CHAPTER 1

EXTERNAL POSITIONS AND POLICIES

War and Lingering Pandemic

Global current account balances started widening in 2020 at the pandemic's outset after several years on a narrowing trend. This reflects the asymmetric impact on external positions of the COVID-19 shock and the related policy responses, including through the travel and medical shocks, shifts in consumption, and larger fiscal support in advanced economies. These factors remained at play in 2021, and together with rising transportation costs and commodity prices as the recovery took hold, they have contributed to a further widening in global balances.[1]

The war in Ukraine has created a humanitarian crisis and is setting back the global recovery. It is exacerbating the widening trend in global balances in 2022 as it adds to existing commodity price pressures, with an opposite effect on commodity exporters and importers. The accelerated pace of US monetary tightening in response to rising inflation and the attendant dollar appreciation are also expected to contribute to widening global balances in 2022.

The medium-term outlook is for global balances to return to a narrowing trend as the pandemic's impact and the war shock recede. However, this outlook is subject to unusually large uncertainties at this juncture, which could well see global balances widening. Risks to the outlook include a possible pandemic resurgence, slower-than-expected recovery in public savings (especially in current account deficit economies), a stronger-than-expected impact of the war in Ukraine on commodity prices, further inflation surprises and faster monetary tightening, a possible escalation of geopolitical conflicts and tensions, the impact of China's growth slowdown and zero-COVID-19 policy, and the risk of trade and economic fragmentation.

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[1]Global current account balances are defined as the sum of the absolute values of deficits and surpluses divided by global GDP. Because global current account balances are defined as the sum of absolute values of deficits and surpluses, if an economy increases its deficit by one percent of global GDP and another economy increases its surplus by one percent of global GDP, the combined impact would be an increase in global current account balances by two percent of global GDP.

Recent Developments in Current Account Balances

External positions have been affected by developments in commodity and energy prices and supply bottlenecks related to the pandemic and the war. Energy and commodity prices recovered from the bottom in the pandemic's early phase and rose in 2021, affecting the external position of exporters and importers asymmetrically. Shipping costs surged in 2021, reflecting pandemic-related supply constraints and capacity constraints on sea routes in the face of a strong rebound in trade, which affected exporters and importers of transportation services asymmetrically. Increased geopolitical tensions and the start of the war have exacerbated those trends in 2022 while bringing about a surge in the price of grains (Figure 1.1).

The sharp increase in oil prices in 2021 has contributed to shifting current account positions. The oil balances and current accounts of oil exporters in 2021 recovered from the pandemic-induced decline of 2020, with the opposite applying to oil importers (Figure 1.2). The war in Ukraine is expected to affect current account positions in 2022 mostly by increasing the current account of oil and other commodity exporters, while the projected impact on advanced economies is smaller (Figure 1.3).[2]

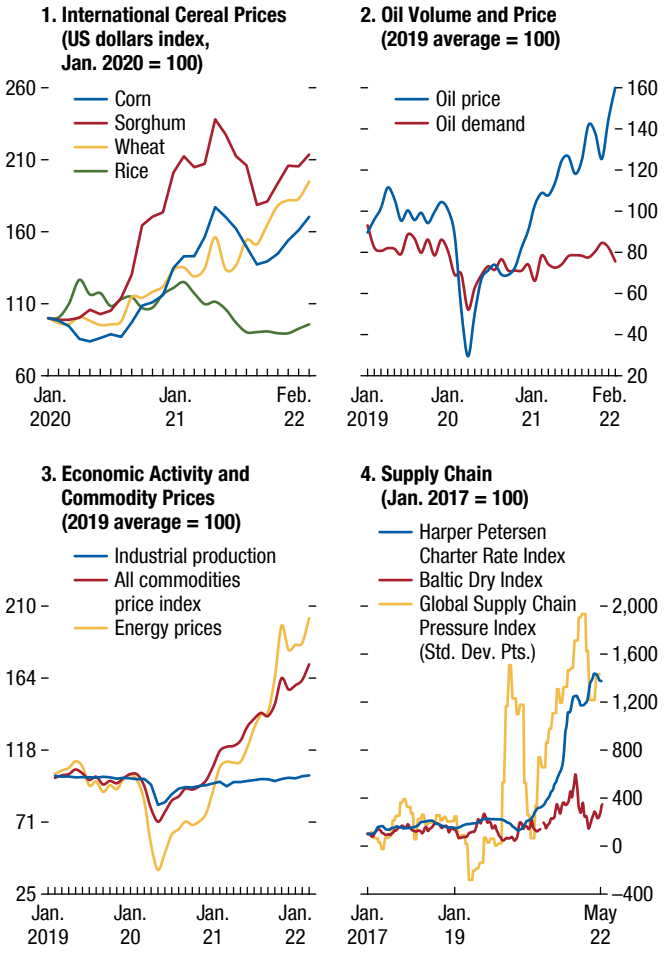
The COVID-19 pandemic has continued to affect countries' current account balances:

