



REPORT TO CONGRESS

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

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

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

Executive Summary

The global economy experienced a tumultuous year in 2020 as a result of the SARS-Cov-2 (COVID-19) pandemic. The unprecedented nature of the crisis as well as the difficulty in separating temporary versus structural changes makes analysis of current accounts and exchange rates an even more difficult task than usual.

The impact of the virus led to a deep global contraction in the first half of 2020. Governments implemented public health policies and restrictions on mobility to arrest the spread of the virus, and households and businesses became more cautious in spending and investment decisions. Governments also provided historic economic support to offset the damaging effects of the virus through direct fiscal spending as well as indirect measures. In addition, central banks took prompt actions to support economic conditions through expansions and extensions of monetary easing as well as policies aimed at stabilizing financial markets. Global trade also contracted in the first half of 2020 resulting from ruptures in supply chains and declining demand. Services were particularly hard hit as travel and tourism collapsed. For many emerging market and developing economies the global shock resulted in large capital outflows and sharp downward pressures on their currencies.

Global economic conditions improved in the second half of the year as policy measures provided support for individuals and businesses. Stabilizing financial conditions and the recovering global economy led to a reversal in exchange rates and capital flows from early in the year. Goods trade and commodity prices picked up but tourism and travel continued to remain depressed. Strong domestic policy support buoyed demand in some countries while in countries where support was limited domestic demand remained weak. The COVID crisis is likely to continue to affect current account positions over the next year as recoveries accelerate in some countries and lag in others. The longer-term effects of the crisis on global trade and incomes will become clearer over time as structural changes emerge.

The International Monetary Fund (IMF) estimates the global economy contracted 3.3% in 2020, the worst recession since the Great Depression. The IMF expects global growth to return in 2021, but recovery will be unequal among economies and depend upon the evolution of the pandemic, vaccine access, the degree to which policy support can limit longer-term economic scarring, as well as developments in financial conditions and commodity prices. Against this backdrop, it is critical that fiscal and monetary policies in the major economies remain supportive. International economic cooperation and support for the most vulnerable countries will remain necessary to support a robust recovery and prevent a divergence in growth paths between advanced economies and emerging market and developing economies.

Over the four quarters through December 2020, a number of economies have experienced significant expansions in their current account surpluses as the pandemic drastically affected global trade, including China, Taiwan, and Singapore, while other economies, including Germany and Vietnam, have maintained large current account surpluses, which

allowed for external asset stock positions to widen further. The total U.S. goods trade deficit widened to 4.7% of GDP in the fourth quarter of 2020 from 3.7% of GDP at the end of 2019. The U.S. current account deficit expanded to 3.5% of GDP in the fourth quarter, 1.6 percentage points larger than at the end of 2019 and the largest U.S. deficit as a share of GDP since the final quarter of 2008. Treasury remains concerned by how persistent current account imbalances will evolve as the effects of the pandemic subside. With heightened risks of economic scarring, it is important that governments bolster domestic-led rather than externally supported growth.

Treasury is also 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. Additionally, all members remain committed that their exchange rates reflect underlying economic fundamentals and note that exchange rate flexibility can facilitate the adjustment of their economies.

G-20 members have also committed to:

- consult closely on foreign exchange market developments,
- refrain from competitive devaluations, and
- not target exchange rates for competitive purposes.

G-7 economies, meanwhile, remain committed to:

- market-determined exchange rates,
- using domestic tools to meet domestic objectives, and
- consulting closely and cooperating as appropriate with regards to action in foreign exchange markets.

IMF members have committed to avoid manipulating their exchange rates to gain an unfair competitive advantage over other members.

Nevertheless, a number of economies have conducted foreign exchange market intervention in a persistent, one-sided manner. Over the four quarters through December 2020, five major U.S. trading partners — Vietnam, Switzerland, Taiwan, India, and Singapore — intervened in the foreign exchange market in a sustained, asymmetric manner with the effect of weakening their currencies. Three of these economies — Vietnam, Switzerland, and Taiwan — exceeded the two other thresholds established by Treasury to identify potentially unfair currency practices or excessive external imbalances, which could impede U.S. growth or harm U.S. workers and firms.

Treasury Analysis Under the 1988 and 2015 Legislation

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.

In this Report, Treasury has reviewed 20 major U.S. trading partners with bilateral goods trade with the United States of at least \$40 billion annually against the thresholds Treasury has established for the three criteria in the 2015 Act:

(1) Persistent, one-sided intervention in the foreign exchange market occurs when net purchases of foreign currency are conducted repeatedly, in at least 6 out of 12 months, and these net purchases total at least 2% of an economy's gross domestic product (GDP) over a 12-month period.²

(2) A material current account surplus is one that is at least 2% of GDP over a 12-month period.

(3) A significant bilateral trade surplus with the United States is one that is at least \$20 billion over a 12-month period.³

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 and criteria 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

Vietnam again exceeded the thresholds for all three criteria under the 2015 Act over the four quarters through December 2020. Treasury has updated its enhanced analysis of Vietnam in this Report. In early 2021, Treasury commenced enhanced bilateral engagement with Vietnam and is working with the Vietnamese authorities to develop a plan with specific actions to address the underlying causes of Vietnam's currency undervaluation.

Switzerland again exceeded the thresholds for all three criteria under the 2015 Act over the four quarters through December 2020. Treasury has updated its enhanced analysis of Switzerland in this report. In early 2021, Treasury commenced enhanced bilateral

² The Report covers data from the 12-month period ending in December 2020. These quantitative thresholds for the scale and persistence of intervention are considered *sufficient* on their own to meet this criterion. Other patterns of intervention, with lesser amounts or less frequent interventions, might also meet this criterion depending on the circumstances of the intervention.

³ Treasury focuses in this Report on trade in goods only, as it has done in past Reports. The United States has a surplus in services trade with many economies in this Report, including China, Japan, Korea, Singapore, and Switzerland, and to a lesser extent, Taiwan and Vietnam. Taking into account services trade would reduce the bilateral trade surplus of these economies with the United States.

engagement with Switzerland and is discussing with the Swiss authorities options to address the underlying causes of Switzerland's external imbalances.

Taiwan exceeded the thresholds for all three criteria under the 2015 Act over the four quarters through December 2020. Treasury has conducted enhanced analysis of Taiwan in this Report and will also commence enhanced bilateral engagement with Taiwan in accordance with the 2015 Act. The bilateral engagement will include urging the development of a plan with specific actions to address the underlying causes of Taiwan's currency undervaluation.

Taiwan has maintained a tightly managed floating exchange rate regime since the late 1970s. Although Taiwan has liberalized capital controls in recent decades, the central bank continues to actively intervene in the foreign exchange market. Over many years, these practices have resulted in a structurally undervalued exchange rate that has failed to adjust in the face of Taiwan's persistently large current account surpluses. Although the New Taiwan Dollar (TWD) has appreciated modestly in nominal and real effective exchange rate terms over the past decade, the authorities' foreign exchange purchases and other, less formal exchange rate management practices have slowed the pace and scale of external adjustment, preventing the TWD from fully reflecting macroeconomic fundamentals.

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 the December 2020 Report, Treasury found that Switzerland and Vietnam each met the standards for currency manipulation for the four quarters through June 2020. For the four quarters ending in 2020, based on initial enhanced engagements with Vietnam and Switzerland under the 2015 Act, further analysis, and data, Treasury has determined that there is insufficient evidence to make a finding that either economy (or any other economy covered in the Report) manipulates its exchange rate for either of the purposes referenced in the 1988 Act. Nevertheless, consistent with the 1988 Act, Treasury considers that its continued enhanced engagements with Switzerland and Vietnam, as well as a more thorough assessment of developments in the global economy as a result of the COVID-19 pandemic, will enable Treasury to better determine whether either of these economies intervened in currency markets in 2020 to prevent effective balance of payments adjustment or gain an unfair competitive advantage in trade. For Taiwan, Treasury will initiate enhanced engagement in accordance with the 2015 Act and expects that engagement will help Treasury to make the determination required under the 1988 Act for the period of review. Meaningful actions to address policy distortions and increase data transparency will be critical for making progress under these engagements. Treasury will also continue to consider whether economies that do not trigger enhanced engagement manipulate their currencies for the purposes referenced in the 1988 Act.

Treasury Assessments of Other Major Trading Partners

Pursuant to the 2015 Act, Treasury has found in this Report that no major trading partner other than Vietnam, Taiwan, and Switzerland met all three criteria under the 2015 Act during the four quarters ending December 2020.

Pursuant to the 2015 Act, 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, Ireland, Italy, India, Malaysia, Singapore, Thailand, and Mexico. All except Ireland and Mexico were covered in the December 2020 Report.**

Chinese economic growth in 2020 exceeded that of other large economies, but has been driven by the early resumption of manufacturing and increased external demand, especially for medical supplies, personal protection equipment and electronics. Questions remain about the continued strength of the Chinese recovery absent a sustained increase in household consumption. While official data do not show significant accumulation of foreign exchange assets by the central bank, China's failure to publish foreign exchange intervention and broader lack of transparency around key features of its exchange rate mechanism and the activities of state-owned banks warrant close monitoring of renminbi (RMB) developments going forward.

Treasury continues to track carefully the foreign exchange and macroeconomic policies of U.S. trading partners under the requirements of both the 1988 and 2015 Acts, and to review the appropriate metrics for assessing how policies contribute to currency misalignments and global imbalances. 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 for the four quarters through December 2020 and, where data are available, developments through end-March 2021. This Report covers developments in the 20 largest trading partners of the United States, whose bilateral goods trade with the United States exceeded \$40 billion over the four quarters through December 2020. These economies' total goods trade with the United States amounted to more than \$3.1 trillion in the four quarters through December 2020, more than 80% of all U.S. goods trade during that period. For assessments of the criteria in Section 701 of the 2015 Act, data over the four quarters through December 2020 are considered.

U.S. Economic Trends

The U.S. economy continues to recover from the severe disruptions created by the COVID-19 pandemic and the various measures imposed in 2020 to limit the spread of the virus. As economic activity resumed in May 2020 and the federal government's stimulus policies took hold, real GDP grew by 33% in the third quarter, and by 4.3% in the fourth quarter. As of the fourth quarter of 2020, the economy had recovered more than three-fourths of the cumulative loss of output during the first half of 2020. In addition, employment rebounded more rapidly than expected: from May 2020 through February 2021, employers added about 12.9 million payroll jobs, or 58% of the number lost last year between March and April. As of early 2021, retail sales have risen above their pre-pandemic trend, and national indices of manufacturing and service sector activity have signaled expansion in each of the past ten months, rising to multi-decade highs in March. A year ago, deflationary pressures were seen briefly at the start of the pandemic. In contrast, inflation picked up in March and is likely to be elevated in the near-term, reflecting base effects from low energy prices last year and the shuttering of the many service sector industries. This inflation should be transitory, potentially returning to trend after household consumption, business activity, and labor markets normalize from the pandemic.

Though the second federal economic aid package passed in December 2020 should boost growth in the first half of 2021, a full recovery nonetheless depends on effectively resolving the pandemic and its associated difficulties. To that end, the enactment of the American Rescue Plan (ARP) in early March 2021, the gathering momentum seen in vaccine dissemination, and the ongoing reopening of schools and businesses all augur for the return of the U.S. economy to a firmer footing in 2021 as a whole. In early March, the consensus of private forecasters predicted real GDP growth of 5.9% in 2021 on a fourth quarter over fourth quarter basis, and by 2.9% on the same basis in 2022.

U.S. Government Policy Response

The U.S. government in 2020 responded to the effects of the COVID-19 pandemic with a range of significantly expansionary fiscal and monetary policies, including an unprecedented level of fiscal assistance and the reduction of the federal funds rate to near-zero, as discussed in the December 2020 Report.

In March 2021, President Biden signed into law the ARP Act, which features \$1.9 trillion in additional economic aid, providing the building blocks to a more robust recovery. Since the biggest barrier to a full recovery is the persistence of the pandemic, the ARP Act provides additional funding for addressing COVID-19 infections and vaccinating the population. In the meantime, more and more families struggle to make ends meet as the pandemic lingers. Accordingly, the ARP Act provides Economic Impact Payments to low- to middle-income families, expands social safety net programs for the economically vulnerable, and extends and expands unemployment insurance benefits. In addition, the ARP Act assists state and local governments and creates new loans and grants for small businesses to ensure that no sector of the economy is left behind before the recovery begins in earnest.

Economic Output in 2020

Starting very early in 2020, the spread of the COVID-19 virus and the measures to contain it led to a historically severe and sharp economic contraction. In early June 2020, the National Bureau of Economic Research's Business Cycle Dating Committee identified the peak of the most recent U.S. expansion as having occurred in February 2020, making it the longest expansion on record at 128 months.

During the latter part of March 2020, stay-at-home orders, closures of non-essential businesses, and voluntary social distancing caused a steep deterioration in economic activity, and real GDP dropped 5.0% at an annual rate during the first quarter of 2020, and by an historic 31.4% at an annual rate in the second quarter of 2020. These declines marked the first back-to-back quarterly decreases in real GDP in over a decade. Combined, real GDP advanced 18% at an annual rate during the second half of 2020, contrasting with the 19% drop during the first half of 2020. Reflecting the contraction of domestic demand, and with it, demand for imports, net exports added 0.9 percentage points on average during the first half of 2020, but as consumption of domestic as well as imported goods recovered over the second half of 2020, net exports subtracted about 2.4 percentage points from growth during that period.

Labor Markets, Inflation, and Outlooks in 2020 and Early 2021

Labor markets deteriorated sharply in the spring of 2020. The economy lost nearly 22.2 million jobs during March and April last year, and widespread business closures and declining aggregate demand pushed the unemployment rate up to 14.8% in April 2020 – a post-WWII high. In addition, the labor force participation rate (LFPR) fell to 60.2%, its lowest level since January 1973, and the prime-age LFPR dropped to a 37-year low of 79.9%. Since May 2020, however, labor markets have had a robust recovery, with a net 14.0 million payroll jobs having been added by March 2021 — 62% of the jobs lost in March and April 2020. In addition, the unemployment rate has dropped 8.8 percentage points from the April 2020 peak to 6.0% in March 2021. The LFPR has rebounded to 61.4% as of February, while the prime-age LFPR has recovered to 81.1%.

Average hourly earnings growth for all private nonfarm workers remains elevated at 4.2% over the year through March 2021. However, large fluctuations in employment — particularly in industries with lower wage workers — complicate the assessment of recent trends. The growth rate of real average hourly earnings remained elevated through February, but the growth rate slowed to 1.5% over the year through March 2021—or 0.5 percentage points below the year-earlier reading of 2.0%. The slower wage growth was due in part to transitory base effect inflation that started to be realized in March 2021, as well as employment and wage composition effects.

Over the past several months, 12-month inflation measures had been over 1 percentage point below year-ago levels. In recent months these gaps have narrowed. But over the year through March 2021, the Consumer Price Index (CPI) rose 2.6%, 1.1 percentage points above the year-earlier pace and was the fastest pace of inflation since August 2018. The 12-month pace in March reflected in large part the base effect from recovering energy prices after they plummeted in early-to-mid 2020. The core CPI, which excludes food and energy, increased 1.6% over the 12 months through March 2021, but was still 0.5 percentage points below the 2.1% rate on a year-over-year basis through March 2020. Supply-chain disruptions have also elevated inflation measures recently, and core prices may rise more rapidly in coming months — albeit on a temporary basis — due to base effects, where the year-over-year inflation is measured from the depressed levels that accompanied the March to May lockdowns in 2020.

Households' outlooks recovered modestly in the second half of 2020 but fluctuated based on changing perceptions of the likelihood of additional fiscal assistance, the health of labor markets, and the availability of vaccines. Meanwhile, the Institute for Supply Management (ISM) surveys for manufacturing and service-sector business activity have signaled expansion since June 2020. In March, the manufacturing index rose to its highest level since 1983 while the services index climbed to the highest level in its almost 24-year history.

Public Finances

The federal government's deficit and debt were trending higher before the pandemic but rose sharply as a result of the fiscal response to combat the pandemic's effect on the economy. At the end of FY 2020, the federal government posted a deficit of \$3.13 trillion (15.0% of GDP), up \$2.15 trillion from the \$984 billion deficit (4.6% of GDP) posted in FY 2019. Federal receipts totaled \$3.42 trillion in FY 2020, down \$44 billion (1.3%) from FY 2019. Net outlays for FY 2020 were \$6.55 trillion, up \$2.1 trillion (47.3%) from FY 2019, largely due to the fiscal measures enacted to counter the pandemic and consequent recession. As of March 2021, the monthly federal deficit was \$660.0 billion, bringing the 12-month total deficit to \$4.09 trillion.

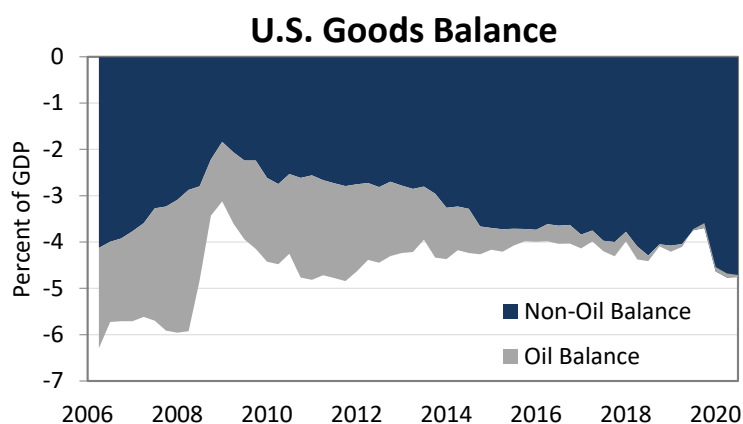
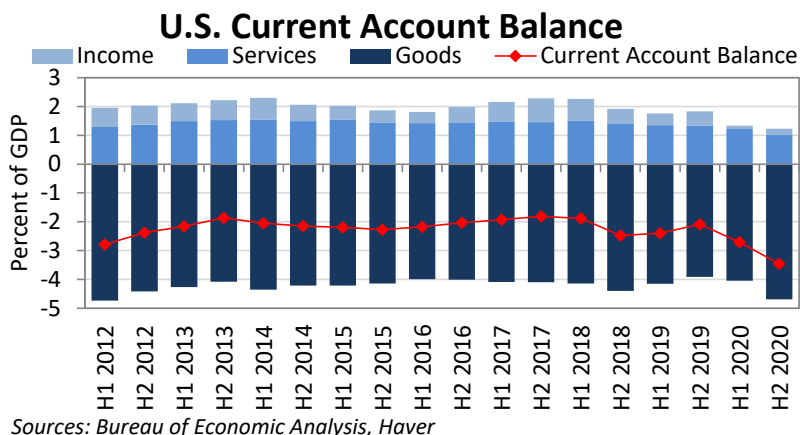
At the end of FY 2020, gross federal debt was \$26.9 trillion. Federal debt held by the public, which includes debt held by the Federal Reserve but excludes federal debt held by government agencies, rose from \$16.8 trillion at the end of FY 2019 (78.0% of GDP) to

\$21.0 trillion by the end of FY 2020 (99.3% of GDP). As of March 2021, gross federal debt was \$28.1 trillion, while federal debt held by the public totaled \$22.0 trillion.

U.S. Current Account and Trade Balances

The U.S. current account deficit rose in the fourth quarter of 2020 to 3.5% of GDP, up 0.1 percentage points from the third quarter. This was the largest deficit as a share of GDP since the fourth quarter of 2008. In the fourth quarter of 2020, nearly all major current account transactions increased for a second consecutive quarter. This mainly reflects the continued resumption of trade and other business activities that had ceased or were restricted due to COVID-19 in the first half of 2020. Both exports and imports of goods rose, with the increase in imports outpacing the growth in exports. Receipts of income rose more rapidly than payments of income, resulting in a larger income surplus, which partially offset the expanded deficit on goods. Prior to the second quarter of 2020, the headline U.S. current account deficit had been quite stable, around 2-2.5% of GDP since 2015.

The U.S. goods trade deficit widened to 4.7% of GDP in the fourth quarter of 2020, up less than 0.1 percentage points from the third quarter. Relative to the third quarter, goods exports increased 8.7%



Note: Trade growth calculated as year-over-year percentage change in the sum of exports and imports.
Source: U.S. Census Bureau, Haver

while imports rose 6.0%, mainly as a result of strengthened global demand. The goods trade deficit has been relatively stable in recent years, in the range of 4-4.5% of GDP, except for the narrower deficit in the first quarter of 2020.

