50	-24	37.7	33.4	4.3	1.3	2.5	-1.2
Mexico	719	661	58	106	108	-2	55.6	51.1	4.5	8.2	8.4	-0.2
China	714	657	57	340	355	-15	4.0	3.7	0.3	1.9	2.0	-0.1
Japan	278	210	68	55	60	-5	5.6	4.3	1.4	1.1	1.2	-0.1
Germany	266	200	66	73	70	3	6.3	4.8	1.6	1.7	1.7	0.1
United Kingdom	240	118	123	-17	-5	-12	7.5	3.7	3.8	-0.5	-0.2	-0.4
Korea	192	161	32	22	29	-7	10.7	8.9	1.8	1.2	1.6	-0.4
Ireland	178	87	90	11	60	-49	35.7	17.5	18.2	2.3	12.1	-9.8
Switzerland	162	87	75	21	39	-18	19.9	10.7	9.2	2.6	4.8	-2.2
India	159	113	46	45	33	12	5.2	3.7	1.5	1.5	1.1	0.4
Taiwan	134	114	20	40	40	0	17.3	14.7	2.6	5.1	5.2	0.0
Netherlands	127	89	38	-24	-18	-6	12.5	8.8	3.7	-2.4	-1.8	-0.6
France	115	80	35	22	20	1	3.9	2.7	1.2	0.7	0.7	0.0
Vietnam	115	113	2	90	91	-1	31.8	31.1	0.6	24.7	25.1	-0.4
Singapore	105	65	40	-21	-6	-15	26.4	16.4	10.0	-5.3	-1.6	-3.7
Brazil	99	78	21	-26	-16	-11	6.1	4.9	1.3	-1.6	-1.0	-0.7
Italy	95	83	12	39	39	0	4.5	3.9	0.6	1.9	1.9	0.0
Malaysia	75	71	4	41	41	0	20.2	19.1	1.1	11.0	11.0	-0.1
Thailand	64	60	4	33	35	-2	12.6	11.9	0.7	6.5	6.8	-0.3
Belgium	63	55	8	-12	-13	1	10.5	9.1	1.4	-2.0	-2.1	0.1
Memo: Euro Area	970	684	286	132	188	-56	6.7	4.7	2.0	0.9	1.3	-0.4

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

Transparency of Foreign Exchange Policies and Practices

There is broad consensus that economic policy transparency enhances the credibility of economic institutions and fosters a more efficient allocation of resources as information asymmetries are reduced. As of March 2022, Taiwan began disclosing Internal Reserve and Foreign Currency Liquidity (IRFCL) in the format of the IMF's Special Data Dissemination Standard (SDDS). Treasury will continue to press its major trading partners to make significant strides in enhancing the transparency of currency practices. As part of this effort, Treasury will monitor and provide its assessment of foreign exchange policy transparency in the semiannual *Report on Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States* on a regular basis.

Table 4: Transparency of the United States and Its Major Trading Partner's Foreign Currency Regimes

	Foreign Exchange Reserves Data			Intervention			
	Headline Reserves: Frequency /Lag	Derivative Position in IRFCL	Currency Compositi on	Stated Objective	Publish Interventi on	Frequency	Lag
USA	Weekly/1 day	Yes	Public	Yes	Yes	As it happens*	None
ECB	Monthly/ 2 weeks	Yes	Public[38]	No	Yes	As it happens*	None
UK	Monthly/ 3-7 days	Yes	COFER	Yes	Yes	As it happens*	None
Japan	Monthly/ 1 week	Yes	COFER	Yes	Yes	Monthly	2 days
Canada	Monthly/ 1 week	Yes	Public	Yes	Yes	As it happens*	None
Switzerland	Monthly/ 1 week	Yes	Public	Yes	Yes	Quarterly	3 months
Australia	Monthly/ 1 week	Yes	Public	Yes	Yes	Annually[39]	4 months
Brazil	Daily/2 days	Yes	Public	Yes	Yes	Daily	5 days
Mexico	Weekly/4 days	Yes	Public	Yes	Yes	Monthly	6 days
India	Weekly/7 days	Yes	COFER	Yes	Yes	Monthly	2 months
China	Monthly/ 1 week	No[40]	COFER	No	No		
Taiwan	Monthly/ 1 week	Yes	No	Yes	Yes	Semi-annually	3 months
Korea	Monthly/ 1 month	Yes	COFER	Yes	Yes	Quarterly	3 months