- *Travel and medical trade*: The pandemic's adverse impact on travel has continued to lower the travel services and current account balances of many tourism-exporting countries significantly, while the demand for medical products and personal protective equipment has bolstered the current account positions of exporters of those goods.[3]

[2]The change in current account projections for 2022 between the January and the April 2022 WEO vintages, shown in Figure 1.3, reflects the impact of the war in Ukraine, although other factors are also at play.

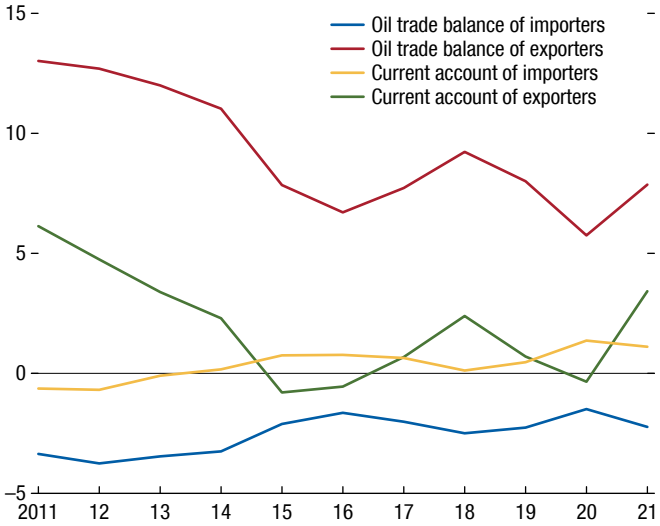
[3]For example, the travel shock is estimated to have lowered Spain's current account by 1.6 percent of GDP and Thailand's by 4.4 percent of GDP in 2021. Trade in medical goods and personal protective equipment is estimated to have increased Malaysia's current account by 1.3 percent of GDP.

Figure 1.1. The COVID-19 Crisis and the War in Ukraine



Sources: CEIC Global Economic Data; Haver Analytics; IMF, Primary Commodity Price System; Joint Organisations Data Initiative.
Note: Global imports in volumes.

Figure 1.2. Movements in Oil Trade Balance and Current Account for Oil Exporters and Importers[1]
(Average of balances in percent of GDP)



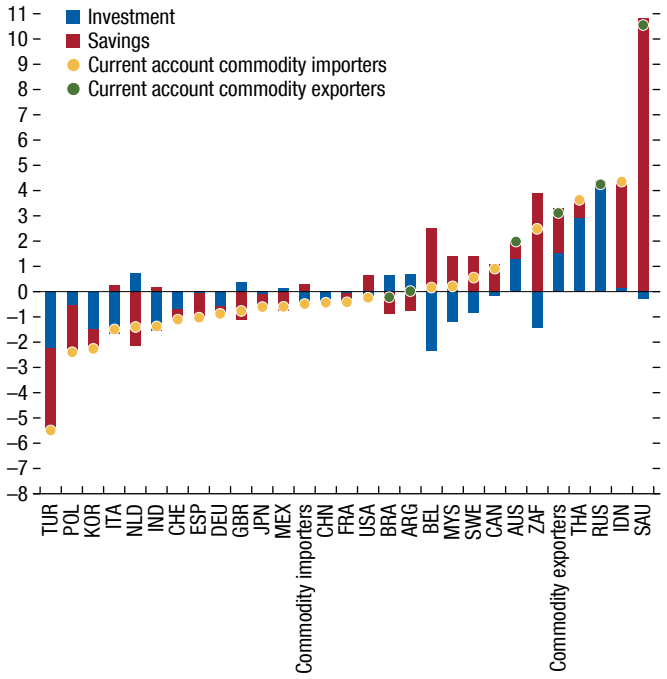
Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
Note: Data labels use International Organization for Standardization country codes. Importer countries: Argentina, Australia, Austria, Belgium, Chile, China, Costa Rica, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Guatemala, Hong Kong SAR, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Korea, Mexico, Morocco, The Netherlands, New Zealand, Pakistan, Peru, Philippines, Poland, Portugal, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Tunisia, Türkiye, United Kingdom, United States, Uruguay. Exporter countries: Brazil, Canada, Colombia, Malaysia, Norway, Russia, Saudi Arabia.
[1]Countries are defined as exporters or importers by the oil trade balance in 2021. Includes External Balance Assessment countries, Hong Kong SAR, Saudi Arabia, and Singapore.