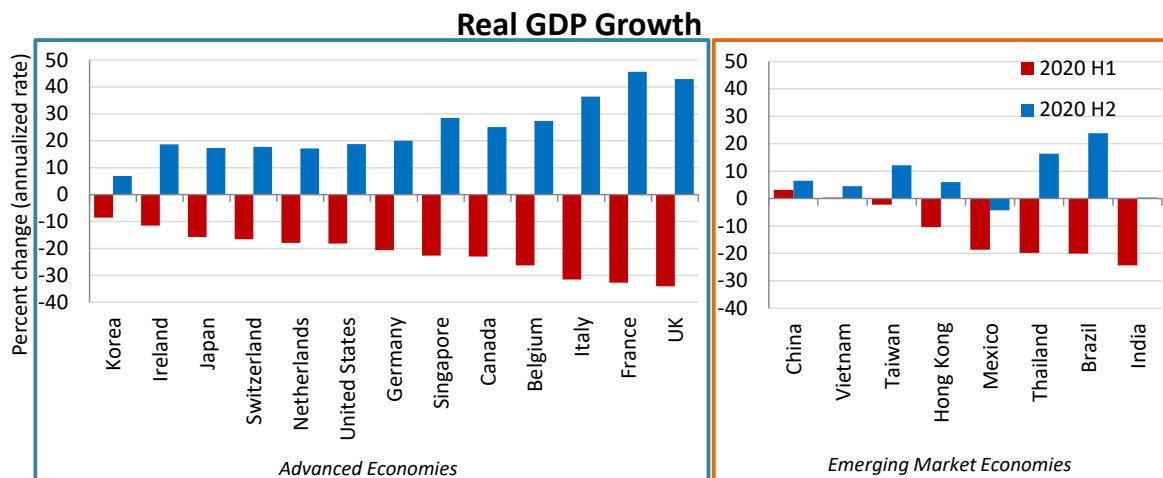
At the end of the fourth quarter, the U.S. net international investment position marked a net liability of \$14.1 trillion (65.6% of GDP), a deterioration of \$0.2 trillion compared to the third quarter. The value of U.S.-owned foreign assets was \$32.2 trillion, while the value of foreign-owned U.S. assets stood at \$46.3 trillion.

International Economic Trends

The outbreak of COVID-19 at the end of 2019 and its spread across the world in early 2020 plunged the global economy into its sharpest and deepest recession since the Great Depression. While many economies experienced sharp rebounds in activity during the third quarter as their economies started to reopen, outturns in the fourth quarter were mixed due to renewed social distancing in response to virus surges. The IMF estimates that the global economy contracted by 3.3% in 2020.

Prospects for 2021 appear brighter but with a high degree of uncertainty. The development and distribution of vaccines offer hope of defeating the virus. The IMF forecasts global growth of 6.0% in 2021. Nevertheless, recoveries are likely to remain uneven — due in part to disparate access to vaccinations and the recurrence of lockdowns — and a host of risks threaten recovery. Even as economies recover, the scars from the pandemic, including lost human capital accumulation and higher debt loads, will continue to drag down medium-term prospects for some countries.

The unprecedented nature of the shock led to an unprecedented policy response by many governments and central banks. The IMF projects government deficits of advanced economies quadrupled from 2.9% of GDP in 2019 to 11.7% of GDP in 2020. A continued strong and supportive policy response remains crucial to a sustained recovery.



Note: Based off semester average of Q/Q SAAR growth rates. China, India, Mexico, and Vietnam based off Y/Y NSA data for the final quarter of each period.

Sources: National Authorities, Haver

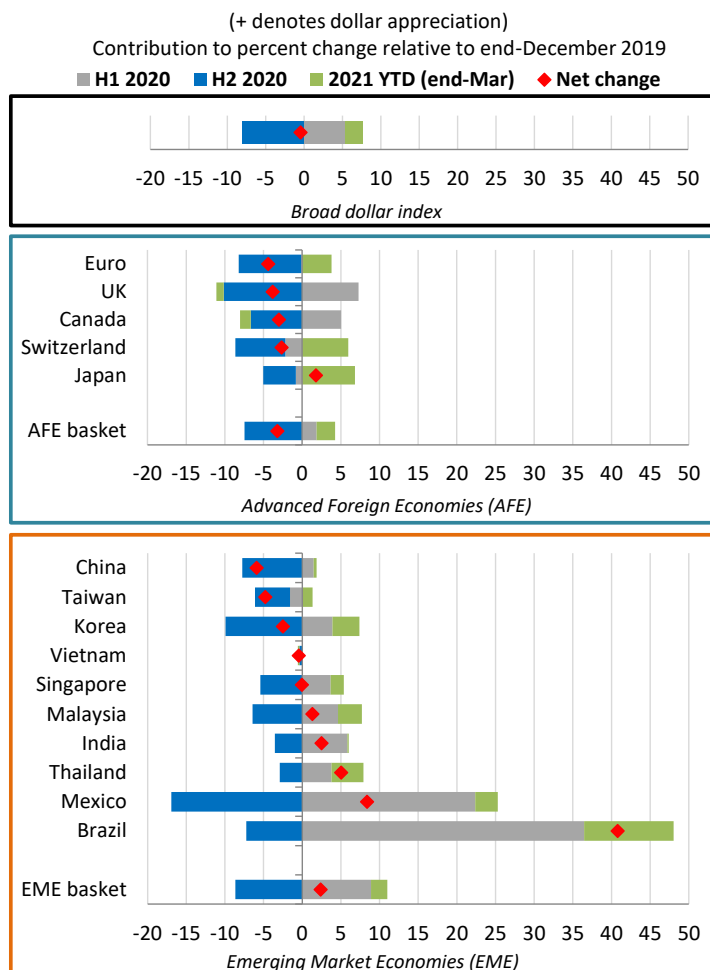
Foreign Exchange Markets⁴

In the early months of 2020, the spread of COVID-19 set off a dash for safety to the dollar. The dollar strengthened against the currencies of nearly every major trading partner.⁵ Central bank action to ease dollar funding strains and support the economy, fiscal stimulus, stabilization of financial markets, and a gradual reopening of economies helped lessen the rush to the dollar in the months after March 2020. The nominal trade-weighted dollar weakened 11.8% from March 23 to the end of December, leaving it 2.7% weaker for 2020 as a whole. Since the beginning of 2021, the dollar has resumed strengthening against many — though not all — currencies, and the nominal trade-weighted dollar has appreciated 2.3% through end-March.

On a real effective basis, the dollar depreciated 2.9% in 2020. Despite this decline, the real dollar ended 2020 nearly 5% above its 20-year average. Sustained dollar strength is concerning given that the IMF continues to judge that the dollar is overvalued on a real effective basis (see chart below). The real effective exchange rates of several surplus economies that the IMF assessed to be undervalued in 2019 depreciated in 2020 (e.g., Thailand, Malaysia, Singapore, and Vietnam).

Though foreign exchange market functioning deteriorated in the early months of 2020 in response to the COVID-19 shock, swift central bank action calmed conditions and markets

U.S. Dollar vs. Major Trading Partner Currencies

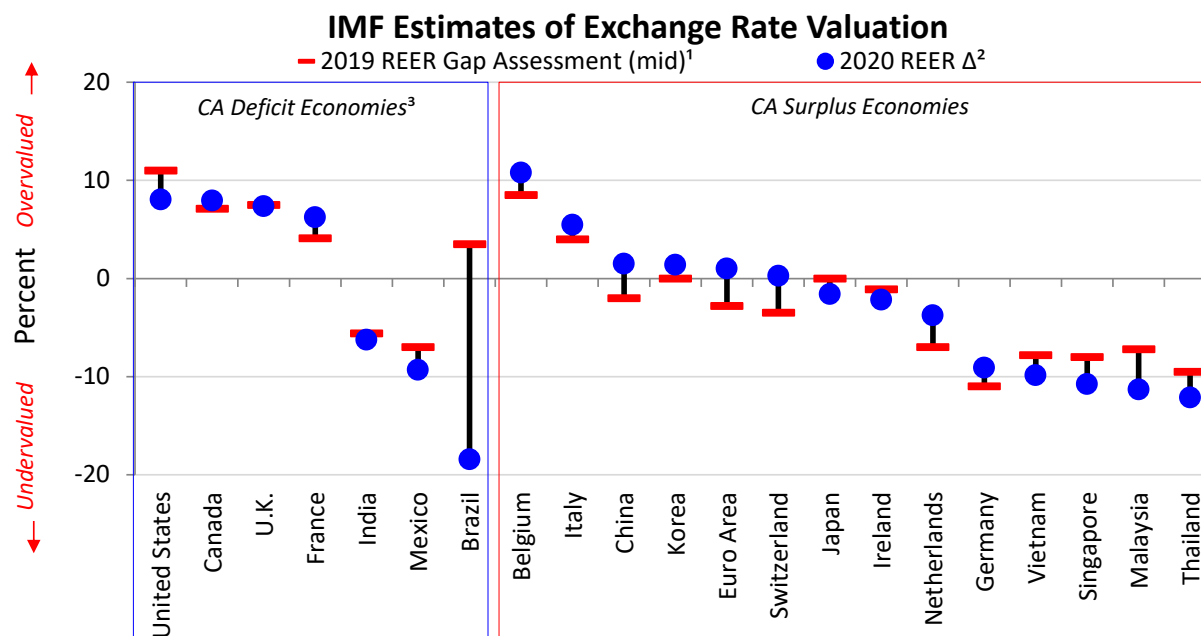


Sources: FRB, Haver

⁴ 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.

⁵ Perhaps most notably, increasing market concerns about Brazil's debt sustainability and historically low real interest rates have weighed on the Brazilian real during Brazil's particularly severe experience with the pandemic (despite significant central bank intervention to stem depreciation).

have been functioning more smoothly in the period since. The dollar continues to be the world's principal currency in international foreign exchange markets, reflecting its dominant global position both in terms of market turnover (being bought or sold in 88% of all currency trades) and trade settlement.⁶



Sources: IMF 2020 External Sector Report, IMF 2019 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 2019 to the level consistent with the country's medium-term economic fundamentals and desired policies. The midpoint of the gap range is depicted above. For Ireland, the 2018 REER gap is used.

2/Change through December 2020 versus 2019 average. For Ireland, change through December 2020 versus 2018 average.

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.

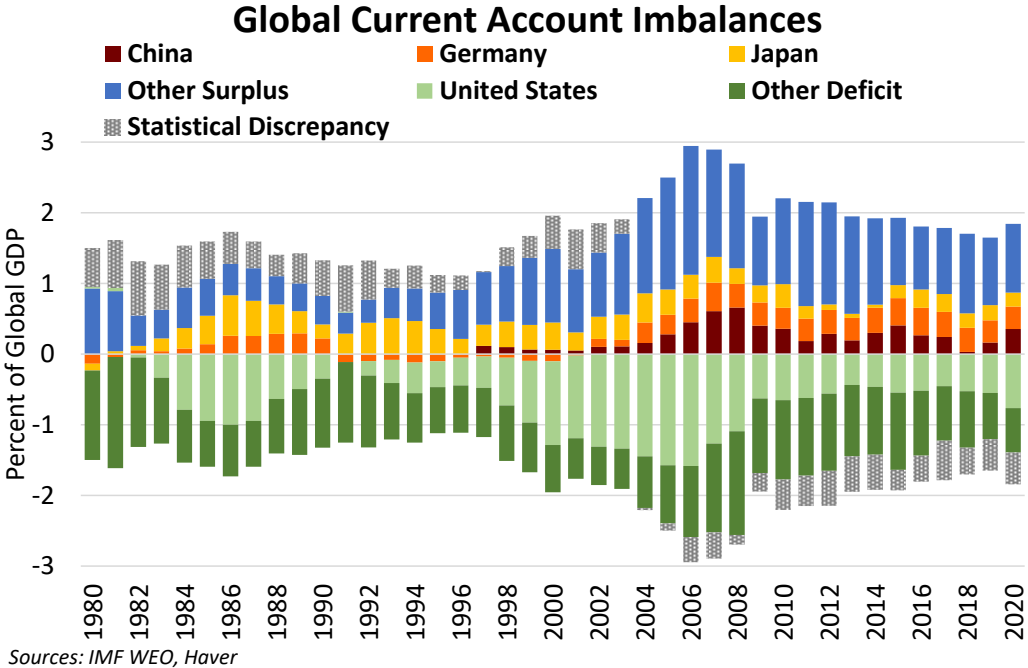
Global Imbalances

Global current account imbalances were broadly stable in the few years prior to the pandemic. The IMF April 2021 WEO reports that, at the global level, current account surpluses and deficits narrowed early in the crisis, with the effects of a sharp contraction in activity in early-2020 and the ensuing global recession weighing heavily on tourism-dependent economies and commodity producers. Later in the year, global imbalances subsequently widened with rising trade and commodity prices. Some surpluses remained very large in 2020. Among major U.S. trading partners, the very large surpluses of Germany, Netherlands, Korea, Taiwan, Malaysia, and Singapore have each remained significant as a share of GDP, with the combined surpluses of these economies totaling \$575 billion over the four quarters through December 2020 (roughly equivalent to 0.7% of global GDP). Japan's current account surplus is slightly smaller than in 2019 as a share of GDP at 3.3%, but in dollar terms is comparatively high at \$165 billion. China's surplus is

⁶ Currency market turnover according to the 2019 BIS Triennial Central Bank Survey of Foreign Exchange and OTC Derivatives.

even higher in dollar terms at \$299 billion in the four quarters through December 2020, its highest level since 2015. Additionally, external stock positions are expected to continue widening in 2020 to historical peaks; however, this generally reflects sharp drops in GDP rather than an increase of creditor or debtor positions.

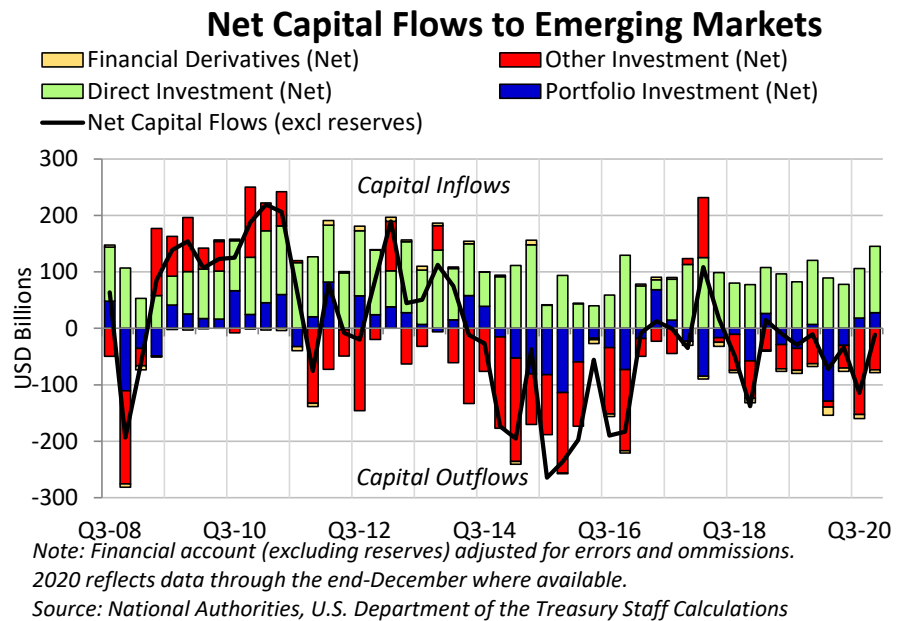
In many cases, these persistent imbalances reflect past policy distortions. Moreover, global imbalances have been affected by shifts in saving and investment driven by the COVID-19 crisis and policy responses, although it is too soon to determine the extent to which these shifts may be permanent. In 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 in deficit economies — the channel which too often has dominated in the past. As the global economic recovery path continues to stabilize, it is critical to adopt policies that allow for a narrowing of excessive surpluses and deficits, particularly additional fiscal measures where policy space is available to support languishing recoveries.



Capital Flows

Following the sharp outflow of portfolio debt and equity from emerging markets in early 2020, portfolio flows began to rebound in the second quarter, though net capital flows remained suppressed in the third quarter as other investment outflows accelerated to \$152 billion, driven by large resident outflows from China (\$129 billion).⁷ Net inflows continued in

the fourth quarter of the year as positive vaccine-related developments were followed by a surge in portfolio bond and equity inflows to emerging markets. Higher frequency data (from sources beyond quarterly balance of payments data) suggest that, since end-2020, the pace of portfolio equity inflows to emerging markets has slowed substantially.



⁷ Meanwhile, China experienced strong portfolio inflows in the second and third quarter of 2020, totaling roughly \$86 billion.

Foreign Exchange Reserves

Global foreign currency reserves were also affected by the COVID-19 pandemic. After declining by \$122 billion in the first quarter of 2020, reserves have since risen, increasing in each of the final three quarters of 2020 to reach \$12.7 trillion at the end of last year. Over the second and third quarters of 2020, reserve level growth was a product both of large net foreign exchange purchases—totaling \$286 billion—and valuation effects caused by the depreciation of the dollar against other currencies, which contributed \$254 billion to the rise in reserves. In the fourth quarter of 2020, the increase in global foreign currency reserves was attributable to net foreign exchange purchases amounting to \$253 billion, as well as valuation effects (which expanded reserves \$209 billion) from the continued depreciation of the dollar relative to other currencies.

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. Meanwhile, other economies, particularly low-income countries, are facing shortages of foreign exchange reserves to address external financing needs. Foreign exchange intervention to further reserve accumulation should be avoided.

Economic Developments in Selected Major Trading Partners

China

Chinese economic growth in 2020 exceeded that of other large economies, but has been driven by the early resumption of manufacturing and increased external demand,

Table 1: Foreign Exchange Reserves

	FX Reserves (USD Bns)	1Y Δ FX Reserves (USD Bns)	FX Reserves (% of GDP)	FX Reserves (% of ST debt)
China	3,216.5	108.6	22%	261%
Japan	1,312.8	56.9	26%	39%
Switzerland	1,013.2	215.1	135%	85%
India	542.2	115.3	21%	527%
Taiwan	529.9	51.8	79%	295%
Korea	430.1	32.2	26%	298%
Singapore	359.3	82.4	106%	32%
Brazil	342.7	-3.8	24%	450%
Thailand	246.0	31.5	49%	472%
Mexico	184.2	13.6	17%	374%
UK	139.6	2.1	5%	2%
Malaysia	102.6	3.2	30%	117%
Vietnam	88.4	10.4	26%	313%
Canada	76.8	3.2	5%	10%
France	55.2	3.4	2%	2%
Italy	46.6	3.9	2%	4%
Germany	36.9	0.9	1%	2%
Belgium	11.0	0.5	2%	2%
Netherlands	5.9	1.5	1%	1%
Ireland	5.0	1.6	1%	1%
World	12,703.3	879.8	n.a.	n.a.

Foreign exchange reserves as of December 2020.

GDP calculated as sum of rolling 4Q GDP through Q4-2020.

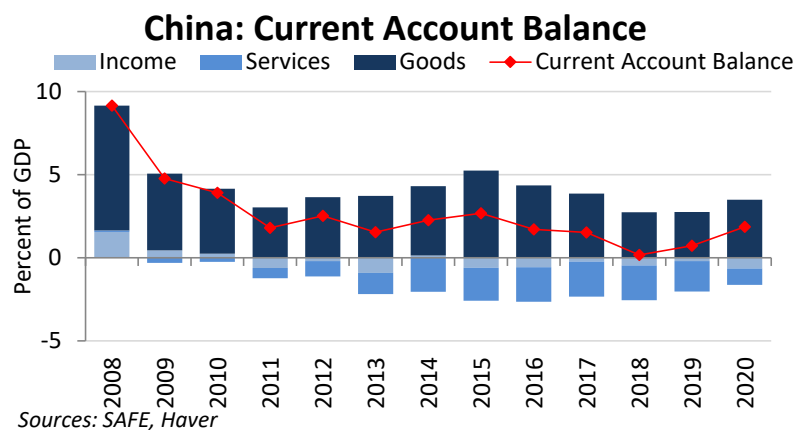
Short-term debt consists of gross external debt with original maturity of one year or less, as of the end of Q3-2020; Ireland as of Q2-2020.

Sources: National Authorities, World Bank, IMF, BIS

especially for medical supplies, personal protection equipment and electronics. Questions remain about the continued strength of the Chinese recovery absent a sustained increase in household consumption. While official data do not show significant accumulation of foreign exchange assets by the central bank, China's failure to publish foreign exchange intervention and broader lack of transparency around key features of its exchange rate mechanism and the activities of state-owned banks warrant close monitoring of RMB developments going forward.

An uptick in growth in the fourth quarter (6.5% year-over-year) contributed to an annual increase in real GDP of 2.3% in 2020. However, China's recovery has been highly imbalanced. China's economy was the first to be impacted significantly by the COVID-19 outbreak. Stringent containment measures enabled China to quickly resume manufacturing while domestic consumption lagged. China's fiscal response to the pandemic has been limited compared to many G20 economies, with total discretionary stimulus estimated by the IMF at 4.7% of GDP. The initial fiscal response focused on health spending and fee reductions, followed by additional public infrastructure spending. China's monetary policy response to the pandemic has also been restrained, with greater emphasis on facilitating indirect support through bank lending, particularly to small- and medium-sized enterprises, as well as regulatory forbearance on loan defaults.