[38] The ECB's template on international reserves and foreign currency liquidity reports the currency composition of the ECB's official reserve assets each December but does not provide a comparable breakdown for the Eurosystem.

[39] Australia publishes daily foreign exchange intervention one time per year in October. Australia has not intervened in foreign exchange markets since November 2008.

[40] China only discloses total short positions in forwards and futures in foreign currencies.

Singapore	Monthly/ 1 week	Yes	COFER	Yes	Yes	Semi-annually	3 months
Thailand	Weekly/1 week	Yes	No	Yes	Yes[41]	Semi-annually	3 months
Malaysia	Biweekly/ 1 week	Yes	No	Yes	Yes[42]	Semi-annually	3 months
Vietnam	Monthly/ 2-3 months	No	No	Yes	Yes[43]	Semi-annually	3 months

* Intervention is published officially in certain reports on a regular basis but in practice intervention is announced on the day it takes place.

[41] Thailand discloses its foreign exchange intervention to Treasury with consent to publish in the FX Report.
[42] Malaysia discloses its foreign exchange intervention to Treasury with consent to publish in the FX Report.
[43] Vietnam discloses its foreign exchange intervention to Treasury with consent to publish in the FX Report.

Summary of Findings

Pursuant to the 2015 Act, Treasury finds that Switzerland met all three criteria for enhanced analysis in the current review period of the four quarters through December 2021 based on the most recent available data. Vietnam, which had met all three criteria for enhanced analysis under the 2015 Act in the three preceding Reports, met one of the three criteria for enhanced analysis in this Report. Taiwan, which had met all three criteria for enhanced analysis under the 2015 Act in the two preceding Reports, met two of the three criteria for enhanced analysis in this Report. Additionally, ten major trading partners met two of the three criteria for enhanced analysis under the 2015 Act in this Report or in the December 2021 Report. **These twelve economies—China, Japan, Korea, Germany, Italy, India, Malaysia, Singapore, Taiwan, Thailand, Vietnam, and Mexico—constitute Treasury's Monitoring List.**

Ireland 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.

With regard to the twelve economies on the 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. China met two criteria in the December 2021 Report for the first time since the April 2016 Report (the initial Report based on the 2015 Act), having a material current account surplus and a significant bilateral trade surplus with the United States. For the four quarters ending December 2021, China met one of the three criteria and therefore remains on the Monitoring List.
- Japan and Germany have met two of the three criteria in every Report since the April 2016 Report, having material current account surpluses combined with significant bilateral trade surpluses with the United States.
- Korea has met two of the three criteria in every Report since April 2016, except for the May 2019 Report, having a material current account surplus and a significant bilateral trade surplus with the United States. While Korea's bilateral trade surplus with the United States briefly dipped below the threshold in 2018, it rose back above the threshold in 2019.
- Malaysia has met two of the three criteria since the May 2019 Report, having a material current account surplus and a significant bilateral trade surplus with the United States.
- Italy has met two of the three criteria since the May 2019 Report, having a material current account surplus and a significant bilateral trade surplus with the United States. Italy met only the significant bilateral trade surplus threshold in this Report.
- Singapore has met two of the three criteria since the May 2019 Report, having a material current account surplus and engaged in persistent, one-sided intervention in the foreign exchange market.
- Thailand had met two of the three criteria since the December 2020 Report, having a material current account surplus and a significant bilateral trade surplus with the United States. Thailand met only the significant bilateral trade surplus threshold in this

Report. As noted above, Thailand will remain on the Monitoring List until it meets fewer than two criteria for two consecutive Reports.