- *Shift in household consumption compositions*: The pandemic has shifted household consumption composition away from services toward goods (for example, equipment to accommodate teleworking and virtual learning). This shift moderated but did not reverse in 2021, with service consumption still below pre-pandemic levels. In advanced economies, household consumption of goods has declined throughout 2021 but was still above pre-pandemic levels at the end of the year, whereas household consumption of services, although recovering, was still below pre-pandemic levels. In emerging markets, consumption of services declined during 2021 after a small recovery in late 2020, and consumption of goods has been on the rise (Figure 1.4).
- *Transportation balance*: In 2021, the combination of high demand for tradable goods in advanced economies and supply bottlenecks associated with the pandemic increased shipping costs noticeably (Figure 1.1, panel 4). Those pressures have significantly increased the current account balance of some economies (for example, France and Korea) through their impact on sea transport service export prices.

The shift in household consumption brought about a sharp recovery in goods trade, in contrast to much slower recoveries after other global recessions. The recovery in global trade in goods, which surpassed its pre-COVID-19 level and went back to its pre-COVID-19 trend in 2021, has also been faster than anticipated in the early stages of the pandemic. However, trade in services remains below pre-pandemic levels despite a rebound in 2021 and

Figure 1.3. Current Account Projections for 2022 before and after the War in Ukraine

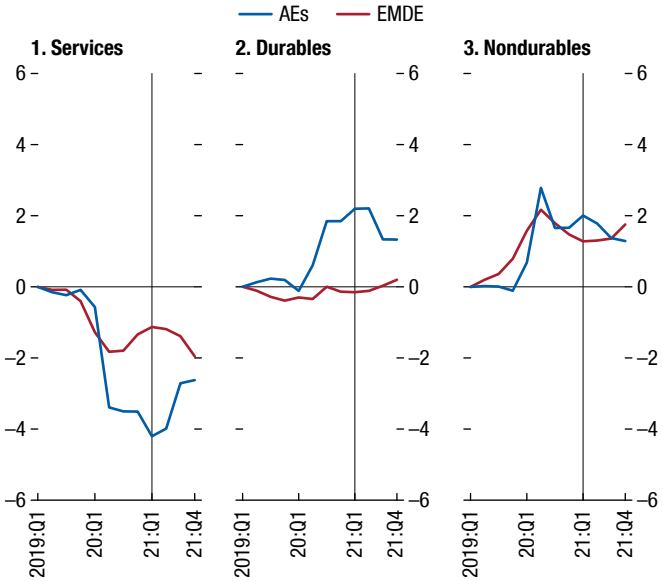
(Changes between January 2022 and April 2022 WEO vintages and contributions, in percent of GDP)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
Note: Data labels use International Organization for Standardization country codes.

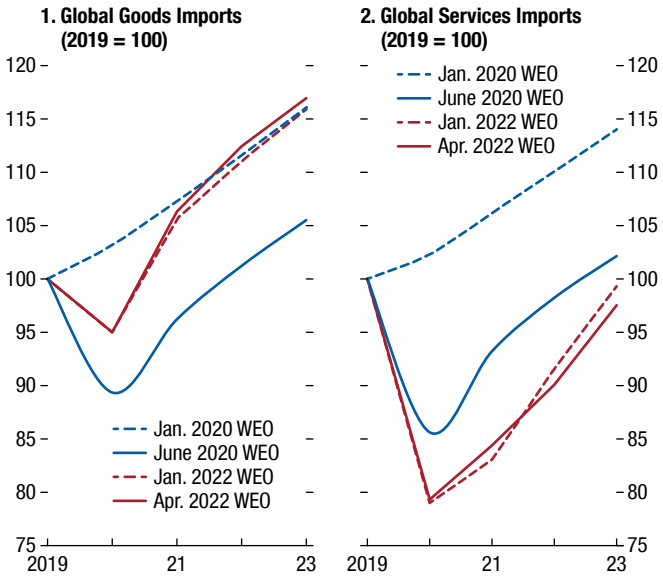
Figure 1.4. Household Consumption Composition Shift, AEs and EMDEs, 2019–21[1]

(Percent of household consumption)



Sources: Haver Analytics; and IMF staff estimates.
Note: AE = advanced economy; EMDE = emerging market and developing economy. Data labels use International Organization for Standardization country codes.
[1]Change in consumption shares from the first quarter of 2019, quarterly data. The panel shows the GDP-weighted average for 14 advanced economies (AUS, CAN, DEU, DNK, ESP, FRA, GBR, ISR, ITA, JPN, KOR, NZL, SWE and USA) and seven emerging market and developing economies (CHN, CHL, IDN, MEX, THA, TUR and ZAF).