China's focus on policies that support external demand, combined with temporary COVID-19 impacts, increased its current account surplus. After recording a current account deficit of 1.4% of GDP in the first quarter of 2020, China subsequently recorded much larger current account surpluses over the remainder of the year, arriving at an



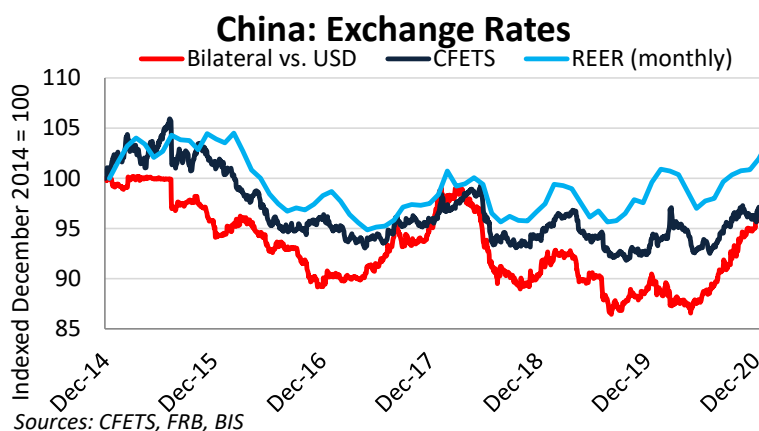
overall surplus of 1.9% of GDP (\$274 billion) compared to a surplus of 0.7% of GDP (\$103 billion) in 2019. COVID-19 provided a short-term boost to China's goods exports, which increased by 4.6% in 2020 and led to a goods trade surplus of \$515 billion, its largest since 2015. The early resumption of manufacturing, as well as the speedy enactment of export tax rebate incentives, allowed China to meet increased external demand for medical supplies and personal protection equipment, along with greater demand for electronics related to the shift toward remote work. Meanwhile, goods imports decreased by 0.6% from 2019, partly reflecting the reduction in commodity prices. China's services deficit sharply decreased by more than 44% in 2020, primarily as a result of the collapse in outbound tourism due to global travel restrictions. Given these pressures, China appears likely to run a large external surplus through the duration of the pandemic.

China's bilateral goods trade surplus with the United States remains the largest by far of any U.S. trading partner. Since peaking at \$419 billion in 2018, China's bilateral goods

trade surplus with the United States has declined steadily, reaching \$345 billion in 2019 and narrowing further in 2020 to \$311 billion. China continues to run a deficit in its bilateral services trade with the United States, which totaled \$22 billion in 2020 compared to \$36 billion in 2019.

Capital outflows remain below the peak levels witnessed in 2015 and 2016. Treasury estimates that, in 2020, net capital outflows (excluding flows accounted for by trade and direct investment) totaled \$447 billion, compared to \$272 billion in 2019. In 2020 China recorded a net errors and omissions deficit of \$168 billion, up from a deficit of \$129 in 2019, suggesting an uptick in undocumented capital outflows that are not captured within the conventional components of the financial account.⁸ Meanwhile, China's other investment deficit increased sizably from \$99 billion in 2019 to \$256 billion in 2020, which may suggest an increase in capital outflows related to bank activity. Overall pressure on the financial account has been curbed by strong foreign direct investment and portfolio inflows, particularly portfolio debt inflows.

The RMB appreciated by 6.7% against the dollar and 3.8% against the People's Bank of China's (PBOC) China Foreign Exchange Trade System nominal basket in 2020.⁹ Meanwhile, the real effective exchange rate strengthened by 3.4% in 2020. In the first half of 2020, the RMB remained relatively stable compared to other emerging



market currencies, depreciating only 1.5% against the dollar despite significant market volatility that led to increased capital outflows in the first quarter of 2020, followed by a large current account surplus and portfolio inflows in the second quarter of 2020. In the second half of 2020, the RMB strengthened 8.3% against the dollar, supported by favorable interest rate differentials, increased investment inflows, and positive economic data, including substantial trade surpluses. RMB appreciation against the dollar moderated at the start of this year and then reversed in March. Overall, the RMB has depreciated against the dollar by 0.4% through the end of March.

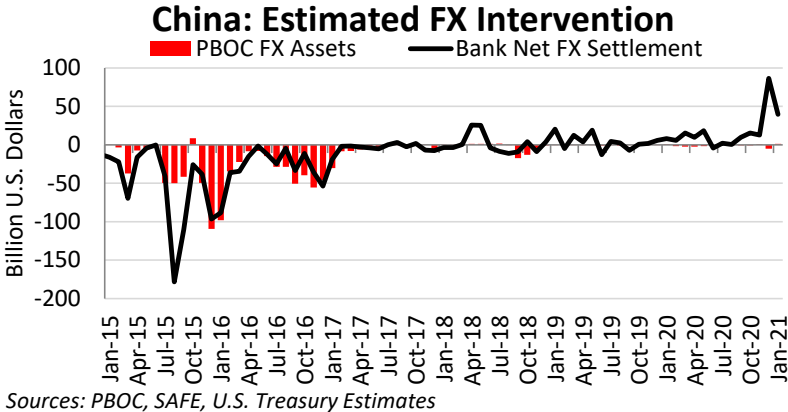
China provides very limited transparency regarding key features of its exchange rate mechanism, including the policy objectives of its exchange rate management regime, the relationship between the central bank and foreign exchange activities of the state-owned banks, and its activities in the offshore RMB market. The PBOC manages the RMB through a range of tools including the setting of the central parity rate (the “daily fix”) that serves as

⁸ China's reporting of its net errors and omissions data has historically lagged reporting of other balance of payments data, raising additional questions regarding data quality and disguised capital outflows.

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

the midpoint of the daily trading band. Chinese authorities can influence the interest rates of RMB-denominated assets that trade offshore, influence the timing and volume of forward swap sales and purchases by China’s state-owned banks and the conversion of FX proceeds by state-owned enterprises, and directly intervene in foreign exchange markets. In recent months, the authorities made several adjustments to their macroprudential policy tools governing corporate and financial institution overseas financing limits that, on net, appear designed to encourage outbound RMB lending and disincentivize foreign currency borrowing. This follows announcements by the PBOC in October 2020 of a reduction in the risk reserve ratio on foreign exchange forwards to zero and the indefinite suspension of the counter-cyclical factor in setting the daily fix. Treasury will closely monitor China’s use of exchange rate management, capital flow, and macroprudential measures and their potential impact on the exchange rate.

Compared to other major economies, especially in Asia, China is increasingly an outlier with respect to its non-disclosure of foreign exchange market intervention, which forces Treasury staff to estimate China’s direct intervention in the foreign exchange market.



Overall, official foreign exchange reserves increased by \$109 billion in 2020, standing at \$3.2 trillion. Meanwhile, monthly changes in the PBOC’s foreign exchange assets recorded no significant changes, decreasing by \$15 billion in 2020. Indeed, the PBOC’s foreign exchange assets have not recorded any quarterly changes greater than \$5 billion in the past two years, despite China recording substantial trade and portfolio inflows in 2020 that historically have resulted in the accumulation of foreign exchange reserves. In contrast, net foreign exchange settlement data, a more comprehensive proxy measure for intervention that includes the activities of China’s state-owned banks, recorded foreign exchange purchases of nearly \$180 billion (1.2% of GDP) in 2020, including substantial purchases of nearly \$87 billion last December alone.¹⁰ Historically, monthly changes in the PBOC’s foreign exchange assets and net FX settlements data have provided roughly similar estimates of the direction and size of Chinese foreign exchange intervention. The divergence between these indicators widened in the second half of 2020 to its largest level since 2015. The precise cause for this divergence is unclear and could be related to commercial factors. The divergence could also indicate that the PBOC’s foreign exchange assets data may not adequately capture the full range of China’s intervention methods, including intervention through the state-owned banks. Overall, this development highlights the need for China to improve transparency regarding its foreign exchange intervention activities.

¹⁰ This figure represents net foreign exchange purchases adjusted for the change in outstanding foreign exchange forwards.

As the authorities attempt to balance policy normalization against supporting the economic recovery, they will need to rely on on-budget fiscal measures and carefully navigate the exit from monetary stimulus while managing short-term volatility. Lackluster private demand – underpinned by continued weakness in the labor market – raises concerns that China’s growth cannot be sustained absent greater official support for household consumption. To regain lost momentum on economic rebalancing and strengthen long-term growth prospects, China should take decisive steps to allow for greater market openness by implementing structural reforms to reduce state intervention, enhancing social safety nets and increasing spending on healthcare and unemployment benefits, and permitting a greater role for market forces.

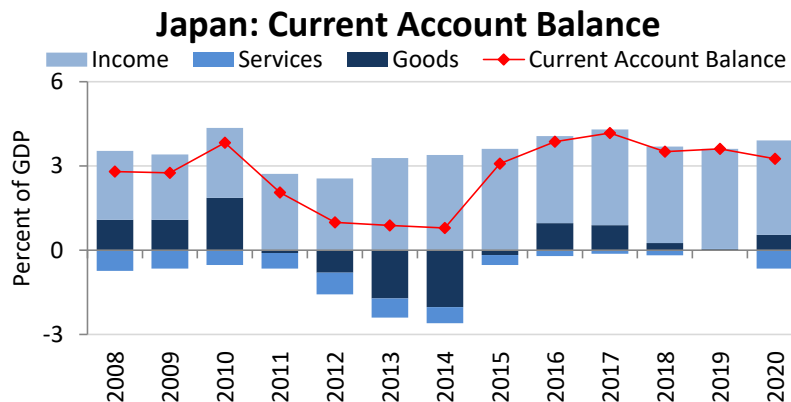
Japan

In 2020, real GDP contracted 4.8%, the largest contraction since 2009. Over the first half of 2020, state of emergency measures encouraging citizens to stay home and public reluctance to engage in various economic activities amid the pandemic drove an acute slowdown in private consumption and investment. Output rebounded strongly by annualized rates of 22.8% and 11.7% respectively in the third and fourth quarters of 2020. The IMF projects real GDP will expand by 3.3% in 2021, with economic output in Japan expected to recover to end-2019 levels in the second half of the year.

Japan’s government responded to the crisis in 2020 with three large supplemental budgets. Direct spending accounted for roughly one-third of the total fiscal response and included measures to ease hardships for households and businesses through the provision of cash transfers to those affected by the downturn. The more substantial indirect measures included tax payment deferrals and concessional loans to businesses, with specific support for small-and-medium enterprises. While Japan’s initial 2021 budget shows a smaller deficit (3.7% of GDP) than its final 2020 budget (16.9% of GDP), spending is still slated to increase 3.8% over the initial 2020 budget, driven by \$46 billion in contingency spending for COVID-19 measures.

The Bank of Japan (BOJ) took measures to further ease monetary conditions, including removing the ceiling on government bond purchases and increasing asset purchase limits for exchange-traded funds, Japan real estate investment trusts, commercial paper, and corporate bonds. The BOJ also implemented multiple financing initiatives to support bank lending.

Japan's current account surplus narrowed to 3.3% of GDP in 2020 from 3.6% in 2019. Japan's current account surplus continues to be driven primarily by income on its substantial net foreign assets, with the primary and secondary income balance reaching record levels in 2020 (\$182.4 billion). The drag on global trade from the COVID-19

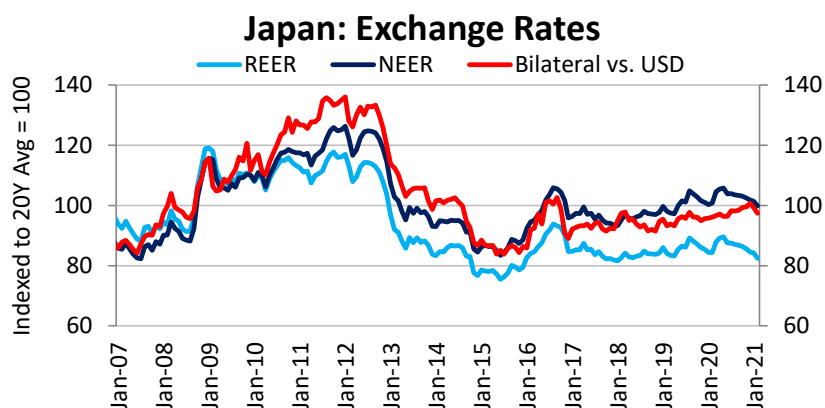


Sources: Bank of Japan, Ministry of Finance, Cabinet Office

shock weighed modestly on Japan's trade balance. Net exports of goods and services fell into deficit by 0.1% of GDP in 2020. The goods trade surplus with the United States in 2020 was \$55 billion, down 20% from 2019

With regard to capital flows, strong outflows from corporates, domestic financial institutions, and households consistently outweighed inflows in 2020. Among these flows, foreign direct investment by Japanese corporations remained elevated in 2020. Notably, Japanese pension funds, including the Government Pension Investment Fund, were large net purchasers of foreign assets, primarily in long-term debt, as these institutions increased foreign asset allocations.

After appreciating close to 1% against the dollar in 2019, the yen appreciated an additional 5.3% against the dollar in 2020, as the deterioration in global risk sentiment sparked by the spread of COVID-19 drove flows into traditional safe haven currencies. On a real effective basis, the yen weakened 1.1% in 2020, after appreciating 1.5% in



Sources: FRB, Bank for International Settlements

2019. The IMF assessed in its 2020 External Sector Report that the yen was broadly in line with fundamentals in 2019. Japan publishes its foreign exchange interventions and 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.

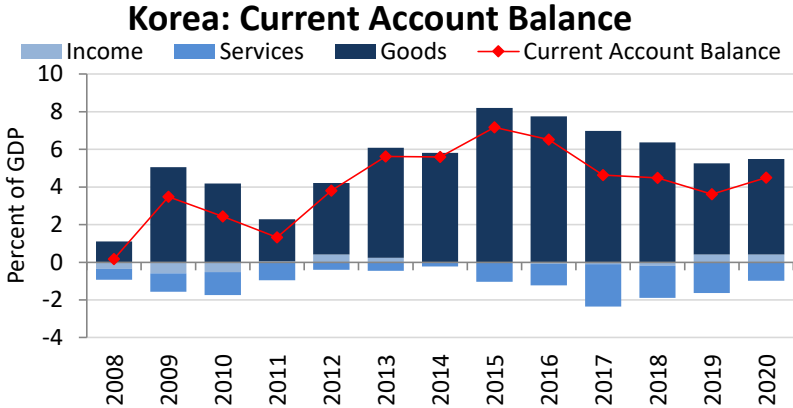
Looking ahead, Japanese policymakers should continue to prioritize containing COVID-19 and supporting the economic recovery, while preparing to address longer-term objectives. Once economic activity normalizes, Japanese authorities should pursue structural reforms

to increase productivity and raise potential growth while maintaining fiscal flexibility to support growth in the near-term.

Korea

Korea’s real GDP contracted by 1% in 2020. One of the first countries to experience an outbreak of COVID-19 outside of China, Korea responded rapidly with public health measures to contain three separate COVID-19 outbreaks over the course of the year. Fiscal authorities complemented public health measures with four pandemic relief packages worth 2.9% of GDP in 2020, including direct cash transfers for individuals and support for small businesses, bringing Korea’s 2020 fiscal deficit to 4.2% of GDP. Authorities also passed two fiscal packages for 2021, bringing the projected 2021 fiscal deficit to 4.5% of GDP. Though historically large for Korea, these fiscal packages are small relative to other advanced economies. With a low debt-to-GDP ratio of approximately 49%, Korea has ample fiscal space to further support growth, especially given the weakness in private demand. Similarly, monetary authorities also took several measures to ease monetary conditions and support Korea’s economic recovery, and the Bank of Korea (BOK) has signaled that monetary accommodation will continue until the economic recovery is stable. The IMF predicts the Korean economy will expand by 3.6% in 2021.

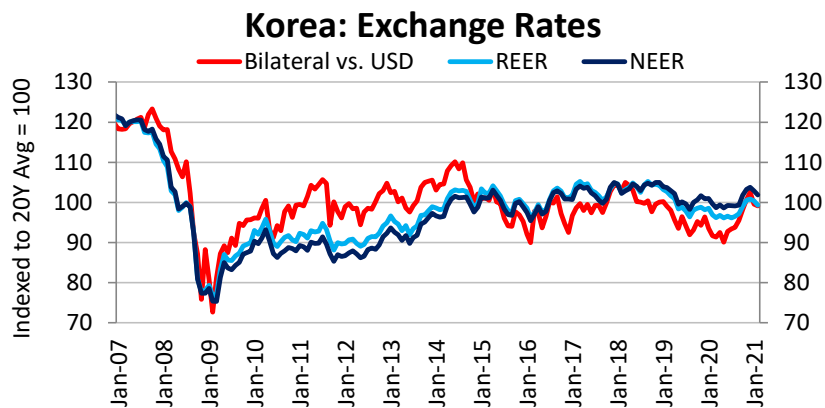
Korea’s current account surplus widened to 4.6% of GDP in 2020, compared to 3.6% in 2019. The largest driver of the increase was the continued narrowing of the services deficit, which fell to 1.0% of GDP from 1.6% of GDP in 2019 due to the impact of COVID on the tourism and transportation services. Korea’s goods surplus increased to 5.0% of



Sources: Bank of Korea, Haver

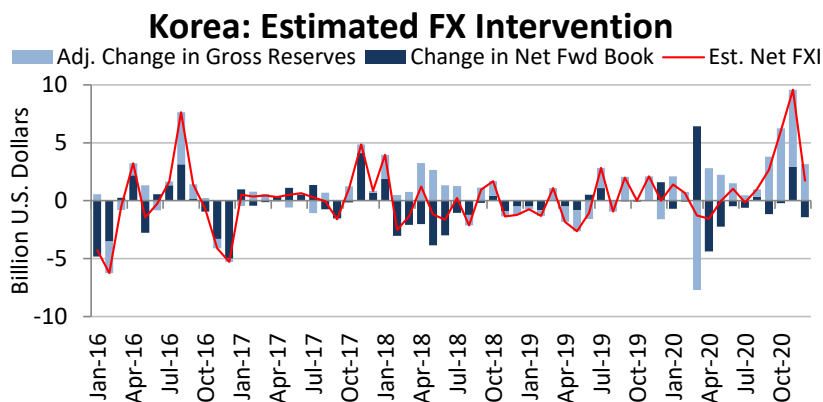
surplus increased to 5.0% of GDP, from 4.8% of GDP a year earlier, led by demand for Korean semiconductor exports. The increase in the current account surplus in 2020 marks a reversal from a gradual moderating trend that began in 2015, when the current account surplus peaked at 7.2% of GDP. Korea’s bilateral goods trade surplus with the United States also expanded to \$25 billion in 2020 from \$21 billion in 2019.

Korea's large current account surplus, augmented by solid capital inflows, drove won appreciation of 6.4% against the dollar and 2.7% on a real effective basis in 2020. The won initially faced sharp depreciation pressure, declining 6.6% against the dollar from January through May. Amid dollar liquidity pressure, the Federal Reserve announced a temporary \$60 billion swap line with the BOK, which drew up to \$19 billion in dollar auctions from March through May. Depreciation pressures reversed in June, and the won steadily strengthened by 10.5% over the second half of 2020. Foreign investors, on net, sold \$16 billion in Korean equities through 2020, though equity sales were front-loaded toward the beginning of the year when volatility was highest. Notably, net foreign purchases of Korean debt totaled \$33 billion and remained remarkably steady throughout the year.



Sources: FRB, Bank for International Settlements

Korea reported net foreign exchange purchases of \$5 billion (0.3% of GDP) in the spot market to stem won appreciation in 2020. Treasury estimates that Korean authorities made sizeable foreign exchange purchases in the last four months of the year totaling \$20 billion (1.3% of GDP), as the won appreciated 9.3% against the dollar over the same period.



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

Korea has well-developed institutions and markets and should limit currency intervention to only exceptional circumstances of disorderly market conditions. Korea maintains ample foreign exchange reserves at \$430 billion as of December 2020, equal to 2.7 times gross short-term external debt. Korea publicly reports its foreign exchange intervention on a quarterly basis.¹¹

¹¹ Treasury's estimates are more frequent and are based on valuation-adjusted changes in foreign exchange reserves as well as changes in the central bank's forward position. In 2020, Treasury estimated \$22.7 billion in spot purchases by Korea while \$1.6 billion in forward contracts expired, for a net of \$21.1 billion in estimated foreign exchange purchases. Increases in Korean domestic banks' foreign exchange deposits with the BOK and realized capital gains from the BOK's sales of foreign currency securities amid volatile market conditions in the first half of the year appeared to drive the unusually large gap between Treasury's estimate and the Korean authorities' reported intervention figure.