- India met two of the three criteria in the December 2021 and the April 2021 Reports, having a significant bilateral trade surplus with the United States and engaged in persistent, one-sided intervention over the reporting period. India met only the significant bilateral trade surplus threshold in this Report. As noted above, India will remain on the Monitoring List until it meets fewer than two criteria for two consecutive Reports.
- Mexico met two of the three criteria in the December 2021 and the April 2021 Reports, having a material current account surplus and a significant bilateral trade surplus with the United States. Mexico met only the significant bilateral trade surplus threshold in this Report. As noted above, Mexico will remain on the Monitoring List until it meets fewer than two criteria for two consecutive Reports.
- Switzerland met two of the three criteria in the January 2020 Report, having a material current account surplus and a significant bilateral trade surplus with the United States. Switzerland previously was included on the Monitoring List in every Report between October 2016 and October 2018, having a material current account surplus and engaged in persistent, one-sided intervention in the foreign exchange market. Based on the available data at the time of each Report's release, Switzerland met all three of the criteria in the April 2021 Report and the December 2020 Report. Switzerland met two of the three criteria in the December 2021 Report, having a significant bilateral trade surplus with the United States and engaged in persistent, one-sided intervention over the reporting period. Switzerland again meets all three criteria in this Report.
- Vietnam met two of the three criteria in the May 2019 Report, having a material current account surplus and a significant bilateral trade surplus with the United States, and met one of the three criteria in the January 2020 Report, having a significant bilateral trade surplus with the United States. Vietnam met all three of the criteria in the December 2021 Report, the April 2021 Report, and the December 2020 Report. Vietnam met one of the three criteria in this Report, having a significant bilateral trade surplus with the United States.
- Taiwan met two of the three criteria in the December 2020 Report, having a material current account surplus and a significant bilateral trade surplus with the United States. Taiwan met all three of the criteria in December 2021 Report and the April 2021 Report. Taiwan met two of the three criteria in this Report, having a significant bilateral trade surplus with the United States and material current account surplus over the reporting period.

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

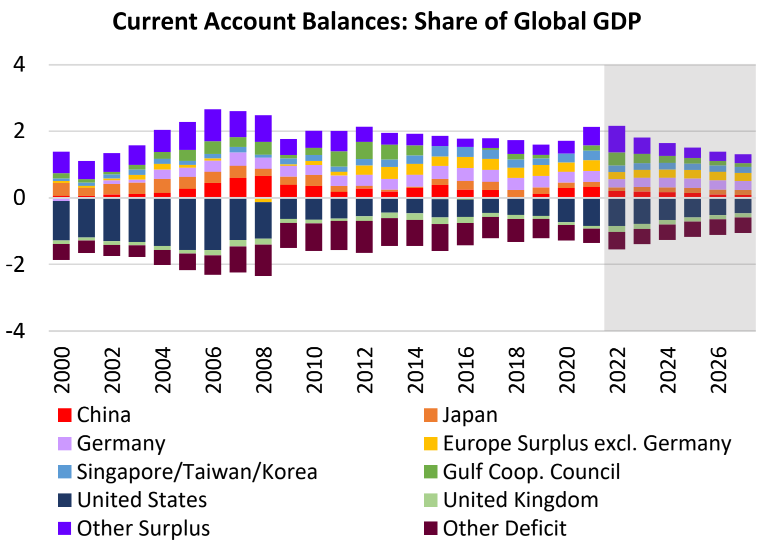
In this Report, Treasury has concluded that no major trading partner of the United States engaged in conduct of the kind described in Section 3004 of the 1988 Act during the relevant period. This determination has taken account of a broad range of factors, including not only trade and current account imbalances and foreign exchange intervention (the criteria in the 2015 Act), but also currency developments, exchange rate practices, foreign exchange reserve coverage, capital controls, and monetary policy.

As the global economy continues to stabilize, it is critical that key economies adopt policies that allow for a narrowing of excessive surpluses and deficits. Heightened risks of economic scarring further underscore the need for governments to bolster domestic-led rather than externally supported growth. This would establish a firmer foundation for strong, balanced growth across the global economy.