Figure 1.5. Trade in Goods and Services Compared with Pre-pandemic Trends



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
Note: WEO = *World Economic Outlook*. Global imports in volumes.

is not projected to approach pre-pandemic levels until 2023, reflecting the emergence of new coronavirus variants and associated travel restrictions (Figure 1.5).[4]

Turning to aggregate saving and investment in advanced economies, public and private saving moved in opposite directions, thereby having limited effects on current account balances. The private sector started to wind down pandemic-related saving as the public sector withdrew fiscal support. Household saving is declining as pandemic-related subsidies and transfers are withdrawn but remains above pre-pandemic levels. Corporate saving remained broadly unchanged during the pandemic, and government saving is moving toward pre-pandemic levels as pandemic-related fiscal support is withdrawn (Figure 1.6). Further unwinding of the stock

[4]The faster recovery in goods trade compared with services trade could partly reflect the pandemic-induced shift from services to goods consumption, but this shift is expected to wind down in the medium term as the pandemic's impact abates.

of accumulated household savings could affect current account balances, although the impact of this channel is subject to uncertainty associated with the full extent of improvement in household balance sheets and its distribution across income levels (Box 1.1).

Global Current Account Balances

Global current account balances had been on a declining trend for several years before widening because of the pandemic in 2020, and they have continued to increase in 2021. This dynamic was driven by the pandemic's asymmetric impact on external positions through the travel and medical shock, the consumption shift, and transportation costs. The pandemic-related consumption shift toward goods contributed to widening global balances as current account deficit advanced economies imported more goods from current account surplus emerging markets. In 2021, this shift is estimated to have increased the US current account deficit by 0.4 percent of GDP and China's surplus by 0.3 percent of GDP. Current account surplus economies like China also saw their surplus increase due to higher exports of medical goods, which were imported by current account deficit economies such as the United States. In addition, in 2021, current account surplus economies started withdrawing fiscal support faster than current account deficit economies. All these developments contributed to widening global balances. Global balances are expected to widen further in 2022, reflecting both the increase in commodity prices (including because of the war) and the pandemic's continued asymmetric impact on external positions, before narrowing over the medium term (Figure 1.7 and Table 1.1). The projected widening of global balances in the short term opens scope for current account surplus economies to redirect global savings to help finance low income countries and emerging markets.

COVID-19's impact on global current account balances—through the medical and trade shock, the shift in household consumption, and transportation costs—was larger in 2021 than in 2020, as shown in Figure 1.8.[5] After netting out COVID-19 factors, global balances still increased in 2021 (likely reflecting the increase in oil prices) and hovered at about their 2019 level. The forecast for global current account balances in the coming years has been revised up for 2022 since the January 2022 *World Economic Outlook Update*. This upward revision incorporates the impact of the war in Ukraine, which is expected to have a widening effect on global current account balances through its impact on commodity prices. Over the medium term, global balances are expected to return to their pre-pandemic downward trend as commodity prices normalize and COVID-19's impact fades away. Another contributing factor is that unlike in 2021, current account deficit economies are expected to implement fiscal policy consolidation faster than current account surplus economies (Figure 1.9).

Currencies, Financial Flows, and Balance Sheets

Currency movements were relatively limited in most advanced economies during 2021, while Japan and Korea experienced depreciations and the United States experienced appreciation. Several emerging market currencies depreciated in 2021, driven by a tightening of global financial conditions and still-weak domestic prospects (as in Thailand) or by sharply easing domestic monetary conditions (as in Türkiye; Figure 1.10). China's currency experienced considerable appreciation. Most emerging markets accumulated reserves (Figure 1.11). Capital inflows by nonresidents to emerging markets were stable in 2021 (Figure 1.12). Foreign direct investment flows peaked at the start of 2021 but were on a declining trend for the rest of the year. Portfolio flows ended the year in net outflows.