As Korea manages its return to normal economic activity, the authorities should continue to deploy economic support measures to avoid prematurely withdrawing support. Monetary policy should remain sufficiently accommodative, with consideration for the potential risks of long-term undershooting of the BOK's inflation target. Progress on structural reforms, including addressing labor market duality and further expanding social safety net programs, would help secure economic opportunity for young workers and reduce old-age poverty while increasing potential growth over the medium term.

The Euro Area

The COVID-19 pandemic has triggered the biggest economic slump in Europe since World War II. Euro area real GDP fell by 15% in the first half of 2020, and after a brisk 12.5% rebound in the third quarter, economic activity contracted by 0.7% in the final three months of the year as member states intensified measures to contain resurging infection rates. The European Union's (EU's) official statistical agency estimates that euro area output fell by 6.6% in 2020. Labor market activity deteriorated significantly, with declines in total hours worked mirroring developments in real GDP, although widespread use of job retention schemes across the region have thus far prevented a corresponding surge in unemployment. Consumer and business sentiment have recovered partially since bottoming out in April 2020, when containment measures were in full force, and have weathered recent restrictive measures comparatively well, particularly in the manufacturing sector. Nonetheless, analysts expect real GDP to contract in the first quarter of 2021, with growth projected to resume from the second quarter.

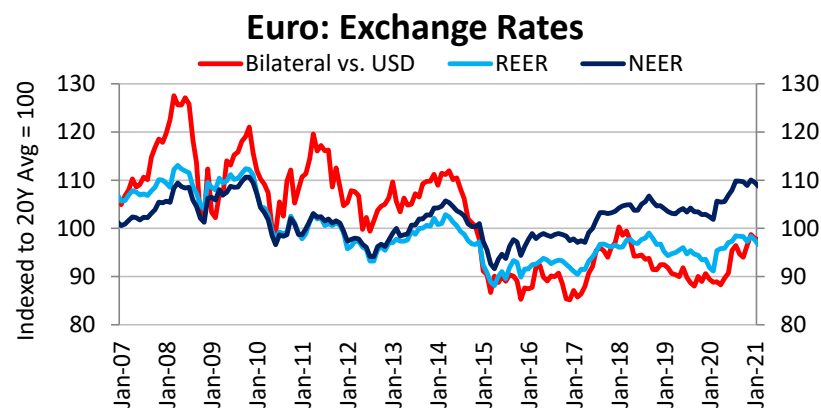
Policymakers have launched an unprecedented monetary and fiscal response to ease the retrenchment in private demand and alleviate potential supply disruptions, with the goal of maintaining the foundations for a restoration in economic activity as restrictions ease. Fiscal support at the national level in 2020 amounted to around 8% of euro area GDP (including automatic stabilizers), along with liquidity schemes of about 19% of euro area GDP, according to European Commission estimates. At the EU level, the roughly \$860 billion (€750 billion) Next Generation EU pandemic recovery package agreed last July is intended to help repair the economic damage of the COVID-19 crisis, foster a more symmetric recovery by supporting the hardest-hit economies, and promote the EU's goal of a "fairer, greener, and more digital Europe." Disbursements of these recovery funds are expected to start in mid-summer.

The European Central Bank's (ECB) Governing Council acted decisively when the pandemic struck last year, launching and then expanding the Pandemic Emergency Purchase Program (PEPP) to €1.85 trillion (equal to about \$2.2 trillion as of end-March), with the horizon for net purchases now slated to run at least through March 2022; expanding the existing asset purchase program with an additional €120 billion temporary envelope until the end of in 2020, together with continued purchases at a pace of €20 billion per month that began in November 2019; slashing interest rates on Targeted Longer-Term Refinancing Operations (TLTROs) to as low as -1.0%; and launching the Pandemic Emergency Longer-Term Refinancing Operations. The ECB

continues to struggle to raise inflation to its mandate of “close to, but below, 2.0% over the medium term”.

The euro area current account surplus held steady at 2.3% of GDP in 2020, unchanged from 2019, as an increase in the goods surplus offset weakening external demand for euro area services.

As global financial market volatility rose in spring 2020 amid the widening COVID-19 pandemic, spot rate swings and option-implied volatility between the euro-dollar currency pair reached multi-year highs in March 2020. On March 15, the Federal Reserve, the ECB, and four other major central banks announced adjustments to their standing U.S. dollar



Sources: FRB, Bank for International Settlements

liquidity swap line arrangements to enhance the availability and effectiveness of U.S. dollar liquidity operations. Subsequently, European banks through the ECB drew up to \$145 billion through the swap line arrangement.¹² In combination with other actions by the Federal Reserve, this helped alleviate global dollar liquidity pressures, and by the end of April, market pricing and volatility had receded closer to normal historical levels. On net in 2020 the euro appreciated 8.9% against the dollar, having gradually strengthened since April 2020. The euro has strengthened somewhat less on a trade-weighted basis, rising 7.0% and 5.1% on a nominal and real effective basis, respectively, over 2020. The IMF’s most recent assessment judged the euro area’s external position to be moderately stronger than the level implied by medium-term economic fundamentals and desirable policies.

The ECB publishes its foreign exchange intervention and has not intervened unilaterally in foreign exchange markets since 2001.

Germany

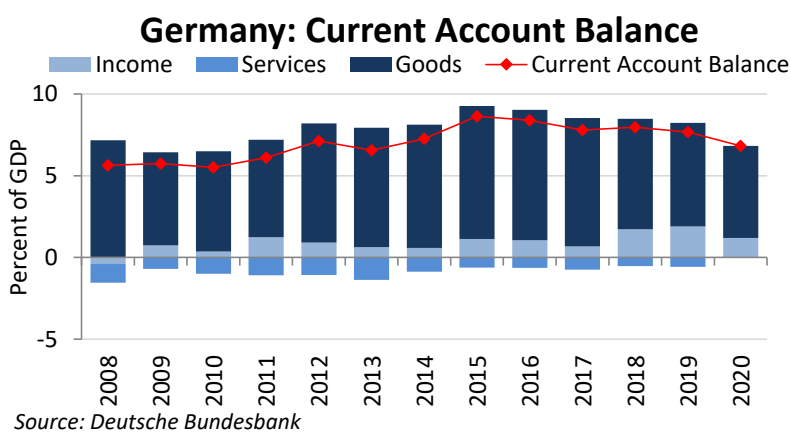
In 2020, the global pandemic ended ten years of economic growth in Germany. After withstanding the initial wave of infections, Germany has been on continuous lockdowns since November with restricted travel and business activity to contain the spread of new variants amid a slow vaccine rollout. Germany’s economy contracted 4.9% in 2020, slightly outperforming the IMF’s October 2020 WEO forecast of a 5.4% contraction. In 2020, the fiscal deficit stood at 4.2% of GDP, while gross debt rose to 68.9% of GDP as Germany adopted large fiscal stimulus measures in response to the crisis and activated the escape clause on its constitutional debt brake to take on unprecedented deficit spending. As

¹² As of end-March 2021, outstanding amounts under the swap line with the ECB stood at \$0.5 billion.

recovery takes hold, the IMF forecasts German real GDP to grow 3.6% in 2021. The IMF expects Germany's general government deficit to widen modestly in 2021 to 5.5% of GDP, while gross debt is expected to stay elevated at 70.3%.

Germany has approved \$316 billion (8.3% of GDP) in direct assistance for shuttered businesses, targeted sectors, and short-time work benefits. In addition, Germany has approved \$1.2 trillion (30.8% of GDP) in loans, equity, and guarantees to firms, even though take-up remains low due to lower financing needs and higher use of direct assistance, as well as the higher cost of certain guarantee schemes. The early and large fiscal measures supported domestic demand in the third quarter of 2020, but lockdowns have since suppressed domestic activity. However, industrial production contributed to a 0.4% quarterly expansion in real GDP in the fourth quarter of 2020, exceeding expectations. While domestic demand remains subdued, German growth was driven mainly by changes in inventories and exports in the fourth quarter of 2020.

Germany's current account surplus remains the largest in the world in nominal terms (at \$284.3 billion in 2020). The current account surplus narrowed somewhat in 2020 as the shock to global trade weighed on goods exports. The current account surplus stood at 6.9% of GDP in 2020 (down from 7.7% of GDP in 2019). Nonetheless, while



German domestic demand contributed substantially to growth from 2015-2019, helping gradually narrow the current account surplus, it was not sufficient to reduce external imbalances appreciably. With low domestic demand in 2020, exports, investment outflows, and limited tourism outflows added to the current account surplus. Germany's bilateral goods trade surplus with the United States stood at \$57.3 billion in 2020, down from \$67.4 billion in 2019. The IMF's most recent assessment judged Germany's external position to be stronger than warranted by medium-term economic fundamentals and desirable policies.

In recent years, Germany's tight fiscal policies have restrained domestic consumption and investment. The measures announced in response to COVID-19, including the VAT cut and the suspension of the national fiscal rules to allow for new debt issuance, are steps in the right direction but are temporary in nature.¹³ Such temporary measures fail to address Germany's overly conservative budget process (both with respect to the debt brake rule and persistent stronger-than-projected revenues), which prevents sufficient public investment in infrastructure to improve Germany's investment climate. Since 2014, Germany's approved budgets have called for fiscal balance, but stronger-than-forecast

¹³ Germany's VAT rate, reduced temporarily in 2020, has reverted to 19% this year.

revenues and under-execution of spending plans have meant that fiscal surpluses have averaged 1.2% of GDP over this time period, while reaching historic records of 1.9% of GDP in 2018 before declining modestly to 1.4% of GDP in 2019. With the sensible temporary suspension of the debt brake rule and “black zero” balanced budget rule to support economic recovery, Germany has an opportunity to reform its fiscal rule and rebalance its economy in favor of domestic demand. As recovery takes hold, Germany should deploy its substantial fiscal space through structural measures to bolster current activity, reduce the burden of taxation — particularly through tax cuts that would lower the labor tax wedge — and reinvigorate investment, which would help external rebalancing proceed at a reasonable pace.

Ireland

Despite pandemic challenges, the Irish economy expanded in 2020, with real GDP growth of 3.4%, compared to a 6.6% contraction for the euro area as a whole. The role of multinational corporations, particularly those in the pharmaceutical and medical sectors, have largely fueled this growth. The European Commission forecasts real GDP growth of 3.4% in 2021 on the back of exports, a domestic consumption rebound, and a recovery in investment.

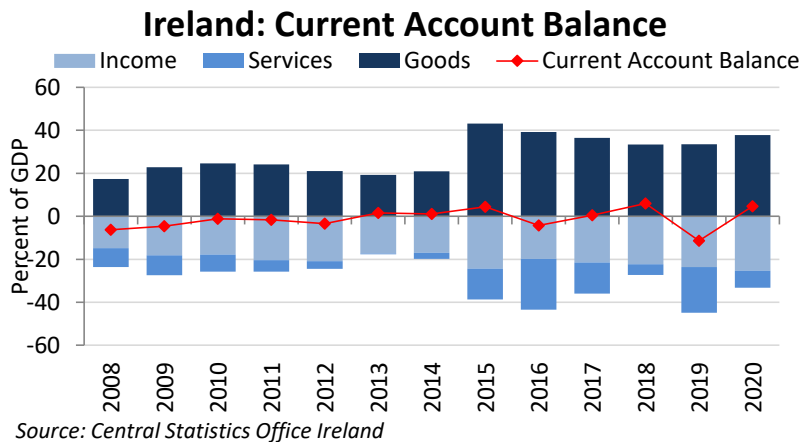
In 2020 and thus far in 2021, the government has committed a total of 6.9% of GDP for COVID-19 related fiscal stimulus, the bulk of which is direct support for businesses, employment, income, and healthcare. The 2021 budget allocates an additional 1.7% of GDP to extend income support measures, provide targeted support to the hospitality sector, and increase health and housing spending. As a result of COVID-19 spending, the government’s fiscal position deteriorated from a 0.4% of GDP surplus in 2019 to a 5.3% of GDP deficit in 2020. Ireland’s debt levels, though rising from 57.3% of GDP in 2019 to 59.8% of GDP in 2020, remain manageable.

Despite Ireland’s relative economic resilience, like its EU peers Ireland faces the risk of rising unemployment. The unemployment rate rose from 4.8% in February 2020 to 5.8% in February 2021, but the increase would have been much larger in the absence of job retention measures. As these measures — due to expire mid-year — fall away, the economy may face substantially higher unemployment. Ireland also faces a housing gap, with supply shortages pushing up prices; as such, Treasury welcomes the Irish government’s ongoing efforts to boost affordable housing.

Ireland's current account has become increasingly volatile. The significant presence of large foreign multinational enterprises (MNE) headquartered in Ireland contributes to current account volatility and balance of payments measurement challenges.

Ireland ran a sizeable current account surplus in 2018, followed by a swing to deficit

in 2019. In 2020, the current account shifted back to surplus. The current account surplus stood at 4.8% of GDP in 2020, driven by strong goods exports — mainly of pharmaceuticals and medical equipment, which comprised 39% of goods exports in 2020 — against sharply weaker services imports, including a large decline in Ireland's aircraft leasing sector activity.



Since 2017, Ireland's Central Statistics Office has produced complementary metrics for economic activity and the balance of payments which exclude the profits of re-domiciled companies, the depreciation of intellectual property products, and aircraft leasing. According to this measurement — the Modified Gross National Income or GNI* — the Irish economy contracted by 5.1% in 2020, in contrast to 3.4% growth as measured by real GDP. Ireland's modified current account balance metric (CA*) also filters out the volatile activities of MNEs that have limited impact on the domestic economy. In its most recent assessment from June 2019, the IMF concluded that Ireland's external position was broadly consistent with medium-term fundamentals and desirable policy settings during 2018, but noted that the assessment is subject to considerable uncertainty given the volatility of the data and the role of MNEs.

The U.S. remains Ireland's largest single-country export destination, accounting for 31% of Irish exports in 2020. By contrast, imports from the U.S. represent 13% of total Irish imports. In 2020, Ireland posted a \$56 billion goods trade surplus with the U.S., continuing a 24-year goods surplus streak. The United States' services trade surplus with Ireland stood at \$43 billion in 2020. Two-way investment between the United States and Ireland also continues to grow. Ireland's membership in the EU attracts U.S. companies that use Ireland as a base to sell into Europe and other markets.

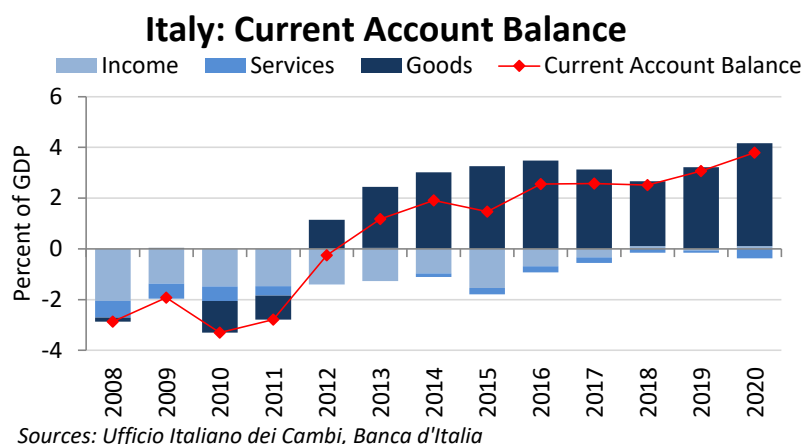
Ireland's foreign MNE sector has driven the economy's relatively strong performance through the pandemic, highlighting the increasing divergence between the country's outward-facing and domestic sectors. Treasury encourages the authorities to use the EU's Recovery and Resilience Facility funds effectively on productive investment in the domestic economy and structural reforms to support balanced and sustainable growth throughout the economy. Continued fiscal support will be important, particularly for the struggling tourism and hospitality sectors, until the economic recovery is well underway. Diversifying

revenue sources, including though broadening the tax base, could help improve fiscal sustainability.

Italy

Italy was first among European countries hit by COVID-19 (with the outbreak first confirmed in February 2020), and remains among the countries hardest hit. In the second quarter of 2020, real GDP contracted by a record 42.7% annualized rate (18% year-over-year) as the government-imposed lockdowns and other restrictive measures to stem the pandemic. While Italy saw a stronger-than-expected rebound in the third quarter, the resurgence of COVID-19 in the fall weighed on growth in the fourth quarter. Italian real GDP contracted 8.9% in 2020, and is not expected to return to pre-pandemic levels until 2023. To tackle the COVID-19 crisis in 2020, Italy passed four fiscal packages totaling around 6.8% of GDP in direct fiscal stimulus and around 35% of GDP in loan guarantees. In early 2021, Italy passed another fiscal package amounting to 1.8% of GDP. As a result, the fiscal deficit reached 9.5% of GDP in 2020 and is projected to remain elevated at around 9% of GDP in 2021, increasing Italian government debt — already the second-highest in the euro area — to nearly 156% in 2020 and a projected 159% in 2021.

Italy's current account surplus has been broadly stable in recent years and stood at 3.6% of GDP in 2020 (above its 2019 level of 3.0%). The United States is Italy's third-highest export destination, and Italy's goods trade surplus with the United States stood at \$30 billion in 2020. The IMF's most recent assessment describes Italy's external position in 2019 as largely in line with medium-term economic fundamentals and policies.



Italy's persistently anemic growth and pre-pandemic fundamentals highlight the difficult road to economic recovery. These longstanding trends have been further exacerbated by the COVID-19 crisis, and continuous lockdowns of various stringencies in response to second and third COVID-19 waves in fall 2020 and early 2021. In light of the unfolding circumstances, Italy should continue to provide fiscal support to impacted households and firms and consider further extending its worker furlough program to help prevent widespread unemployment. EU-level fiscal support — including the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) and Next Generation EU funding — should also help Italy weather the crisis, with Italy receiving a total of around \$240 billion in grants and loans. The crisis has only further demonstrated the need, once the economic recovery takes hold, for Italy to undertake fundamental reforms to tackle deep-rooted structural rigidities and boost competitiveness. In that vein,

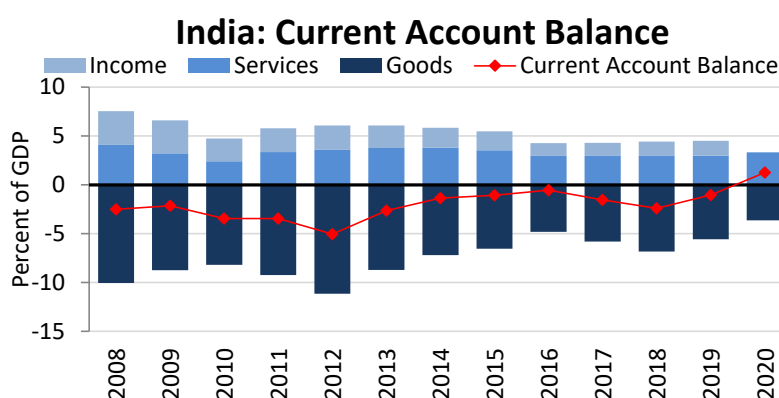
Treasury welcomes the new government's intention to reform Italy's public administration, judicial system, and tax system to help raise long-term growth in Italy.

India

India experienced one of the world's largest number of COVID-19 cases along with a steep growth contraction in 2020. India's GDP shrank 7% in 2020 owing to the impact of the pandemic, particularly on domestic demand and manufacturing activity. The nation's strict lockdown began on March 25, 2020 and continued until May 31, 2020. Economic activity rebounded in the fourth quarter of the year as new COVID-19 cases declined from their mid-September peak and as the government eased containment measures.

The Indian government expects the overall fiscal deficit to reach 9% of GDP in fiscal year 2021,¹⁴ substantially higher than past deficits, which have hovered below 4% of GDP since 2015. India introduced fiscal stimulus of roughly 2% of GDP in 2020. The stimulus targeted low-income households, particularly in rural areas, and the government used indirect fiscal measures to help ease the flow of credit to small businesses. The central bank also pursued measures to boost demand last year. The Reserve Bank of India (RBI) reduced its policy rate 115 basis points to 4.0% in August 2020. Measures intended to provide liquidity support totaled roughly 6% of GDP and a temporary loan repayment moratorium supported businesses and non-bank financial companies.

India's current account registered a surplus of 1.3% of GDP 2020, a marked departure from the consistent current account deficits recorded since 2004, as imports fell faster than exports reflecting India's weak domestic demand during the COVID-19 lockdown and historically low oil prices. Relatively resilient remittance inflows and steady services exports also contributed to the current account surplus in 2020.