ANNEX 1: DEVELOPMENTS IN GLOBAL IMBALANCES

The United States has long pushed for strong, sustainable, and balanced growth in both bilateral discussions with major trading partners and in multilateral fora. Indeed, the G-20 endorsed this goal for the global economy at the Pittsburgh Summit in 2009. After roughly a decade following the global financial crisis of more moderate and even declining levels of current account surpluses and deficits, these balances widened again in 2020-2021. The widening was driven by the economic impact of, and associated policy responses to, the COVID-19 pandemic that resulted in divergent global growth trajectories. This Annex analyzes the evolution and drivers of global current account surpluses and deficits and discusses when current account surpluses and deficits may be considered excessive.

Evolution and Drivers of Global Current Account Balances



Between 2000 and 2013, oil exporters,[44] Japan, and China accounted for 30-50% of global current account surpluses. As the oil exporters' contribution declined, it was offset by larger surpluses in some European countries. Germany's surplus has remained large and relatively stable over time, contributing over 18% to global surpluses on average over the last 10 years. The Netherlands and Switzerland, while smaller economies, have maintained large surpluses which, taken together, have contributed over 9% to global surpluses on average over the last 10 years. While China was a key driver of the sharp increase in global imbalances leading up to the global financial crisis, its surplus subsequently narrowed, though it remains a material contributor to current account surpluses globally, contributing around 12% to global surpluses on average over the last 10 years. Some smaller Asian economies have surpluses that are nominally small, but large relative to the size of their economy. For example, Singapore, Taiwan, and Korea, taken together, have accounted for, on average, about 13% of global surpluses.

There were numerous factors at play in the shifting pattern of current account surpluses from 2013 up until the COVID-19 pandemic hit.[45] Term of trade changes associated with oil price declines exceeded the increase in export volumes for an overall decline in the current account surpluses of oil exporting countries. Oil price declines meant oil importing

[44] For the purposes of this annex "oil exporters" are the Gulf Cooperation Council countries.
[45] 2017 External Sector Report, International Monetary Fund.

countries experienced terms of trade gains. Heterogeneous responses to these gains resulted in very different current account impacts. In the United States and the United Kingdom, terms-of-trade-related *income* gains were more than offset by large increases in trade volumes, driven in part by appreciating currencies and strong domestic demand. In contrast, the impact in the euro area was much more muted amid relative weak domestic demand and euro depreciation.

The United States' current account deficit increased significantly in 2020 due to the impact of COVID-19 and extraordinary policy support, after remaining roughly stable since 2013. In fact, the U.S. deficit is typically larger than the "norm" estimated by the IMF. It is difficult to disentangle the various drivers of the U.S. current account deficit, including public versus private sector contributions, global demand for U.S. assets, and weak domestic demand in other major economies. Each of these plays a role and, in turn, impacts each other.[46] Fiscal consolidation in the United States is likely to narrow the U.S. current account deficit in the coming years. Empirical estimates suggest a 1 percentage point of GDP fiscal consolidation reduces the current account deficit to GDP ratio between 0.2 to 0.6. percentage points on average.[47] Stronger domestic-led activity in the United States' major trading partners would likely narrow it further and more durably.