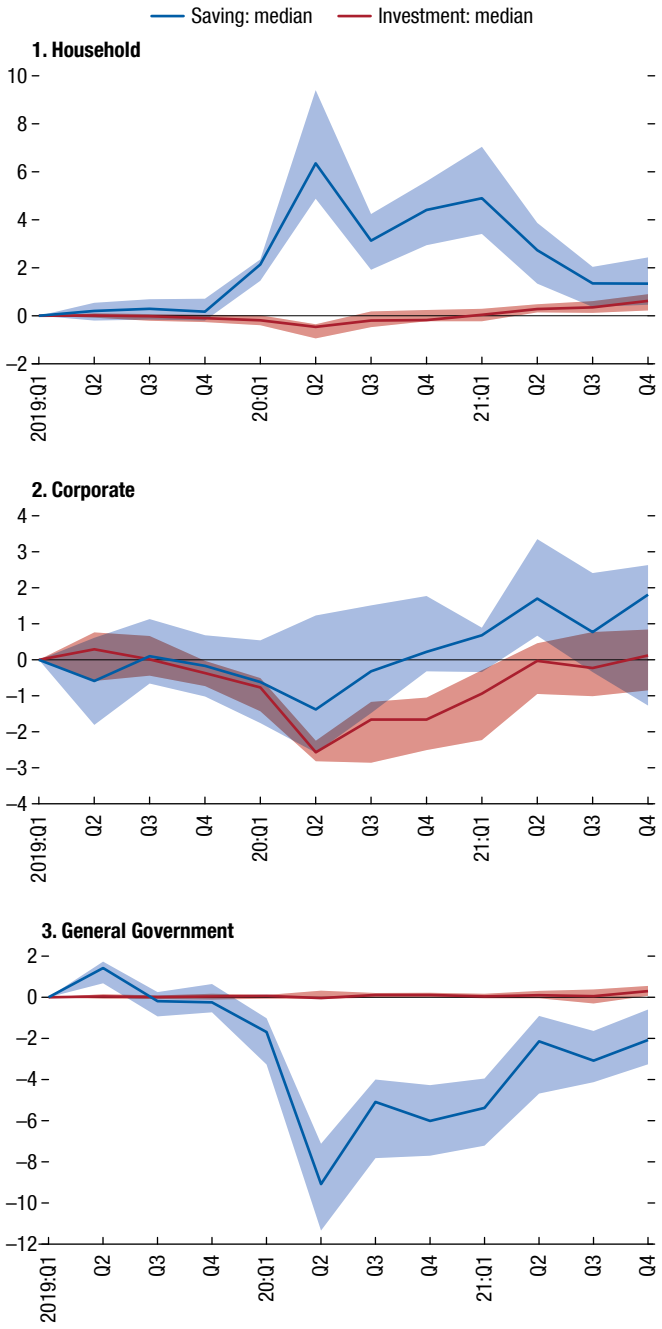
Monetary policy tightening is driving currency movements in 2022. With inflation rising, many central banks have accelerated the withdrawal of monetary stimulus, while several emerging markets have started a tightening cycle in 2021. Largely in anticipation of Federal Reserve tightening, the US dollar has appreciated by about 5 percent in nominal effective terms in the first half of 2022 (Figure 1.10). Despite Federal Reserve tightening, some emerging economies' currencies appreciated, given their earlier and more aggressive tightening: for example, Brazil and Mexico experienced an appreciation in the first half of 2022 after depreciating in 2021.[6] The dollar

[5]In Figure 1.8, the vertical distance between the April 2022 *World Economic Outlook* vintage and the line that shows the netting out of COVID-19 factors is larger for 2021 than for 2020. See Online Annex 1.2 for more details on the compositions of the COVID-19 factors.

[6]The Russian ruble depreciated sharply at the outbreak of the war and associated sanctions, but has since appreciated to exceed the pre-war level by May, including due to the strong terms of trade and current account surplus.

Figure 1.6. Private and Public Sector Saving Rates in Advanced Economies

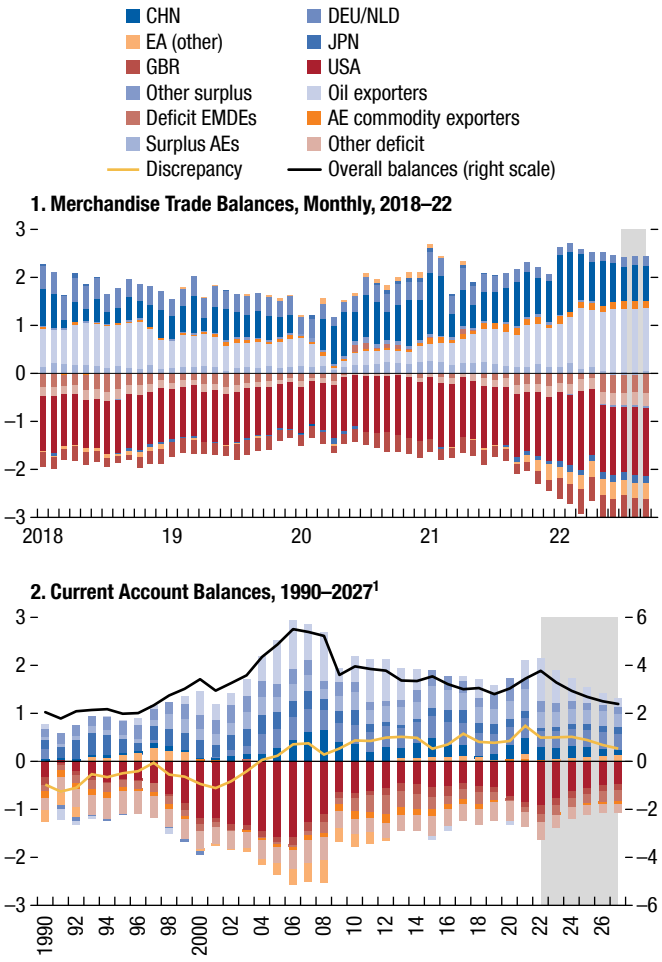
(Percent of GDP)