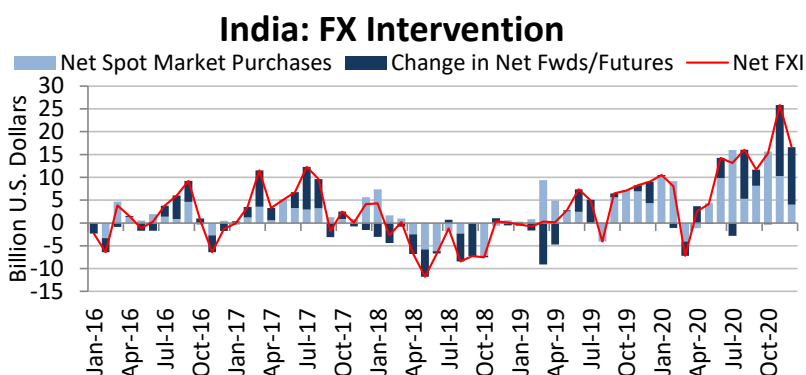
India's goods trade surplus with the United States was \$24 billion in 2020, broadly in line with its average level since 2014. India also ran an \$8 billion services trade surplus with the United States in 2020.

India has been exemplary in publishing its foreign exchange market intervention, publishing monthly spot purchases and sales and net forward activity with a two-month

¹⁴ End-March.

lag. The RBI states that the value of the rupee is broadly market-determined, with intervention used only to curb undue volatility in the exchange rate.

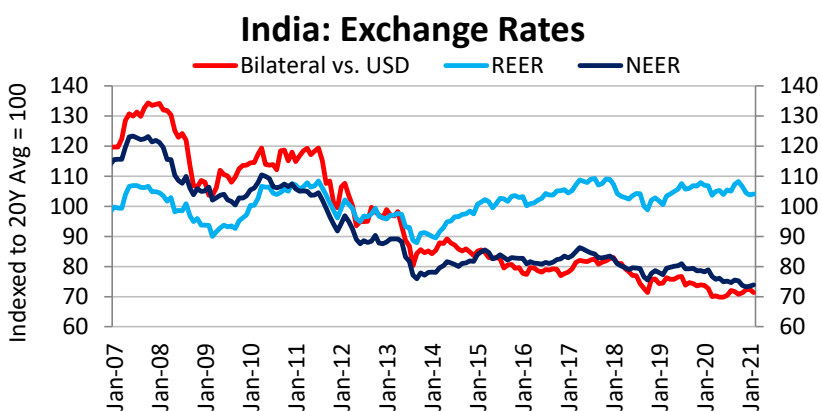
While the RBI frequently intervenes in both directions, the RBI purchased foreign exchange on net in 11 of the 12 months of 2020, with net intervention reaching \$131 billion, or 5.0% of GDP. Purchases slowed following the onset of the pandemic, when India experienced large capital outflows, and, in response, the RBI engaged in net sales in March 2020 as the rupee weakened. As portfolio inflows resumed and foreign direct investment remained strong during the second half of 2020, the RBI's net purchases accelerated.



Source: Reserve Bank of India

RBI purchases have led to a rapid rise in total reserves. As of December 2020, foreign exchange reserves totaled \$542 billion, equivalent to 21% of GDP and 219% of short-term external debt at remaining maturity.¹⁵ In the 2020 External Sector Report, the IMF judged that India's reserves were already adequate for precautionary purposes as of December 2019, as reserves at the time stood at 163% of the IMF's reserve adequacy metric. Given the rapid growth in reserves in 2020, it is likely that they remain above the top end of the IMF's threshold for reserve adequacy (150% of the IMF's metric).

Like most emerging market currencies, the rupee was buffeted in 2020 by substantial swings in global risk appetite and associated shifts in capital flows. After depreciating 6.0% against the dollar during the first half of 2020, the rupee partially recovered and ended the year 1.7% lower against the dollar. On a nominal and real effective basis, the rupee weakened 6.9% and 3.2%, respectively, over the four quarters through December 2020. In its 2020 External Sector Report, the IMF estimated that India's external position in 2019 was broadly in line with economic fundamentals and desirable policies.



Sources: FRB, Bank for International Settlements

¹⁵ Foreign exchange reserves were equivalent to 527% 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 September 2020.

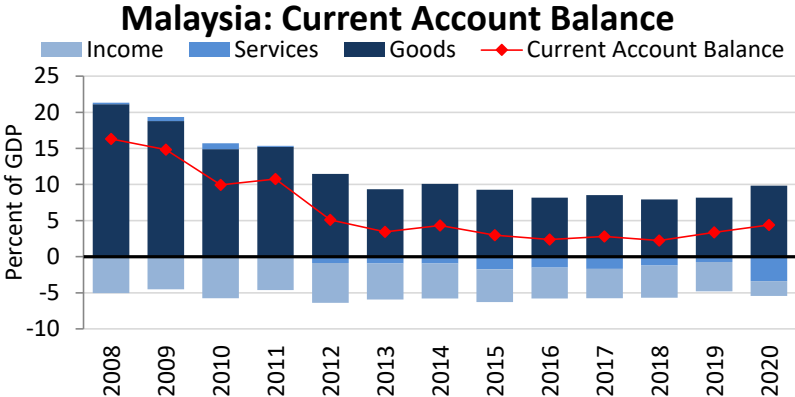
The authorities should allow the exchange rate to move to reflect economic fundamentals, limit foreign exchange intervention to circumstances of disorderly market conditions, and refrain from excessive reserve accumulation. As the economic recovery takes hold, the authorities should continue to pursue structural reforms that can help lift productivity and living standards, including greater openness to foreign financial flows and financial sector deepening, which can further support economic growth.

Malaysia

The Malaysian economy contracted 5.6% in 2020, seeing its worst recession since the Asian Financial Crisis. After a particularly sharp contraction in the second quarter, economic activity began to rebound in the second half of the year, supported by the resumption of non-essential business operations, a rebound in exports, and COVID-19 relief measures. While the economy is expected to continue its recovery in 2021, downside risks remain as the country continues to register elevated COVID-19 case numbers, prompting the authorities to reintroduce strict social distancing measures in January 2021. However, new cases counts have moderated since early February and Malaysia began its vaccination drive in February.

In addition to the substantial policy support provided last year to buffer the shock from the pandemic, the authorities announced approximately \$4 billion (1% of GDP) in COVID-19 programs as part of the 2021 budget. Key measures include cash transfers, wage subsidies and trainings, and support for the healthcare sector.

Malaysia has made substantial progress rebalancing its external sector over the past decade as savings rates declined gradually due to stronger consumption amid a strengthened labor market, rising household borrowing, and increased government transfers. However, imbalances have widened modestly over the last two years, with the current account surplus reaching 4.4% of GDP in 2020, its highest level since 2012. This partially reflected COVID-19 related shocks, including a substantial contraction in domestic demand, the decline of outward remittances, and a rebound in exports by the third quarter of 2020.

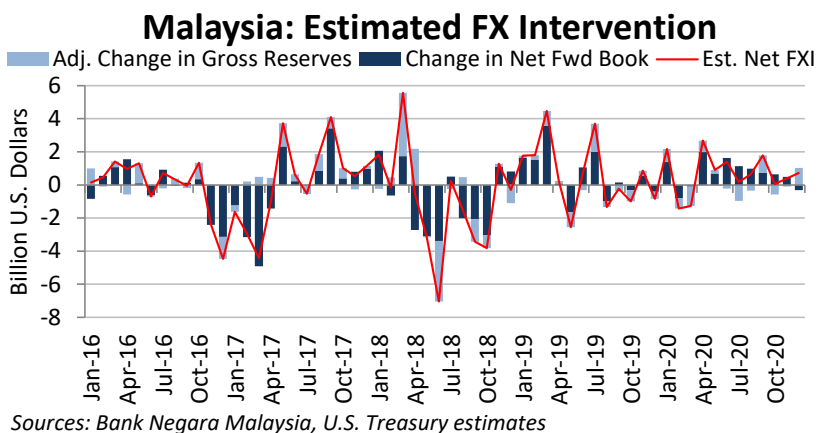


Source: Department of Statistics Malaysia

Malaysia’s bilateral goods trade surplus with the United States reached \$32 billion in 2020. Malaysia and the United States have strong supply chain linkages, and bilateral trade is driven by supply integration in key industries such as electrical machinery parts, nuclear

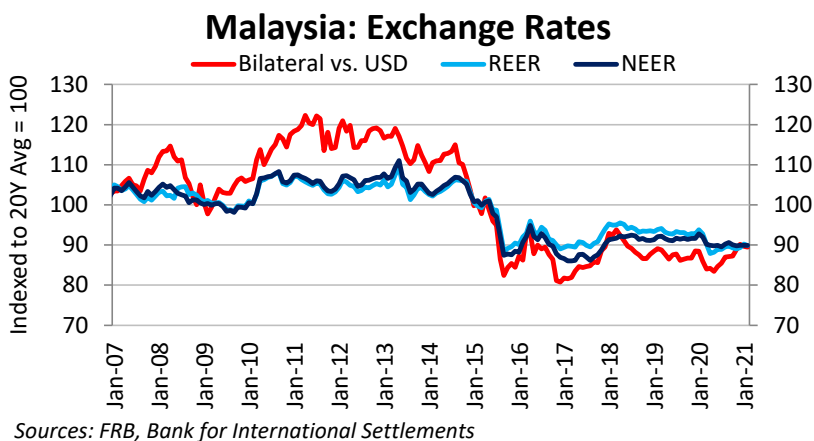
reactor and boiler parts, and optical and medical instruments. Malaysia engages in relatively limited bilateral services trade with the United States — about \$4 billion in 2020 — and has long run a modest services trade deficit with the United States, led by U.S. exports of tourism, financial services, and intellectual property. Malaysia’s services trade deficit with the U.S. has narrowed in the past three years, down to \$0.6 billion in 2020 from a peak of \$1.7 billion in 2017.

Malaysia does not publish foreign exchange intervention data, forcing Treasury staff to estimate the scale of Malaysia’s intervention. Treasury estimates Bank Negara Malaysia’s (BNM) net purchases of foreign exchange in 2020 amounted to \$2 billion, or 0.6% of GDP. BNM sold foreign exchange



on net in the first quarter of 2020 amid the significant global financial volatility sparked by the pandemic. BNM purchased foreign exchange on net over the subsequent three quarters, with most activity displaying through a rise in BNM’s net forward position. Foreign exchange reserves stood at around \$100 billion at end-2020, up 2.6% over the year, and are broadly adequate according to standard adequacy metrics, including that of the IMF.

Like most other emerging market currencies, the ringgit came under considerable pressure at the outset of the COVID-19 shock but recovered over the rest of 2020 as investor sentiment improved. On net, the ringgit appreciated 1.8% against the U.S. dollar in 2020, while depreciating 1.9% and 3.7% on a nominal and real effective basis, respectively.



The IMF has assessed the ringgit to be undervalued for over a decade, and its most recent assessment found the ringgit to be 8% undervalued in 2020.

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. Treasury urges the authorities to increase the transparency of foreign exchange intervention, in line with

many peers that have moved to public reporting on intervention in recent years. External rebalancing would be supported by upgrades to the social protection system and by measures to foster quality investments.

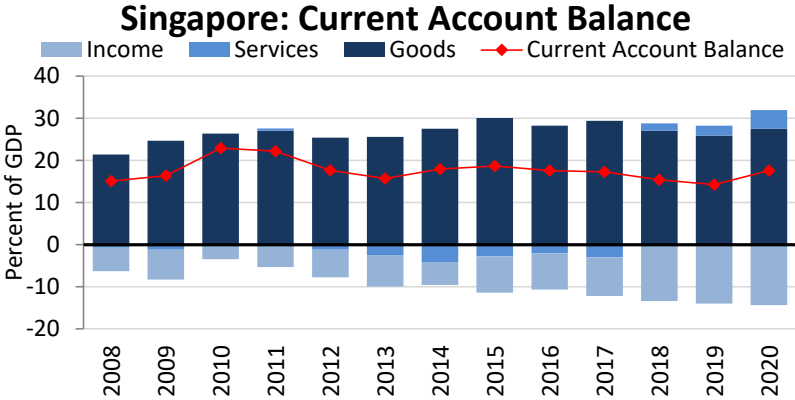
Singapore

The Singapore economy contracted sharply in 2020, with real output falling 5.4%, its largest contraction on record. Economic activity was weighed down by both demand- and supply-side shocks stemming from strict social distancing measures, a fall in domestic and external demand, and supply chain disruptions. These factors, coupled with low oil prices and a weak labor market, pushed headline and core inflation into negative territory for most of 2020. Singapore began its vaccination drive in December 2020 and is aiming to vaccinate all residents by the end of 2021.

In response to the COVID-19 outbreak, Singapore provided over \$70 billion in fiscal support in 2020, equivalent to approximately 20% of GDP. Fiscal measures aimed to alleviate the economic damage to households, low- and middle-income workers, and businesses, with a particular focus on maintaining employment, and other programs to support economic resilience. In the fiscal year 2021 budget, the authorities announced a new COVID-19 package worth \$8 billion (2% of GDP) to fund public health and safe reopening measures, along with support for workers and businesses.

While fiscal policy has been the authorities’ primary tool to respond to the economic effects of the pandemic, the Monetary Authority of Singapore (MAS) has maintained a loose monetary policy stance since March 2020, when MAS eased monetary policy by adopting a 0% annual rate of appreciation of its exchange rate policy band and reducing the midpoint of the band to the prevailing nominal effective exchange rate.

Singapore’s outsized current account surplus averaged 17% of GDP over the last decade and ticked up to 17.6% of GDP in 2020. The goods trade surplus has been above 25% of GDP since 2010 and rose to nearly 28% of GDP in 2020 as exports recovered more quickly than imports over the second half of 2020. Moreover, as outbound travel collapsed, the services trade surplus increased to 4.4% of GDP, its highest level in over two decades.

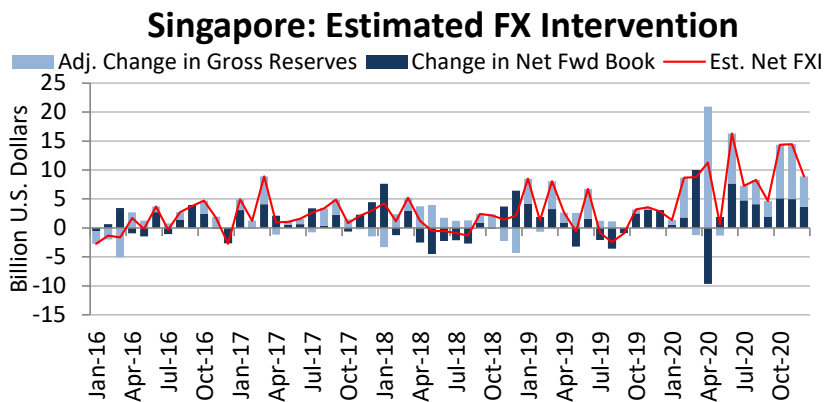


Sources: Monetary Authority of Singapore, Department of Statistics

Singapore’s bilateral goods trade balance with the United States turned to a surplus in 2020 for the first time in two decades, swinging from a \$5 billion deficit in 2019 to a \$4 billion surplus. Singapore’s exports to the United States ticked up in 2020, driven by a

large rise in gold and jewelry exports. Meanwhile, Singapore’s imports of U.S. aircraft, its largest category of imports from the United States, declined significantly. Singapore has long run a bilateral services deficit with the United States, which registered \$11.9 billion in 2020. Key U.S. services exports to Singapore include research and development, intellectual property, and professional and management services.

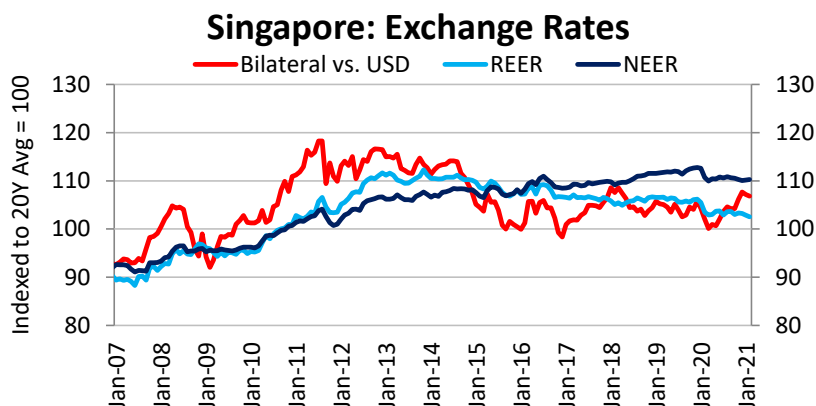
MAS uses the nominal effective exchange rate of the Singapore dollar (the S\$NEER) as its primary tool for monetary policy and executes its policy by purchasing and selling foreign currency in the foreign exchange market. In October 2020 and April 2021, MAS published data on intervention covering the first and second half of 2020 respectively, indicating total net purchases of \$96.5 billion in foreign currency in 2020, equivalent to 28.3% of GDP. While MAS’s intervention has been heavily weighted toward purchases since 2017—with Treasury estimating that annual net purchases of foreign exchange averaged 8% of GDP from 2017-2019—net purchases in 2020 were higher than Treasury’s estimates for any other year in the last two decades.



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

Official foreign exchange reserves held by MAS grew to \$362 billion (107% of GDP) at end-2020, the highest level on record. In addition to the reserves held by MAS, Singapore’s government also has access to official foreign assets managed by the sovereign wealth and investment funds GIC and Temasek. The IMF estimated that, as of 2019, external assets held by GIC and Temasek amounted to at least 70% of GDP.

Amid the COVID-19 shock, the Singapore dollar, like most emerging market currencies, came under pressure in the first quarter of 2020, but generally recovered over the remainder of the year. On net, the Singapore dollar appreciated 1.8% against the U.S. dollar over 2020, while weakening 2.4% and 2.8% on a nominal and real effective basis, respectively.



Sources: FRB, Bank for International Settlements

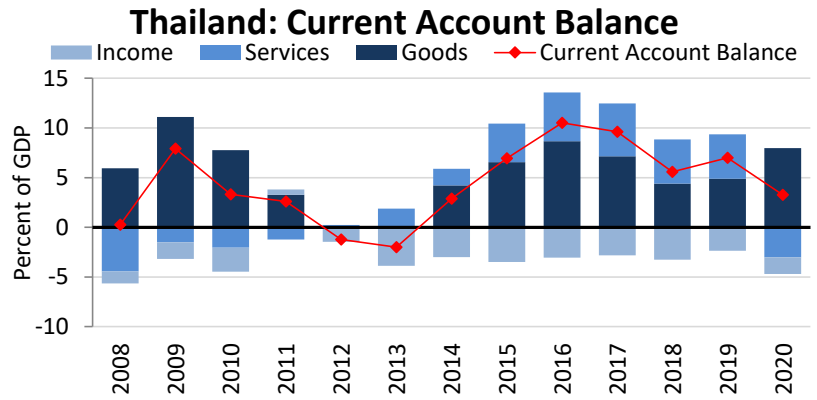
The IMF in recent years has consistently assessed Singapore's external position to be substantially stronger than warranted by economic fundamentals and desirable policies, while acknowledging that Singapore's position as a global trading and financial center present challenges for assessing the external position and the degree to which real exchange rates may affect external adjustment. For 2019, the IMF assessed the real effective exchange rate to be undervalued by 8% with a range of 2 to 14%. The IMF cited several factors that boost saving, including a track record of fiscal surpluses and high mandatory contribution rates for pensions, as key drivers of the strong external position.

In Singapore's monetary policy regime, the primary policy role for the exchange rate has been to achieve domestic (internal) balance, but at the same time external imbalances have remained large and persistent. Given the massive size of net external official assets, the government has substantial space to loosen fiscal policy on a structural basis. A sustained expansion in the provision of social services in areas like healthcare, unemployment insurance, and retirement would help reduce incentives for private saving and support stronger consumption. Reductions in the high rates for mandatory contribution to the government pension scheme and appropriately structured tax policies that support consumption 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

The COVID-19 pandemic has severely impacted the Thai economy. Output contracted by 6.1% in 2020, led by the collapse of the travel and tourism sector. Local transmission of the virus was extremely low until mid-December 2020, when an acceleration in community spread prompted tighter domestic activity restrictions. The authorities continue to implement a package of relief measures combining fiscal stimulus, liquidity support, and loan guarantees totaling 19% of GDP. Vaccine distribution began in late February 2021, though the government does not anticipate being able to inoculate all eligible residents this year. While domestic output should continue to recover this year, buoyed by the global recovery and the domestic vaccine rollout, a marked increase in domestic COVID-19 cases or a slower than expected recovery in tourism represent significant downside risks.