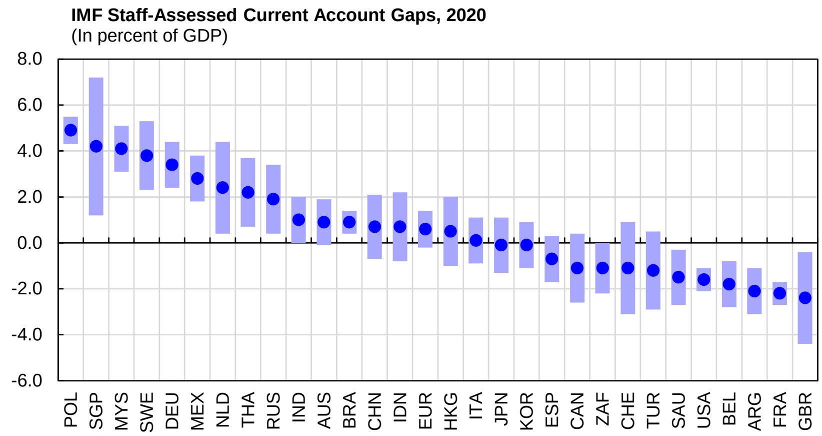
Excessive Global Imbalances

Policy makers and academics often point to the global sum of current account surpluses, and the equivalent global total of current account deficits, as a measure of global imbalances. While rapid changes in these figures may indicate a policy concern, the existence of deficits and surpluses are not necessarily problematic and may instead be indicative of differences in economic fundamentals across countries.

[46] Ferguson 2005: FRB: Speech, Ferguson—-U.S. Current Account Deficit: Causes and Consequences—-April 20, 2005 (federalreserve.gov)

[47] Analysis in the IMF's 2021 External Sector Report suggests 1% of GDP fiscal consolidation raises the current account balance by 0.63% of GDP over the course of two years. Looking at contemporaneous effects, Treasury's GERAF model estimates that a 1% of GDP increase in the cyclically adjusted fiscal balance raises the current account by 0.53% of GDP. The IMF's External Balance Assessment also uses the cyclically adjusted fiscal balance, suggesting a rise in the current account by 0.33% of GDP. Lastly, Gagnon and Sarsenbayev (2021) estimate the effect of cyclically adjusted fiscal balances on current accounts depends on the level of capital mobility, raising the current account by 0.19% of GDP with no mobility and by 0.38% with full mobility.

The IMF's External Balance Assessment (EBA) estimates current account "norms" based on economic "fundamentals" that affect saving and investment, such as productivity, demographics, expected growth, institutional quality, and an appropriate mix of policies, including fiscal and exchange rate policy.[48] Subsequently, the actual current account balance (stripping out cyclical factors) is compared to the "norm" and the difference is the current account "gap." This type of analysis is helpful in coming to a view on which surpluses and deficits are "excessive." A positive gap is illustrative of a current account balance that is higher than it should be based on economic fundamentals and desirable policies. The chart above provides the IMF assessment of current account gaps for the year 2020 (latest available). These results suggest the U.S. current account balance is "too low," meaning the deficit is "too high". At the same time, China's and Germany's surpluses are "too high." In total, IMF estimates suggest that excessive surpluses totaled $450 billion (0.6% of global GDP) for the sample of countries the IMF included in 2020. Excessive deficits totaled $550 billion (where the United States accounts for 60% of this total).



As the global economic recovery stabilizes, it is critical to adopt policies that allow for a narrowing of both surplus and deficit imbalances. IMF research[49] has noted an increase in the persistence of current account surpluses since the global financial crisis. While the IMF explains that in some cases persistent surpluses are justified based on demographics or other underlying economic realities, it also stresses that large and persistent surpluses can create risks. Excess global saving can reflect policy distortions that result in lower growth and can exacerbate stock imbalances. In 2021 the global net international investment position (IIP), remained at historically high levels.

In general, and especially at a time of major global growth shocks, adjustments to reduce imbalances should occur through a symmetric rebalancing process that sustains global growth momentum rather than through asymmetric compression in deficit economies — the channel which too often has dominated in the past. This is because policy adjustments in deficit countries, e.g., fiscal consolidation, tend to be negative for economic activity while the adjustments for surplus countries, e.g., fiscal supply and demand-enhancing structural reforms, tend to support economic activity. The asymmetric adjustment that occurred following the global financial crisis resulted in weaker global growth than would have been realized should a greater degree of domestic demand-supporting policies been implemented in surplus economies.

[48] Treasury's Global Exchange Rate Assessment Framework (GERAF) model follows a similar approach.
[49] 2017 External Sector Report, International Monetary Fund.

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.