Sources: Eurostat; national authorities; Refinitiv, Datastream; and IMF staff calculations.
Note: Countries are Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, The Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, the United Kingdom, and the United States. The series are rebased to zero in the first quarter of 2019. The second quarter of 2020 corresponds to the peak of the COVID-19 crisis.

Figure 1.7. Global Current Account Balances, 1990–2027

(Percent of world GDP)



Sources: IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; and IMF staff calculations.
Note: AE = advanced economy; EA = euro area; EMDE = emerging market and developing economy. The shaded area indicates forecasts. Data labels use International Organization for Standardization (ISO) country codes.
[1]Overall balance is the absolute sum of global surpluses and deficits. AE commodity exporters comprise Australia, Canada, and New Zealand; deficit EMDEs comprise Brazil, Chile, India, Indonesia, Mexico, Peru, South Africa, and Türkiye; oil exporters comprise *World Economic Outlook* definition plus Norway; surplus AEs comprise Hong Kong SAR, Korea, Singapore, Sweden, Switzerland, and Taiwan Province of China. Other deficit (surplus) comprise all other economies running current account deficits (surpluses).

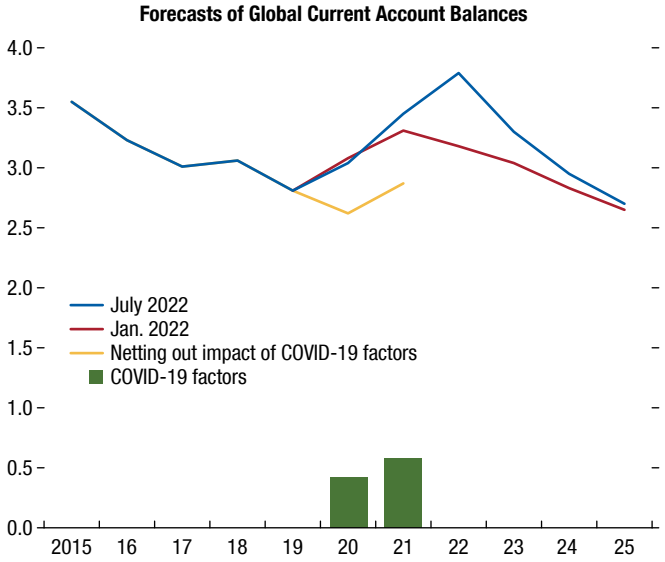
Table 1.1. Selected Economies: Current Account Balance, 2019–22