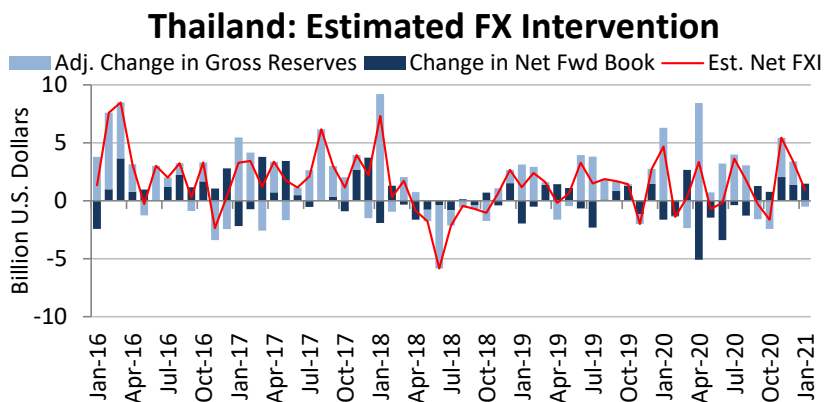
In 2020, Thailand's current account surplus narrowed to 3.3% of GDP from 7.0% of GDP in the previous year. The moderation of the current account surplus is primarily the result of the pandemic-related collapse in tourism receipts, which caused the services balance to swing from a 4.4% of GDP surplus in 2019 to a 3.0% of GDP deficit in 2020. Significant import compression, along with a surge in gold exports and prices, resulted in Thailand maintaining a sizeable goods trade surplus of 8% of GDP in 2020 (the widest annual surplus since 2016) despite a rapid drop in external demand. Exports contracted by 7% year-over-year, but imports fell by 13% as domestic demand collapsed and oil prices fell sharply.



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

Thailand's bilateral goods trade surplus with the United States reached \$26 billion in 2020, up from \$20 billion in 2019. Thailand's exports to the United States increased by 12% last year, driven by the strong growth of electronic and electric equipment exports. Thailand's imports from the United States fell 16% last year. This drop was largely attributable to lower Thai imports of oil but falling imports of U.S.-made capital goods also contributed to the decline.

Thailand intervenes frequently in foreign exchange markets in both directions, but intervention activity has skewed heavily toward purchases of foreign currency since 2016. Thailand does not publish data on its foreign exchange intervention. The Thai authorities have credibly conveyed to Treasury that



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

net purchases of foreign exchange were 1.9% of GDP last year. This figure is equivalent to about \$9.6 billion. The authorities intervened in both directions in 2020, including periods where they sold foreign exchange amid the market volatility sparked by the pandemic in the first half of the year. Nevertheless, net purchases of foreign exchange were firmly positive on an annual basis, picking up in the second half of the year. Net purchases were particularly elevated in November and December, when the baht was appreciating rapidly against the dollar and Thai authorities expressed concern publicly about the effect of baht appreciation on the Thai economy.

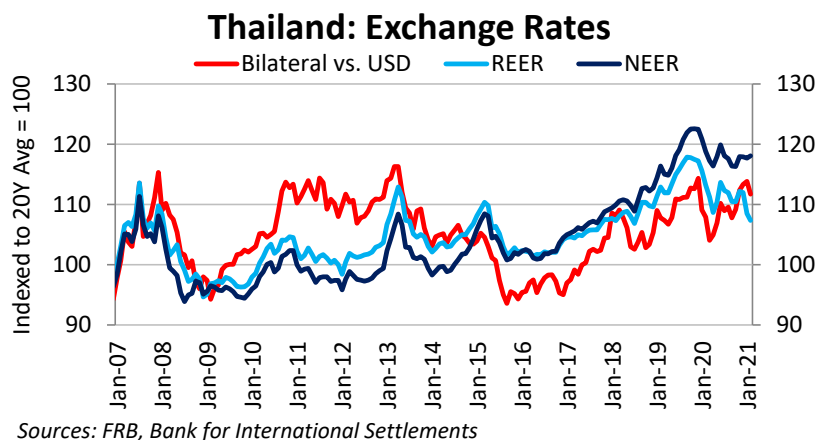
Like most emerging market currencies, the baht depreciated rapidly in the first quarter of 2020 but subsequently retraced most of this decline, ending the year 0.9% weaker against the dollar and 4.5% weaker on a real effective basis. Thailand has taken several steps in recent years to limit short-term capital inflows and encourage capital outflows.

Many recent changes have fallen into the latter category and have resulted in a welcome easing of limits on capital outflows. However, some recent changes have effectively tightened inflow restrictions, making it more difficult for nonresidents to hold baht and baht-denominated assets.

In 2020, gross foreign exchange reserves grew by \$31 billion to reach \$246 billion, equal to 49% of GDP and 329% of short-term external debt.¹⁶ Reserves remain more than adequate, with net foreign exchange reserves at the end of 2019 standing at 221% of the IMF's adequacy metric.

The IMF has consistently assessed since 2015 that Thailand's external position is stronger than warranted by economic fundamentals and desirable policies. The IMF's most recent assessment estimated the baht was undervalued by 9.5% in 2019 on a real effective basis. Persistent, one-sided foreign exchange purchases, along with restrictions on capital inflows, have limited appreciation and contributed to sustained external imbalances. External imbalances have also reflected a relatively tight fiscal stance and an under-developed social safety net, which weigh on domestic demand and contribute to elevated precautionary saving. Chronically low fixed investment has also contributed to external surpluses.

Thai authorities should allow the exchange rate to move flexibly in line with economic fundamentals, avoid sustained, one-sided intervention, and cease excessive reserve accumulation. Moreover, the authorities should refrain from the use of capital flow measures to manage exchange rate pressures or to target exchange rate levels. Thailand should also pursue fiscal and structural policies that would reduce Thailand's external imbalances by encouraging private investment, reducing precautionary savings, and promoting greater openness in domestically oriented sectors, which also would help to support domestic growth.

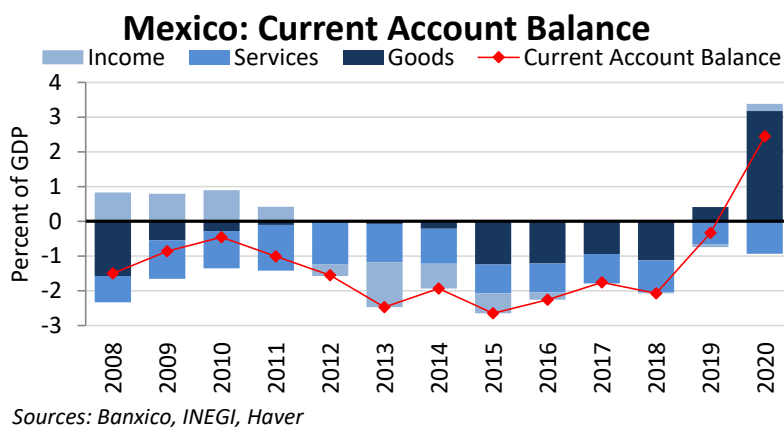


¹⁶ Based on Bank of Thailand data for short-term external debt as of end-2020.

Mexico

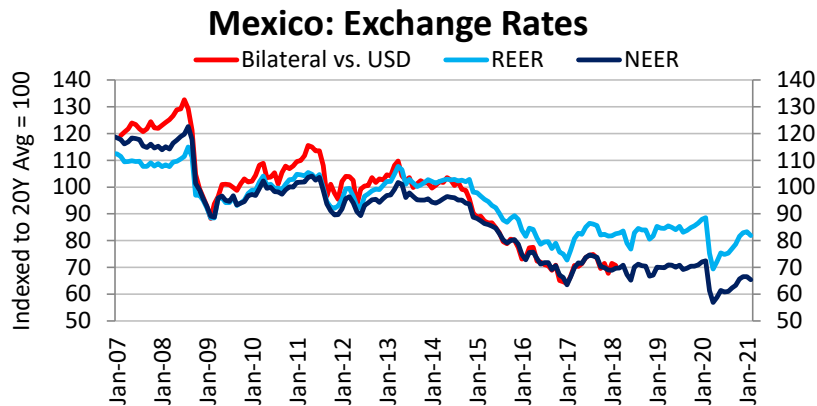
Mexico fell into recession well in advance of the COVID-19 pandemic, with the economy contracting 0.1% in 2019. As the pandemic took hold, Mexico's economic downturn accelerated and GDP fell by 16.8% quarter-over-quarter in the second quarter of 2020, contracting by 8.2% over the full year. Mexico's tepid recovery since the second quarter has relied on external rather than domestic demand, as austere fiscal policy continues to weigh on domestic activity. The IMF estimates that Mexico's fiscal support package totaled less than 1% of GDP, the lowest amount of fiscal support among the G20 and regional peers. This austerity came despite modest public debt (63% of GDP) that is the median among emerging market G20 members. Meanwhile, Mexico's monetary policy response has been constrained by sticky core inflation that has remained at the upper end of Banxico's inflation target band of $3\pm 1\%$

Mexico's current account swung into historic surplus in 2020. Relatively strong external demand from the United States cushioned exports while fiscal austerity in Mexico left the economy more exposed to the economic effects of the pandemic, leading to collapsing domestic demand resulting in import



compression. Prior to 2020, Mexico had not had a current account surplus since 1987; at 2.4% of GDP, Mexico's surplus was more than 4 percentage points above the 2015-2019 average. Mexico's goods trade surplus was 3.2% of GDP, up from 0.4% in 2019. Notably, the country's bilateral goods trade surplus with the United States in 2020 was \$113 billion (the second highest after China, at \$311 billion), up 11% from 2019. A record inflow of remittances in 2020, increasing 11% to exceed \$40 billion, also contributed 3.7% of GDP to the current account surplus. Once pandemic conditions ease, economic normalization is likely to result in some recovery of domestic demand — and therefore imports — delivering a degree of rebalancing to the current account. Nonetheless, hard hit labor markets and a deteriorating investment climate will likely weigh on domestic sources of growth, keeping the current account above its long-term average.

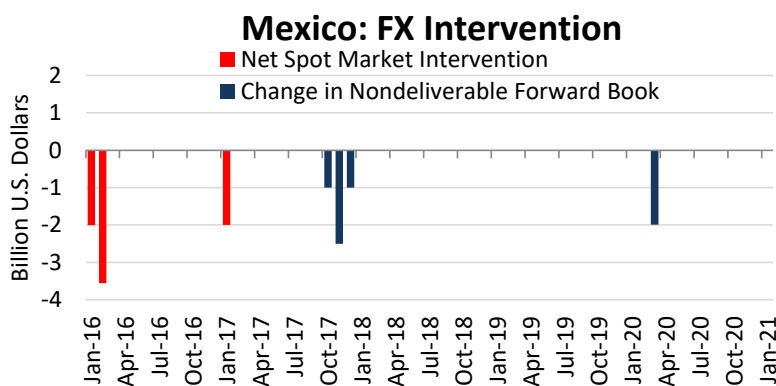
The Mexican peso is a freely traded, global currency that responds flexibly to shifts in global sentiment. Early in the COVID-19 pandemic, the peso depreciated by as much as 25% against the dollar before recovering to end-2020 just 5.2% weaker against the dollar, as global risk aversion subsided in the second half of the year. On a real effective basis, the peso



Sources: FRB, Bank for International Settlements

weakened 4.2% in 2020 and has largely tracked Mexico’s terms of trade over the past 15 years. In its latest External Sector Report, the IMF assessed that Mexico’s external position in 2019 was broadly in line with economic fundamentals and desirable policies. Mexico has intervened in foreign exchange markets only minimally since 2017. Notably, almost all of its interventions over the past decade have been foreign exchange sales that have supported (strengthened) the currency. Mexico is very open to capital flows, has refrained from capital flow management measures, and has a highly liquid currency. As such, the peso acts as an important shock absorber for Mexico. Additionally, as of end-2020, Mexico has over \$184 billion in foreign exchange reserves, together with \$133 billion in available swap and credit lines,¹⁷ to add to its external buffers. In April 2020, Mexico drew on \$6.6 billion of its \$60 billion swap line with the Federal Reserve and, as of end-March 2021, has repaid \$6.2 billion. In its latest External Sector Assessment, the IMF assessed Mexico’s 2019 foreign exchange reserves levels to be adequate across a range of metrics.

Mexico is timely in publishing its foreign exchange market intervention, publishing 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.¹⁸ The last time Banxico intervened in the spot



Sources: Banxico, U.S. Treasury estimates

¹⁷ These comprise a \$61 billion IMF Flexible Credit Line, a \$60 billion temporary (pandemic) swap line with the Federal Reserve, 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.

¹⁸ See “Reserves Management and FX Intervention in Mexico” by Banxico Deputy Governor Javier Guzmán Calafell. <https://www.banxico.org.mx/publicaciones-y-prensa/discursos/%7BEA88E47F-8EC7-14F7-9B19-B4649E0EE3E6%7D.pdf>.

market was in January 2017, when Banxico sold \$2 billion in foreign exchange on the month to dampen heightened volatility and support the peso. Since then, Banxico has intervened minimally in forwards markets to defend the peso, most recently selling \$2 billion in March 2020 during heightened financial market pressures. The last time the central bank purchased foreign exchange from the private sector was in October 2011, where net foreign exchange purchases during the year totaled 0.4% of GDP (\$4.6 billion). The country's prudent, inflation-targeting monetary policy and flexible exchange rate regime remain crucial pillars of the macroeconomic framework for Mexico's resilience to shocks.

Looking forward, although the IMF expects GDP growth to recover in 2021 to 5.0%, tightening mobility restrictions in the first quarter amid a resurgence of COVID-19 infections and deaths may continue to weigh on Mexico's recovery. Continued fiscal austerity and a deteriorating domestic investment climate also will likely weigh on domestic demand and limit external rebalancing. The absence of strong counter-cyclical response to the pandemic arguably did not offset a sharp increase in poverty during the pandemic, which the authorities preliminarily estimated to have risen by 7-8% (9-10 million people), with a consequent decrease in consumption that may prove durable. The IMF has cautioned that per capita income will remain below pre-pandemic levels until the latter half of the decade.

Under-investment by the private sector threatens to hamper recovery and reduce long-term growth potential. Mexico's costly support to increase the market dominance of loss-making state firms drains public resources for essential spending and marginalizes investment in renewable energy that would reduce user costs and free fiscal space for more productive investment and social protection. Insofar as net energy exports from the United States to Mexico may decline as a result of Mexico's policy objective of greater fossil fuel independence, Mexico's trade surplus with the United States may increase.

Enhanced Analysis Under the 2015 Act

Taiwan

Recent Developments

Taiwan's swift public health response to the COVID-19 pandemic helped it contain its domestic outbreak to just 985 confirmed infections and 10 deaths as of March 14, 2021 (out of a population of nearly 24 million). The authorities were able to avoid a national lockdown by relying heavily on preventative measures (e.g., building up a stockpile of masks for widespread domestic use, social distancing, rigorous application of quarantines, and strict border controls) as well as aggressive testing, contact tracing, and nearly universal compliance with quarantines that helped prevent widespread community transmission.

The authorities approved cumulative fiscal measures in 2020 totaling \$44.5 billion (6.6% of GDP), which included measures to support public health, coupons to support

consumption, and targeted support for small and medium enterprises (SMEs). The scale of Taiwan's fiscal relief package is notable given that the authorities historically have been reticent to use fiscal policy to support growth.

Taiwan's central bank implemented several measures to ease monetary conditions and stabilize financial markets, including lowering the discount rate 25 basis points to 1.125% in March 2020, a record low and the first rate cut since 2016. The central bank has held rates steady since then, citing continued low inflation and monetary and fiscal easing by many of its trading partners. The central bank also introduced in April 2020 a special accommodation facility to provide support to SMEs at below market rates for one year, and both increased its size and extended its duration to provide a total of TWD300 billion (\$10.7 billion, 1.6% of GDP) through June 2021. A 2019 measure designed to encourage Taiwanese companies to bring accumulated offshore FX holdings back on shore to invest locally as foreign direct investment helped mitigate some capital outflow pressures in the first half of 2020 while the central bank also deployed funds from the National Stabilization Fund to support the equity market in the first half of 2020. Amid concerns that the low interest rate environment and foreign capital repatriation from some Taiwanese firms was fueling excessive inflows into the property market, the central bank implemented prudential restrictions on mortgage loans in December 2020.

Real GDP grew a relatively strong 3.1% year-over-year in 2020. Surging global demand for Taiwan's exports of semiconductors and other high-tech equipment helped lift real GDP growth from external shocks in the second quarter of 2020, with real GDP growth falling from 2.5% year-on-year in the first quarter of 2020 to 0.4% year-on-year in the second quarter before recovering to 4.3% and 5.1% in the third and fourth quarters, respectively, on a year-on-year basis.

Despite Taiwan's success in controlling the pandemic, domestic demand remained weak and private consumption failed to recover fully from a significant contraction in the second quarter, ultimately falling by 0.9% in 2020 from one year earlier. The authorities recently increased their real GDP forecast for 2021 to 4.6% from 3.8% previously, citing expectations of continued strong export growth, particularly among technology related firms, though global economic uncertainties around the pandemic and oil prices pose downside risks.

The TWD appreciated 6.5% against the dollar in 2020, 4.8% of which occurred in the second half of the year. However, in the second half of the year, the TWD depreciated modestly on a nominal effective basis (0.6%) and on a real effective basis (0.9%). For the full year, the TWD appreciated 2.5% on a nominal effective basis while also appreciating 2.2% in 2020 on a real effective basis. The Taiwanese authorities have publicly disclosed net purchases of foreign exchange in 2020 of \$39.1 billion, which is equivalent to 5.8% of GDP. The majority of these purchases occurred in the second half of 2020 (\$35.2 billion or 5.3% of GDP), with particularly large interventions in November and December, according to Treasury estimates.

Enhanced Analysis

A series of liberalizing economic reforms, an active industrial policy supported by a high national savings rate, and high levels of educational attainment enabled Taiwan to experience rapid industrialization between the mid-1960s and late-1980s. During this period, Taiwan became a major manufacturing center, and export growth averaged 20-30% per year while real GDP growth averaged 10% annually.

As local manufacturers moved up the value chain, Taiwan continued to post high, albeit declining, GDP growth rates in the ensuing decades with the only full year contractions coming during the global recessions of 2001 and 2009. Taiwan's skilled labor force, well-educated population, and leading role in global semiconductor production has helped it occupy a key position in global technology supply chains and attract significant foreign direct investment inflows.

In the years following its World Trade Organization (WTO) accession in 2002, Taiwan's exports to China grew rapidly as Taiwan-based firms shifted manufacturing operations to China amid rising labor costs in Taiwan and these firms became more integrated into regional supply chains, especially in IT products. Exports to China and Hong Kong typically account for more than 40% of Taiwan's total exports, and fluctuations in Taiwan's industrial production closely track exports to China. Taiwan's GDP growth remains highly dependent on exports which account for about 77% of GDP.

Taiwan has maintained a tightly managed floating exchange rate regime since the central bank assumed management of Taiwan's foreign exchange market in 1979. Initially, Taiwan employed extensive use of foreign exchange and capital controls to preserve domestic savings, restrict foreign ownership in certain sectors, and reduce the financial stability risks associated with international capital flows. Taiwan's gradual liberalization of these capital controls, beginning in the 1990s, coincided with Taiwan's drive to join the WTO. However, even after substantially liberalizing capital controls, Taiwan continued to actively use foreign exchange purchases by the central bank to keep the exchange rate artificially undervalued. This not only supported continued strong export growth but also combatted domestic price weakness in times of deflation such as the early 2000s. Moreover, several regulatory measures remain, and certain foreign exchange transactions require approvals, such as for remittances above set thresholds and repatriation of some investment capital and profits. Taiwanese authorities also employ other measures such as restrictions on onshore foreign exchange hedging and limits on U.S. dollar borrowing by local firms, as well as informal guidance to firms to restrict selling U.S. dollars during periods of TWD appreciation, according to external analysts. Financial regulatory measures, such as ceilings on life insurers' exposure to foreign exchange risk, impact the pace of capital outflows taking place on private balance sheets. Overall, the current restrictions tend to be geared toward preventing speculative inflows but also serve to somewhat insulate the TWD from rapid adjustment to market dynamics.

Decades of active exchange rate management, direct intervention in foreign exchange markets that have largely weakened the TWD, and the use of off-balance sheet instruments

such as foreign exchange swaps, have thus resulted in a structurally undervalued TWD exchange rate that failed to adequately adjust in the face of Taiwan's persistently large current account surpluses. At the same time, Taiwan's geopolitical isolation, its lack of IMF membership, and its dependence on imported energy and external demand more broadly argued for a larger than normal external buffer.

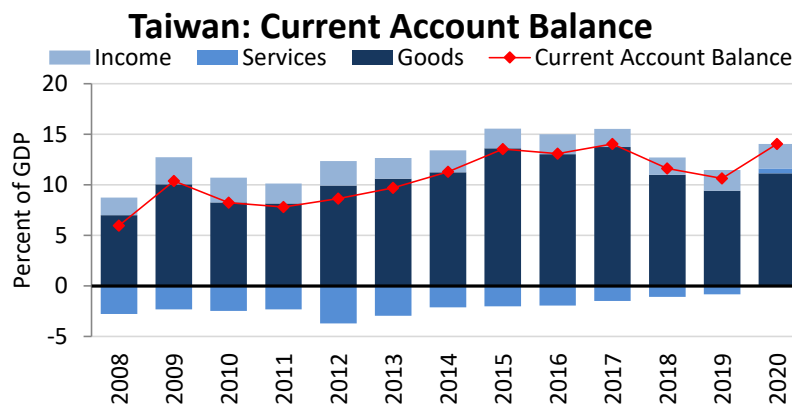
Taiwan has historically been reluctant to use its fiscal policy to stimulate growth and has a legislatively mandated limit on fiscal borrowing: central government debt (31% of GDP as of 2019) plus local government debt (6% of GDP as of 2019) cannot exceed 50% of the average general government GDP of the previous three years. This fiscal restraint has enabled Taiwan to maintain low levels of public debt, at 37% of GDP in 2019, down from a multi-decade peak of 48% of GDP in 2012. This relative fiscal conservatism has also been a factor in Taiwan's consistently high national savings rates, including high corporate and household savings.