	Billions of US Dollars				Percent of World GDP				Percent of GDP			
	2019	2020	2021	2022 Projection	2019	2020	2021	2022 Projection	2019	2020	2021	2022 Projection
Advanced Economies												
Australia	8	35	57	15	0.01	0.04	0.06	0.01	0.6	2.6	3.5	0.9
Belgium	1	4	–2	–10	0.00	0.01	0.00	–0.01	0.2	0.8	–0.4	–1.7
Canada	–35	–29	1	17	–0.04	–0.03	0.00	0.02	–2.0	–1.8	0.0	0.8
France	–8	–47	11	–38	–0.01	–0.06	0.01	–0.04	–0.3	–1.8	0.4	–1.4
Germany	294	272	314	251	0.34	0.32	0.32	0.24	7.6	7.1	7.4	6.1
Hong Kong SAR	21	24	42	38	0.02	0.03	0.04	0.04	5.9	7.0	11.3	10.3
Italy	65	71	51	11	0.07	0.08	0.05	0.01	3.2	3.7	2.4	0.5
Japan	176	147	142	84	0.20	0.17	0.15	0.08	3.4	2.9	2.9	1.9
Korea	60	76	88	49	0.07	0.09	0.09	0.05	3.6	4.6	4.9	2.8
The Netherlands	85	64	92	88	0.10	0.07	0.10	0.09	9.4	7.0	9.0	8.8
Singapore	54	58	72	56	0.06	0.07	0.07	0.05	14.5	16.8	18.1	13.2
Spain	29	11	13	10	0.03	0.01	0.01	0.01	2.1	0.8	0.9	0.7
Sweden	29	33	35	30	0.03	0.04	0.04	0.03	5.5	6.1	5.5	4.9
Switzerland	40	21	76	55	0.05	0.02	0.08	0.05	5.4	2.8	9.3	6.7
United Kingdom	–77	–69	–82	–174	–0.09	–0.08	–0.09	–0.17	–2.7	–2.5	–2.6	–5.3
United States	–472	–616	–822	–944	–0.54	–0.72	–0.85	–0.91	–2.2	–2.9	–3.6	–3.7
Emerging Market and Developing Economies												
Argentina	–4	3	7	3	0.00	0.00	0.01	0.00	–0.8	0.9	1.4	0.5
Brazil	–65	–24	–28	–26	–0.07	–0.03	–0.03	–0.02	–3.5	–1.7	–1.7	–1.3
China	103	249	317	279	0.12	0.29	0.33	0.27	0.7	1.7	1.8	1.4
India[1]	–25	24	–38	–108	–0.03	0.03	–0.04	–0.10	–0.9	0.9	–1.2	–3.1
Indonesia	–30	–4	3	29	–0.03	–0.01	0.00	0.03	–2.7	–0.4	0.3	2.2
Malaysia	13	14	14	16	0.01	0.02	0.01	0.02	3.5	4.2	3.8	3.7
Mexico	–3	27	–5	–7	0.00	0.03	–0.01	–0.01	–0.3	2.5	–0.4	–0.5
Poland	3	18	–4	–21	0.00	0.02	0.00	–0.02	0.5	2.9	–0.6	–3.0
Russia	66	36	122	265	0.08	0.04	0.13	0.26	3.9	2.4	6.9	11.9
Saudi Arabia	38	–22	44	177	0.04	–0.03	0.05	0.17	4.8	–3.1	5.3	17.2
South Africa	–10	7	15	6	–0.01	0.01	0.02	0.01	–2.6	2.0	3.6	1.5
Thailand	38	21	–11	–4	0.04	0.02	–0.01	0.00	7.0	4.2	–2.2	–0.8
Türkiye	5	–36	–14	–44	0.01	–0.04	–0.01	–0.04	0.7	–4.9	–1.7	–5.5
Memorandum item:[2]												
Euro Area	307	250	345	228	0.4	0.3	0.4	0.2	2.3	1.9	2.4	1.6
Global Current Account Balance	2,452	2,592	3,333	3928	2.8	3.0	3.5	3.8	. . .	. . .	. . .	. . .
Statistical Discrepancy	322	364	747	581	0.4	0.4	0.8	0.6	. . .	. . .	. . .	. . .
Overall Surpluses	1,387	1,476	2,030	2251	1.6	1.7	2.1	2.2	. . .	. . .	. . .	. . .
Of which: Advanced Economies	1,007	995	1,317	1038	1.2	1.2	1.4	1.0	. . .	. . .	. . .	. . .
Overall Deficits	–1,065	–1,112	–1,283	–1670	–1.2	–1.3	–1.3	–1.6	. . .	. . .	. . .	. . .
Of which: Advanced Economies	–688	–794	–951	–1218	–0.8	–0.9	–1.0	–1.2	. . .	. . .	. . .	. . .

Sources: IMF, *World Economic Outlook;* and IMF staff calculations.
Note: ". . ." indicates that data are not available or not applicable.
[1]For India, data are presented on a fiscal year basis.
[2]The global current account balance is the sum of absolute deficits and surpluses. Overall surpluses and deficits (and the "of which" advanced economies) include non–*External Sector Report* economies.