Treasury estimates that Taiwan's household savings have remained relatively flat over the past decade at roughly 10% of GDP while corporate savings has increased to roughly 24% of GDP in 2019 from 20% of GDP in 2010. Taiwan has struggled to increase household consumption in recent years, with per capita annual consumption growth averaging in the low single digits. In 2020, per capita consumption contracted 2.7% on the back of pandemic related uncertainty and weak sentiment. Overall, the national savings rate has averaged 34% of GDP since 2010, while the level of domestic investment has averaged around 22% of GDP over the same period.

This excess domestic savings is mirrored by Taiwan's correspondingly large current account surpluses, which have averaged more than 11% of GDP since 2010. The primary driver of Taiwan's widening current account surplus has been Taiwan's growing trade surplus, which grew by nearly 90% between 2007 and 2015, widening from \$38 billion (9% of GDP) to \$73 billion (14% of GDP) over that period.

Taiwan's external surpluses widened further in 2020 as export growth picked up in the second half of the year and import growth remained subdued. Taiwan's current account balance stood at 14.1% of GDP in 2020 – the highest since 1987 and an increase from 10.7% of GDP in 2019. Exports of electronic goods have remained resilient during the pandemic as external demand for computing equipment partially offset the decline in non-electronic goods exports, and overall goods exports increased 4.3% in 2020 to \$345 billion. Goods imports declined 1.1% over the course of the year despite an uptick in the fourth quarter in part due to tepid domestic demand and lower oil prices. Taiwan's services balance also shifted from deficit to surplus (\$3.3 billion) for the first time since data have been published, spanning nearly 40 years, mainly driven by a collapse in outbound tourism.

Taiwan has run a consistent bilateral goods surplus with the United States since at least the mid-1970s with this surplus expanding significantly over the past decade. On a trailing twelve-month basis, Taiwan's goods surplus with the United States first passed the \$20 billion threshold for inclusion on the Monitoring List in August 2019.



Sources: Taiwan central bank, Haver

Taiwan's goods trade surplus with the United States expanded sharply in 2020 to \$30 billion, growing by \$7 billion compared to a year prior, driven by a \$6.2 billion increase in Taiwan's goods exports and an \$0.8 billion contraction in Taiwan's goods imports. Increased exports of semiconductors, telecommunications, and other work-from-home related equipment drove the increase in Taiwan's exports to the United States. Taiwan's exports of such technology goods to the United States totaled \$10.3 billion in 2020, accounting for roughly 17% of Taiwan's total goods exports to the United States. Taiwan's imports of U.S. goods declined 6.5% year-on-year to \$30.5 billion in 2020, driven by a contraction in Taiwanese domestic demand and lower oil prices.

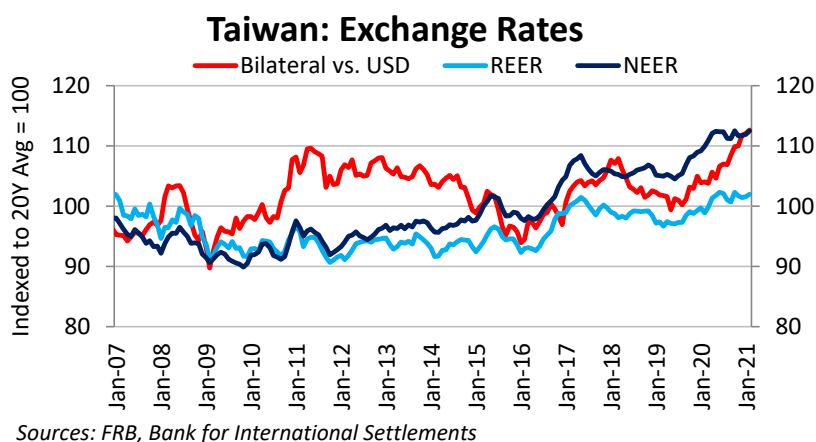
Taiwan's persistently large current account surpluses have been roughly offset in recent years by large portfolio outflows. Taiwan's asset management industry is the largest in the world relative to GDP, and life insurance assets have driven most of its growth, with assets under management growing from \$844 billion in 2007 to \$1.1 trillion in 2020 (166% of 2020 GDP). From 2007 through 2020, portfolio outflows from domestic residents, primarily the life insurance sector, totaled \$645 billion, which offset more than 80% of the \$783 billion in cumulative current account surpluses accrued during that time period. These outflows from the life insurance sector were thus able to offset some of the fundamental pressures for TWD appreciation generated by Taiwan's large external surpluses. The accumulation of an increasingly large net foreign asset position has also brought substantial prudential risks for the life insurance sector. Life insurers hedged some of their growth in foreign assets via the local banking sector while the central bank provided foreign exchange liquidity to local banks through the foreign exchange swap market. This also enabled the central bank to effectively sterilize some of its foreign exchange intervention. In 2020, outflows from domestic residents totaled \$36 billion, which offset less than 40% of Taiwan's 2020 current account surplus of \$94 billion.

Net portfolio outflows in 2020 totaled \$58.5 billion, an increase from outflows of \$46.4 billion in 2019. The bulk of net portfolio outflows (\$22 billion) occurred in the first quarter of 2020 as foreign investors withdrew \$16.3 billion from the Taiwanese equity market in conjunction with a broader global reduction in risk appetite, while net outflows moderated in subsequent quarters. Notably, the withdrawal of foreign capital largely reversed in the fourth quarter as foreign investors increased their holdings of Taiwanese securities by \$4.4

billion, mostly in equities. Government measures such as an initiative introduced in 2019 to encourage Taiwanese companies to repatriate offshore foreign exchange holdings back onshore appear to have partially mitigated Taiwan’s capital outflows over the course of 2020. Taiwan’s insurance firms, which have historically been a source of large financial outflows due to their demand for higher yielding overseas corporate bonds, reduced their pace of overseas asset accumulation in 2020.

The reduction in portfolio outflow pressures, combined with a surging trade surplus in the second half of 2020, exerted appreciation pressures on the TWD. This recent appreciation comes on the back of several years of gradual exchange rate adjustment. The TWD appreciated 17% against the dollar between end-2015 and end-2020 while the TWD also appreciated 13% on a nominal effective basis over the same period. On a real effective basis, the TWD appreciated 8% over the same five-year period. This places the real effective exchange rate roughly where it was in early 2007, suggesting scope for further adjustment in the TWD remains.

The IMF does not currently publish a valuation assessment of the TWD. External analysts assessed in 2018 that the TWD was undervalued by as much as 21%, an assessment that is consistent with a sustained, large external surplus, and relatively limited adjustment of the real exchange rate over time.¹⁹ Unlike IMF assessments of external positions, these estimates do not take into account a comprehensive set of economic fundamentals or the effects of macroeconomic policies on Taiwan’s exchange rate valuation.



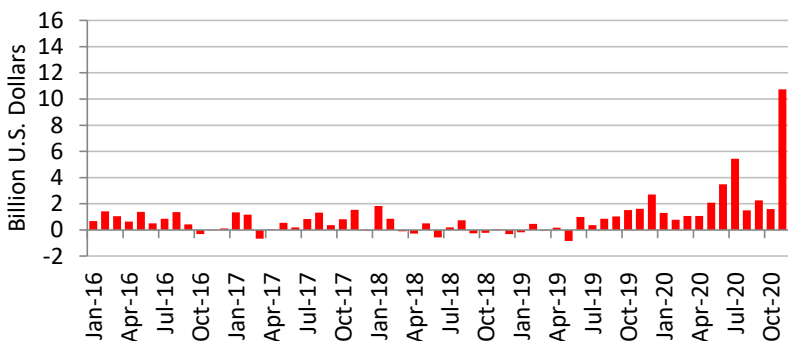
Taiwan publicly disclosed net foreign exchange purchases totaling \$3.9 billion (0.6% of GDP) over the first half of 2020 and \$35.2 billion (5.3% of GDP) over the second half of 2020.²⁰ This is broadly consistent with Treasury staff estimates that Taiwan’s central bank made net foreign exchange purchases of \$39.5 billion in 2020 (equivalent to 5.9% of GDP) after adjusting for changes in interest income and a \$6.8 billion decline in Taiwan’s outstanding foreign exchange swaps position (illustrated in the chart below). Taiwan has accumulated abundant foreign exchange reserves, totaling \$530 billion (79% of GDP) as of

¹⁹ “Estimates of Fundamental Equilibrium Exchange Rates,” William R. Cline, Economic International Inc., November 2018.

²⁰ Treasury’s estimates are more frequent and cover activity in the spot market as well as in the central bank’s forward position.

December 2020. Treasury estimates that the bulk of Taiwan's net foreign exchange purchases occurred in November and December 2020 (\$25.7 billion or 3.8% of GDP) when public statements by central bank officials frequently cited the effect of large portfolio inflows into the Taiwanese stock market on the exchange rate and potential financial stability risks associated with such inflows.

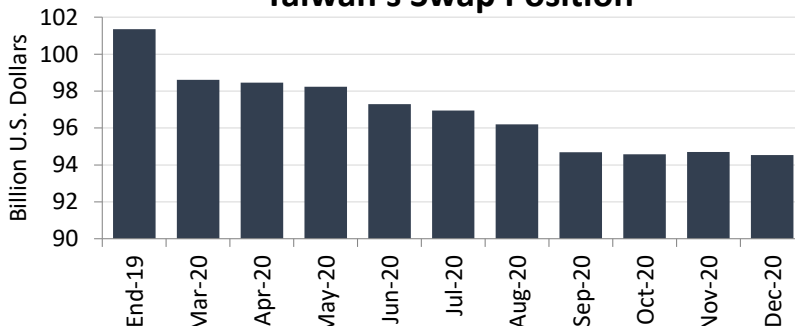
Taiwan: Estimated FX Intervention



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

Treasury urges the authorities to limit foreign exchange intervention to only exceptional circumstances of disorderly market conditions and to avoid asymmetrical intervention to resist appreciation in line with economic fundamentals. Further appreciation in line with economic fundamentals would also help reduce

Taiwan's Swap Position*



*Swap position includes non-TWD swap positions, which were subsequently unwound within a 12-month period.

Source: Taiwan central bank

Taiwan's large and durable external surpluses. Treasury encourages the Taiwanese authorities to build on last year's progress in increasing transparency and take further action, particularly with respect to fully reporting foreign exchange reserves data in the widely accepted format of the IMF's Special Data Dissemination Standard.

More broadly, the authorities should consider policies that support a durable reduction in the gap between Taiwan's savings rate which, at 39% of GDP, is among the highest in the world, and its investment rate (22% of GDP). This should include measures to both lower savings and raise investment. Specifically, the authorities should consider fiscal policies to boost consumption, including extending some fiscal measures designed to support household consumption such as the current vouchers program. More robust fiscal support for Taiwan's social safety net could also help lower savings and expand care for the elderly as Taiwan adjusts to coming demographic shifts. More broadly, efforts to diversify growth drivers away from exports and toward consumption and services would reduce the incentives to maintain an undervalued exchange rate and bolster Taiwan's resilience to external shocks.

Vietnam

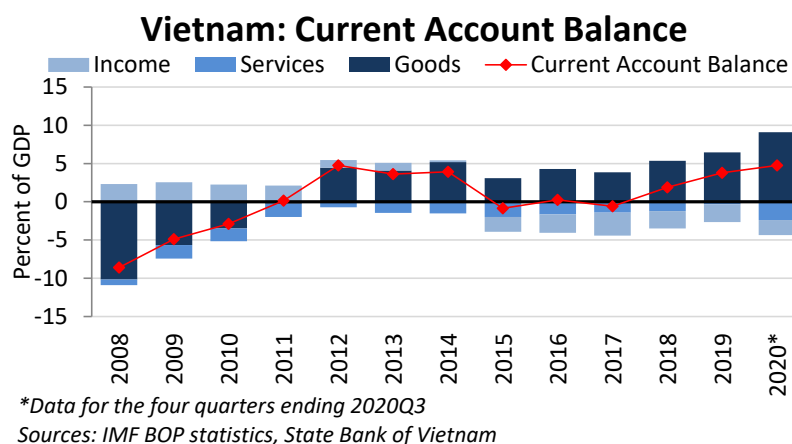
Enhanced Analysis and Engagement

Treasury conducted enhanced analysis of Vietnam in its December 2020 FX Report.²¹ A summary of recent economic developments is provided below, along with an update on Treasury's ongoing enhanced engagement with the Vietnamese authorities.

Vietnam has not been as hard hit by the COVID-19 pandemic as many peers, reflecting in part the success of the authorities' swift containment measures. Vietnam's GDP growth rate in 2020 was a relatively resilient 2.9%. As of late March 2021, Vietnam had recorded approximately 2,600 cases and less than 50 deaths. The country's COVID-19-related fiscal relief was relatively small compared to peers. Over the course of 2020, the Vietnamese authorities enacted a range of fiscal measures totaling about 4.1% of GDP in response to the COVID-19 pandemic. The measures included tax deferrals, exemptions, and reductions, cash transfers, and additional health spending. Budget execution on relief measures lagged somewhat, however, with the IMF estimating that delivered fiscal relief totaled 40% of planned measures through end-November 2020. The IMF projects 2021 GDP growth to accelerate to 6.5% as the normalization of economic activity continues.

In 2020, according to preliminary headline current account figures provided by the authorities to Treasury, Vietnam ran a current account surplus of 3.7% of GDP, slightly narrowing from 3.8% of GDP in 2019.²² The main driver of the growing current account surplus continues to be Vietnam's goods trade surplus, which increased to \$20 billion in

2020 from \$10 billion in 2019.²³ While global trade contracted sharply in the first half of 2020 due to the COVID-19 pandemic, Vietnam's exports bounced back strongly in the second half of the year, pushing goods exports in 2020 up 7% over 2019. Meanwhile, Vietnam's goods imports rose 3.7% year-over-year, as import demand staged a strong



²¹ 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 (Dec. 2020). Pages 48-55. <https://home.treasury.gov/system/files/206/December-2020-FX-Report-FINAL.pdf>

²² Vietnam is in the process of revising its GDP figures, resulting in significant revisions to GDP levels. However, quarterly revised figures are not available. In this Report, we estimate a revised series of quarterly GDP based on the degree of revisions to the annual figures used when calculating current account balances and foreign exchange intervention as a share of GDP.

²³ Complete BOP data with individual components for the fourth quarter of 2020 were not publicly available as of this Report's release. The goods trade data cited in this paragraph is reported monthly by Vietnam's General Statistics Office and is not identical to the BOP data.

recovery in the few months of 2020. Vietnam's successful, dynamic foreign-invested enterprise (FIE) sector continues to be the key driver of its growing trade and current account surpluses over the past five years.

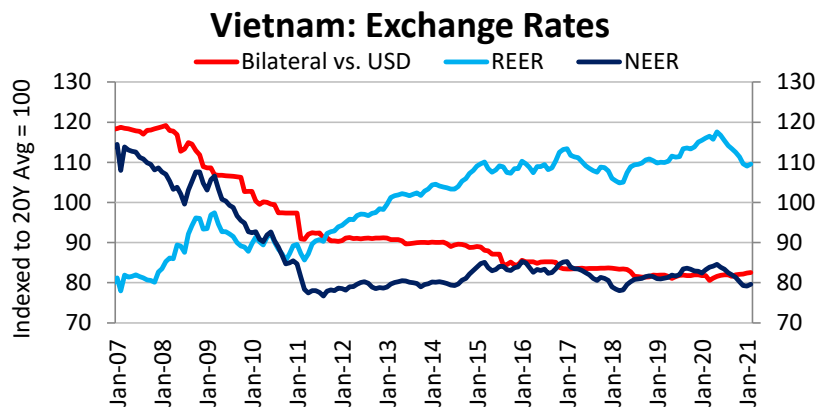
Coming into 2020, Vietnam's services trade deficit had gradually narrowed for several years, declining from a \$4.8 billion deficit in 2015 to \$1.2 billion by 2019. However, the COVID-19 pandemic led to the collapse of tourism, dramatically curtailing Vietnam's services exports. The services deficit widened in each of the three quarters of 2020 on a year-over-year basis to reach \$8 billion over the first nine months of 2020.

Vietnam's income balance in 2020 was stable. The primary income balance continued to be in deficit, which in large part reflects profits from the FIE sector being paid out to foreign owners. Meanwhile, Vietnam's secondary income balance, which includes remittances, remained in surplus, though at a lower level than the primary income deficit. The World Bank estimates that inward remittance flows dropped 8% year-over-year to about \$15.6 billion in 2020, equivalent to about 5% of GDP.

In 2020, Vietnam's bilateral goods trade surplus with the United States widened to \$70 billion, the largest bilateral imbalance on record between the two countries. Vietnam's exports to the United States grew about 19.5% in 2020, while imports from the United States decreased 8%. Vietnam's growing bilateral trade surplus continues to reflect the country's expanding export capacity, particularly in sectors such as apparel, technology, and electric machinery and equipment. The expanding surplus also reflects Vietnam's deepening links with global supply chains, with Vietnam being one of the primary beneficiaries of the ongoing shifts in Asian supply chains. In 2020, Vietnam ran a \$1.5 billion services trade deficit with United States.

In its most recent assessment of Vietnam's external position, based on 2019 data, the IMF reported that Vietnam's external position remains substantially stronger than warranted by fundamentals and desirable policies, reflecting a less productive domestic economy relative to the export sector, constraints on private sector investment, a relatively weak social safety net, and the pace of reserve accumulation. Moreover, the IMF assessment indicated that the Vietnamese dong was 7.8% undervalued on a real effective basis in 2019, broadly consistent with its assessment of dong undervaluation in recent years.

Since January 2016, the State Bank of Vietnam's (SBV) stated policy has been to allow the dong to float +/- 3% against the U.S. dollar relative 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. While emerging market currencies



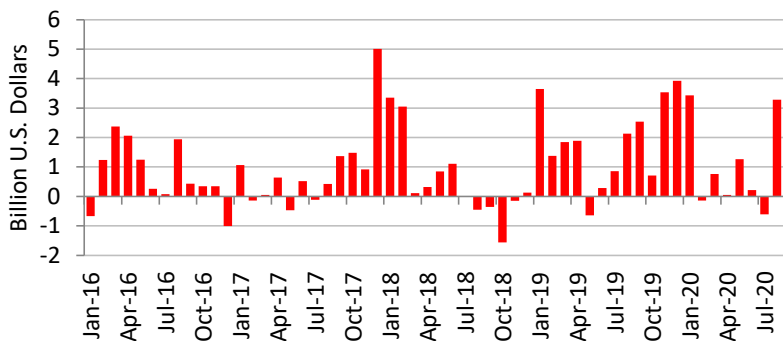
Sources: Vietcombank, JP Morgan

experienced significant depreciation pressures at the outset of the COVID-19 pandemic in spring 2020 as global capital took flight to safety, the dong remained relatively stable against the U.S. dollar. The SBV held the central reference rate almost flat against the dollar in February and March 2020, while the dong spot rate depreciated as much as 1.7% below the reference rate. Aside from this relatively short period of limited volatility, both the dong spot rate against the U.S. dollar and the SBV's daily reference rate were virtually flat on net over the course of 2020. In both nominal effective and in real effective terms, the dong appreciated in the first half of 2020, but depreciated over the course of the second half of the year. On net, the dong depreciated 4.3% and 4.7% over 2020 on a nominal effective basis and real effective basis, respectively.

Year-to-date as of end-March, the SBV's daily reference rate has weakened by about 0.5%, while the dong spot rate against the U.S. dollar has appreciated 0.2%. In January 2021, the SBV announced a change to its foreign exchange intervention practices. Instead of transacting in the spot market, SBV will now transact in the 6-month forward market for foreign exchange. Moreover, in February 2021 the SBV announced that it will only intervene in the foreign exchange market on a weekly basis going forward.

Vietnam does not publish data on its foreign exchange intervention. The Vietnamese authorities have conveyed credibly to Treasury that net purchases of foreign exchange in 2020 were 4.4% of GDP. This figure is equivalent to about \$14.9 billion. Net purchases of foreign exchange were relatively limited in early-to mid-2020 as the pandemic

Vietnam: Estimated FX Intervention



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

took hold and global financial conditions tightened. FX purchases rapidly picked up in August 2020 and remained at elevated levels through the remainder of the year.

The Vietnamese authorities have conveyed credibly to Treasury that gross reserves stood at 26% of GDP at the end of 2020. This is equivalent to about \$95 billion, implying that gross reserves expanded by 22% in 2020. Reserves stood at 313% of gross short-term external debt as of the third quarter of 2020. The continued build-up of reserves in recent years has brought them into the range the IMF considers adequate based on its reserve adequacy metric for fixed exchange rate regimes (with IMF staff estimating reserves at 108% of the metric at end-2020). Reserves were already assessed to be adequate prior to 2020 according to the IMF's adequacy metric for flexible exchange rate regimes.

In early 2021, Treasury commenced enhanced bilateral engagement with Vietnam in accordance with the 2015 Act. As part of this process and consistent with the 2015 Act, Treasury is working with the Vietnamese authorities to develop a plan with specific actions to address the underlying causes of Vietnam's currency undervaluation and excessive external surpluses.

Switzerland

Enhanced Analysis and Engagement

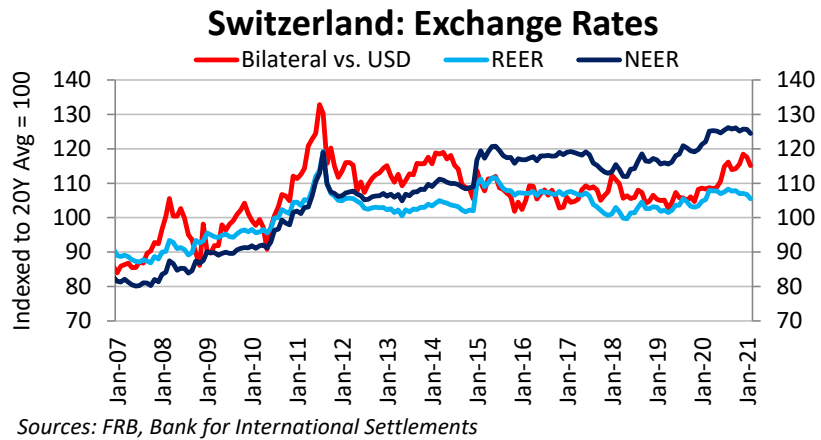
Treasury conducted enhanced analysis of Switzerland in its December 2020 FX Report.²⁴ A summary of recent economic developments is provided below, along with an update on Treasury's ongoing enhanced engagement with the Swiss authorities.

Switzerland was one of the countries in Europe hit early and hard by COVID-19, leading the government to declare a national state of emergency in mid-March 2020. The number of active and new cases declined sharply in April 2020 but started rising again in June as the authorities eased public health and mobility restrictions. Starting in October, the number of new COVID-19 cases surged, with new infections significantly above spring 2020 highs. As a result, the Swiss Federal Council reintroduced several containment and lockdown measures, which were eased gradually since March 2021 as COVID-19 cases started to decline. However, the recent uptick in cases has halted further reopening. Since the beginning of the COVID-19 crisis, Treasury estimates that Switzerland has announced fiscal stimulus amounting to nearly 11% of GDP, including both direct and indirect measures, although less than half of the funds made available have been used thus far.

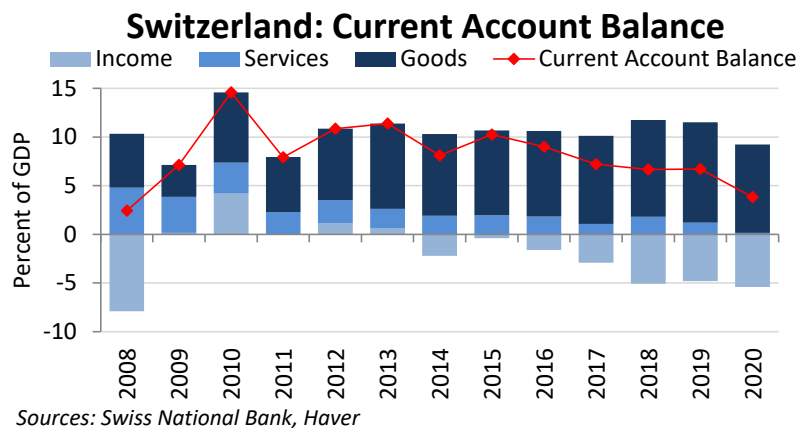
While Swiss economic activity has been hard hit by the pandemic and related containment efforts, it has been impacted less than in most neighboring countries. Overall, Switzerland's economy contracted 2.9% in 2020. The Swiss finance ministry (SECO) projects the real economy will expand 3% in 2021 (below the IMF's growth forecast of 3.5% in the April 2021 WEO), although the forecast remains subject to significant downside risks.

²⁴ *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 (Dec. 2020). Pages 48-55. <https://home.treasury.gov/system/files/206/December-2020-FX-Report-FINAL.pdf>

The sharp pullback in global risk appetite in spring 2020 amid the widening pandemic generated a spike in safe haven capital flows into Switzerland, putting pressure on the Swiss franc to strengthen and weighing on domestic inflation pressures. Over 2020, the Swiss franc remained broadly unchanged against the euro, appreciating 9.5% against the dollar and 3.5% on a real effective basis.



Switzerland has for many years run large current account surpluses, with the surplus reaching 6.7% of GDP in 2019. The current account surplus declined significantly to 3.7% of GDP in 2020 due to lower goods and services surpluses. Switzerland's historically tight fiscal policy has contributed to its large and persistent current

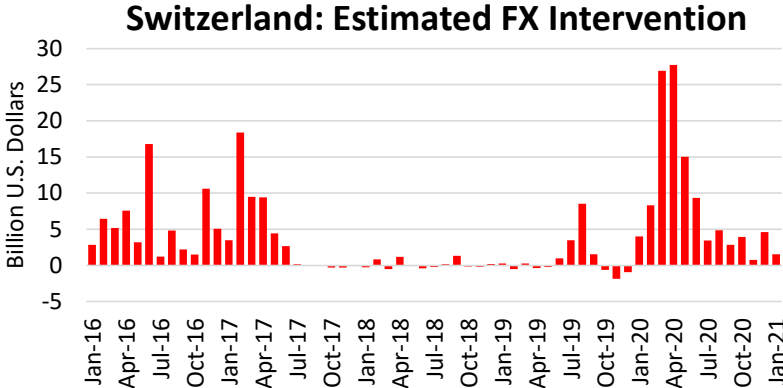


account surpluses. Even against the context of the current COVID-19 crisis and relatively large announced fiscal stimulus, Switzerland's general government deficit only reached 2.6% in 2020 (significantly smaller than in neighboring countries). The Federal Finance Administration projects the deficit to reach 3.5% in 2021 before returning to balance in 2022. Other structural factors also play a role, including high per capita income; a large prime-saver-aged and aging population; a high household savings rate, which is almost double the advanced economy average per OECD data; limited domestic investment opportunities; measurement issues; and a large net international investment position (NIIP), in which returns further raise the income balance. Even after accounting for the frequently large downward revisions due to changes in investment income, Switzerland's current account surplus has averaged over 8% of GDP since 2010, although it has declined since the global financial crisis (when it reached nearly 15% of GDP). Since the global financial crisis, the composition of the current account has evolved, with the primary income and services trade surpluses declining and the goods surplus expanding due to merchandising and the pharmaceutical sector.

In 2020, Switzerland's goods trade surplus with the United States reached \$57 billion, more than double the annual surplus of \$27 billion in 2019. Switzerland maintains a large and rising goods trade surplus with the United States, but this traditionally has been mirrored

largely by a services trade deficit. The unusually large increase in the goods surplus in 2020 can be partially attributed to a surge of private Swiss gold exports to the United States as the COVID-19 pandemic worsened and U.S. investors increased gold bullion purchases in the first half of 2020. Notably, Swiss gold exports to the United States in 2020 jumped to \$15.4 billion from \$1.2 billion in 2019. In 2020, Switzerland’s bilateral services trade deficit with the United States stood at \$21 billion, slightly lower from \$22 billion in 2019. In most recent years, the United States’ trade deficit with Switzerland was closer to balance when including services data, except for 2020.

To buffer the shock to activity from COVID-19, limit franc appreciation, and combat deflationary risks, the SNB also significantly eased monetary policy in 2020 through a range of measures. As an issuer of a global reserve currency, Switzerland experienced intensified pressure from safe haven inflows in the first half of 2020 as a result



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

of the COVID-19 crisis. The SNB responded by stepping up its foreign exchange purchases significantly to stem franc appreciation and deflationary pressure, and massively increased its intervention in foreign exchange markets in the spring of 2020. Over the first half of 2020, the SNB purchased \$93 billion (90 billion francs) in foreign exchange (equivalent to 26% of 2020 first semester GDP). These purchases in the first half of the year accounted for over 80% of overall Swiss foreign exchange purchases in 2020. In addition, the SNB raised the exemption threshold from negative interest rates for sight deposits in April to 30 times minimum reserves (up from 25 times previously). The SNB also introduced a COVID-19 refinancing facility that would operate in tandem with surety and loan guarantee programs offered by the federal government and cantons to allow banks to obtain liquidity from the SNB. Since April, the SNB has been providing liquidity via the repo market, and, in July, adjusted the rate calculation to effectively lower the borrowing cost from its liquidity shortage facility. The SNB also drew on its standing U.S. dollar swap line with the Federal Reserve for the first time since spring 2012.²⁵ In its March Monetary Policy Committee meeting, the SNB maintained its main policy rate at -0.75% and reasserted that it considers the franc to be “highly valued.” Switzerland’s inflation declined to -0.7% in 2020 (making 2020 the sixth year since 2009 that Switzerland had a negative annual inflation figure), but the SNB’s inflation outlook has marginally improved since the December 2020 assessment due to higher oil prices and a weaker franc. The SNB projects inflation to remain weak at 0.2% and 0.4% in 2021 and 2022, respectively.

²⁵ Drawings on the swap line peaked at \$10.7 billion in April 2020 and stood at \$1.6 billion as of end-March 2021.

The IMF's assessment of its 2019 external position found that the Swiss current account surplus was over 5% of GDP stronger than the level implied by medium-term fundamentals and policies. IMF staff, however adjusted that amount down significantly for specific measurement issues that affect Switzerland,²⁶ which had the impact of significantly reducing the size of the IMF's estimate of exchange rate undervaluation. Even so, IMF staff found the franc to be undervalued by about 3.5% on a real effective basis.

In September 2020, the SNB announced it would start reporting the volume of foreign exchange market operations on a quarterly basis (compared to its previous annual disclosure). The SNB disclosed that it spent \$115 billion (109.7 billion francs, 15.3% of GDP) on currency interventions in 2020. Between January and December 2020, Treasury estimates that SNB net foreign purchases have totaled \$112 billion (or 14.9% of GDP). As a result of the SNB's monetary policy actions from the global financial crisis onwards, the SNB's balance sheet and foreign exchange reserves have increased significantly. Between 2007 and 2020, the SNB's balance sheet expanded from 21% of GDP to nearly 145% of GDP, mainly through foreign asset purchases, making it one of the largest central bank balance sheets in the world relative to GDP. By the end of December 2020, Switzerland's foreign currency reserves stood at \$1 trillion, up from \$798 billion at end-2019. Smaller components of the SNB's reserves portfolio, including gold and highly rated sovereign bonds, also increased. The IMF assessed that Switzerland's foreign exchange reserves were considered adequate (despite its large financial sector) in 2019. More recently, reserves covered 85% of short-term debt as of end-September 2020 and 135% of GDP as of end-2020.

In early 2021, Treasury commenced enhanced bilateral engagement with Switzerland in accordance with the 2015 Act. As part of this process and consistent with the 2015 Act, Treasury is discussing with the Swiss authorities specific actions to address the underlying causes of Switzerland's external imbalances.

²⁶ These factors include the inclusion of estimated retained earnings on portfolio equity investment and compensation for valuation losses on fixed-income securities arising from inflation.

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 (criteria 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 exchange rates and externally-oriented policies for each major trading partner “that has— (1) a significant bilateral trade surplus with the United States; (2) a material current account surplus; and (3) engaged in persistent one-sided intervention in the foreign exchange market.” Additionally, the 2015 Act establishes a process to engage economies that may be pursuing unfair practices and impose penalties on economies that fail to adopt appropriate policies within a year of the commencement of such 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 2020, unless otherwise noted) are provided in Table 1 (p. 15) and Table 2 (p. 56).

As noted earlier, Treasury reviews developments in the 20 largest trading partners of the United States whose bilateral goods trade exceeds \$40 billion annually; these economies accounted for more than 80% of U.S. trade in goods in 2020. This includes all U.S. trading partners whose bilateral goods surplus with the United States in 2020 exceeded \$20 billion. Treasury’s goal is to focus attention on those economies whose trade with the United States is most material for the global economy.

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 trade balances for the United States’ 20 largest trading partners for the four quarters through December 2020.²⁷ China has the largest trade surplus with the United States by far, after which the sizes of the bilateral trade surpluses decline notably. Treasury assesses that economies with a bilateral goods surplus of at least \$20 billion have a “significant” surplus. Highlighted in red in column 1 are the 13 major trading partners that have a bilateral surplus that met this threshold for the four quarters through December 2020. Table 3 provides additional contextual information on bilateral trade, including services trade, with these trading partners.

²⁷ 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.

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 (USD Bil., Trailing 2Q) (1c)	Net Purchases 6 of 12 Months† (1d)	Balance (% of GDP, Trailing 4Q) (2a)	3 Year Change in Balance (% of GDP) (2b)	Balance (USD Bil., Trailing 4Q) (2c)	Goods Surplus with United States (USD Bil., Trailing 4Q) (3)
Singapore	28.3	97	52	Yes	17.6	0.3	60	4
Switzerland	15.3	115	22	Yes	3.7	-3.5	28	57
Taiwan	5.8	39	35	Yes	14.1	0.0	94	30
India	5.0	131	99	Yes	1.3	2.8	33	24
Vietnam	4.4*	15	10	Yes	3.7	4.3	13	70
Thailand	1.9**	10	6	Yes	3.2	-6.4	16	26
China	-0.1 — 1.2***	-15 — 180	-7 — 127	No	1.9	0.3	274	311
Malaysia	0.6	2	2	Yes	4.4	1.6	15	32
Korea	0.3	5	12	Yes	4.6	0.0	75	25
Japan	0.0	0	0	No	3.3	-0.9	164	55
Canada	0.0	0	..	No	-1.9	0.9	-32	15
United Kingdom	0.0	0	..	No	-3.5	0.3	-95	-9
Mexico	-0.2	-2	0	No	2.4	4.2	27	113
Brazil	-2.6	-38	-2	No	-0.9	-0.1	-12	-12
Netherlands	..	..	..	..	7.8	-3.0	71	-18
Germany	..	..	..	..	6.9	-1.0	260	57
Ireland	..	..	..	..	4.8	3.8	20	56
Italy	..	..	..	..	3.7	1.1	69	30
Belgium	..	..	..	..	-0.2	-0.9	-1	-7
France	..	..	..	..	-2.3	-1.5	-60	16
Memo: Euro Area	0.0	0	0	No	2.2	-0.9	286	156

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

Sources: Haver Analytics; National Authorities; U.S. Census Bureau; and U.S. Department of the Treasury Staff Estimates

† In assessing the persistence of intervention, Treasury will consider an economy that is judged to have purchased foreign exchange on net for 6 of the 12 months to have met the threshold.

* Vietnam does not publish FX intervention. Authorities have conveyed bilaterally to Treasury the size of net FX purchases during the four quarters ending December 2020.

** Thailand does not publish FX intervention. Authorities have conveyed bilaterally to Treasury the size of net FX purchases during the four quarters ending December 2020.

*** 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 the PBOC's foreign exchange assets data, intervention was not persistent; based on the net foreign exchange settlements data, it was persistent.

Table 3. Major Foreign Trading Partners - Expanded Trade Data

	Bilateral Trade					
	Goods Surplus with United States (USD Bil., Trailing 4Q) (1a)	Goods Surplus with United States (% of GDP, Trailing 4Q) (1b)	Goods Trade (USD Bil., Trailing 4Q) (1c)	Services Surplus with United States (USD Bil., Trailing 4Q)* (1d)	Services Surplus with United States (% of GDP, Trailing 4Q)* (1e)	Services Trade (USD Bil., Trailing 4Q)* (1f)
China	311	2.1	560	-22	-0.2	53
Mexico	113	10.4	538	-6	-0.6	40
Vietnam	70	20.5	90	-1	-0.4	2
Germany	57	1.5	173	3	0.1	61
Switzerland	57	7.6	93	-21	-2.8	69
Ireland	56	13.3	75	-43	-10.3	78
Japan	55	1.1	184	-7	-0.1	69
Malaysia	32	9.4	57	-1	-0.2	4
Taiwan	30	4.5	91	-3	-0.4	15
Italy	30	1.6	69	-1	-0.1	11
Thailand	26	5.3	49	-1	-0.3	3
Korea	25	1.5	127	-8	-0.5	28
India	24	0.9	79	8	0.3	43
France	16	0.6	70	-2	-0.1	29
Canada	15	0.9	526	-22	-1.3	80
Singapore	4	1.1	58	-12	-3.5	33
Belgium	-7	-1.3	49	-2	-0.4	11
United Kingdom	-9	-0.3	109	-9	-0.3	109
Brazil	-12	-0.8	58	-9	-0.6	21
Netherlands	-18	-2.0	73	-8	-0.9	30
<i>Memo</i> : Euro Area	156	1.2	581	-62	-0.5	251

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

*Services data is through end 2020. Services data is reported on a balance of payments basis (not seasonally adjusted), while goods data is reported on a census basis (not seasonally adjusted).

Criterion (2) – Material current account surplus:

Treasury assesses current account surpluses in excess of 2% of GDP to be “material” for the purposes of enhanced analysis. Highlighted in red in column 2a of Table 2 are the 13 economies that had a current account surplus in excess of 2% of GDP in 2020. In the aggregate, these 13 economies accounted for roughly 60% of the value of global current account surpluses in 2020. Column 2b shows the change in the current account surplus as a share of GDP over the last three years, although this is not a criterion for enhanced analysis.

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

Treasury assesses net purchases of foreign currency, conducted repeatedly, in at least 6 out of 12 months, totaling at least 2% of an economy’s GDP to be persistent, one-sided intervention.²⁸ Columns 1a and 1d in Table 2 provide Treasury’s assessment of this criterion.²⁹ In economies where foreign exchange interventions are not published,

²⁸ 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.

²⁹ 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

Treasury uses estimates of net purchases of foreign currency to proxy for intervention. Singapore, Switzerland, Taiwan, India, and Vietnam met this criterion over the four quarters through December 2020, per Treasury estimates.

Summary of Findings

Pursuant to the 2015 Act, Treasury finds that Taiwan, Vietnam, and Switzerland met all three criteria in the current review period of the four quarters through December 2020 based on the most recent available data. 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 2020 Report. Further, one major trading partner, China, constitutes a disproportionate share of the overall U.S. trade deficit. **Eleven economies — China, Japan, Korea, Germany, Ireland, Italy, India, Malaysia, Singapore, Thailand, and Mexico — constitute Treasury’s Monitoring List.**

- China has met one of the three criteria in every Report since the October 2016 Report, having a significant bilateral trade surplus with the United States, with this surplus accounting for a disproportionate share of the overall U.S. trade deficit.
- Japan and Germany have met two of the three criteria in every Report since the April 2016 Report (the initial Report based on the 2015 Act), having material current account surpluses combined with significant bilateral trade surpluses with the United States.
- Korea 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.
- Italy and Malaysia have 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.
- 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.
- 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. Switzerland met all three of the criteria in this Report and the December 2020 Report.
- Thailand met two of the three criteria in this Report, having a material current account surplus and a significant bilateral trade surplus with the United States.

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.

- 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 this Report and the December 2020 Report.
- India met two of the three criteria in this Report, having a material current account surplus and engaging in persistent, one-sided intervention over the reporting period.
- Mexico met two of the three criteria in this Report, having a material current account surplus and a significant bilateral trade surplus with the United States. This is Mexico's first inclusion in the Monitoring List and its first inclusion in a Report since October 2015.
- Ireland met two of the three criteria for the first time since the May 2019 Report and thus is included again in the Monitoring List.
- 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 this Report.

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

Further, in this Report, Treasury has determined that there is insufficient evidence to make a finding that Vietnam, Switzerland, or Taiwan manipulates their respective exchange rates for either of the purposes referenced in the 1988 Act, though Treasury considers that its enhanced engagements with Switzerland and Vietnam may enable it to determine whether either of these economies did so. Additionally, Treasury expects that that engagement with Taiwan will help it to make the determination required under the 1988 Act for the period of review. Treasury has also concluded that no major trading partner of the United States on the Monitoring List has met the standards identified in Section 3004 of the 1988 Act.

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.

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.