Figure 1.8. Global Current Account Balances and COVID-19 Factors

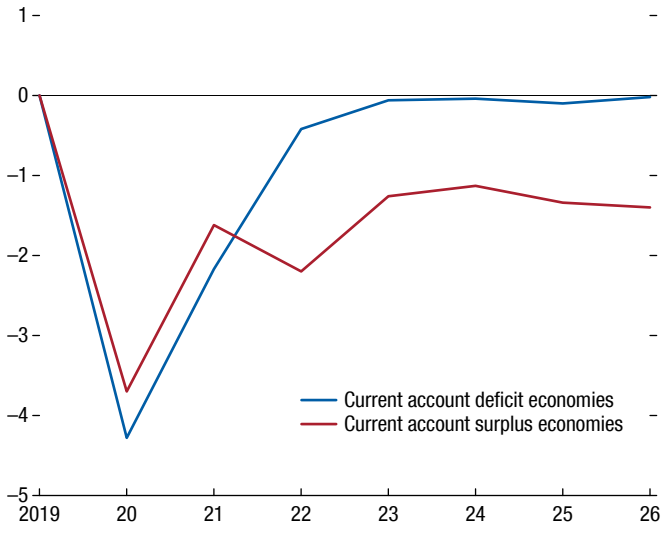
(Percent of world GDP)



Sources: Census and Economic Information Center; IMF, Information Notice System; IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; and IMF staff calculations.
Note: See the chapter text for the definition of sectoral shocks associated with the COVID-19 crisis. Data from 2022 onward are projections, based on IMF staff projections by June 30, 2022 (July 2022) and January 2022 IMF *World Economic Outlook* (Jan. 2022).

Figure 1.9. Fiscal Policy Changes, 2019–26

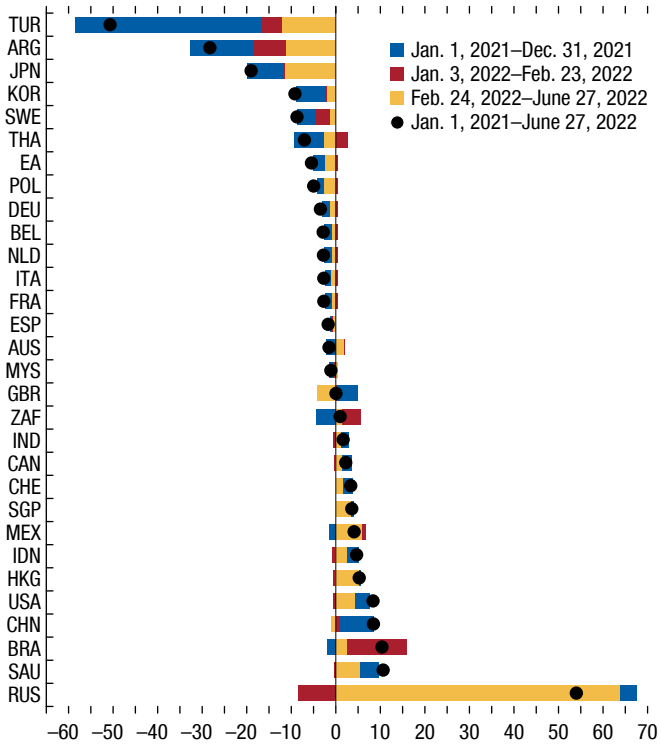
(Cyclically adjusted fiscal balance, percentage points of potential GDP, change since 2019)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
Note: Data from 2022 onward are projections.

Figure 1.10. Currency Movements

Nominal Effective Exchange Rate[1]
(Percent change)

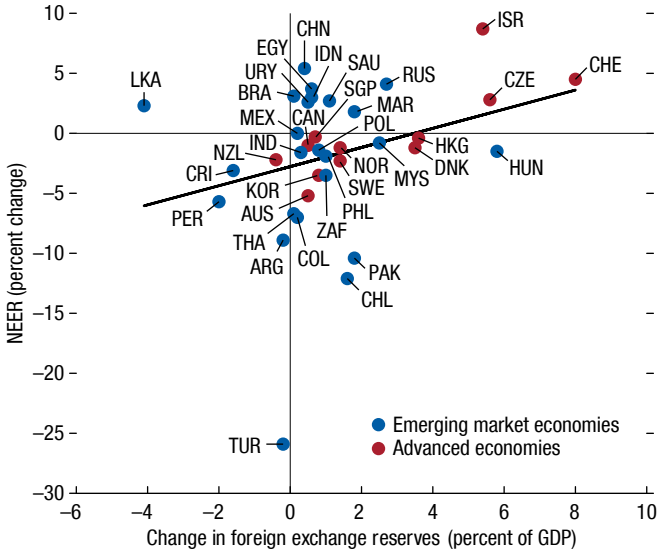


Sources: IMF, Global Data Source; and IMF staff calculations.
Note: EA = euro area. Data labels use International Organization for Standardization country codes.
[1]An increase in nominal effective exchange rate corresponds to an appreciation.

strength in the first half of 2022 could deepen the US current account deficit and contribute to widening global current account balances.

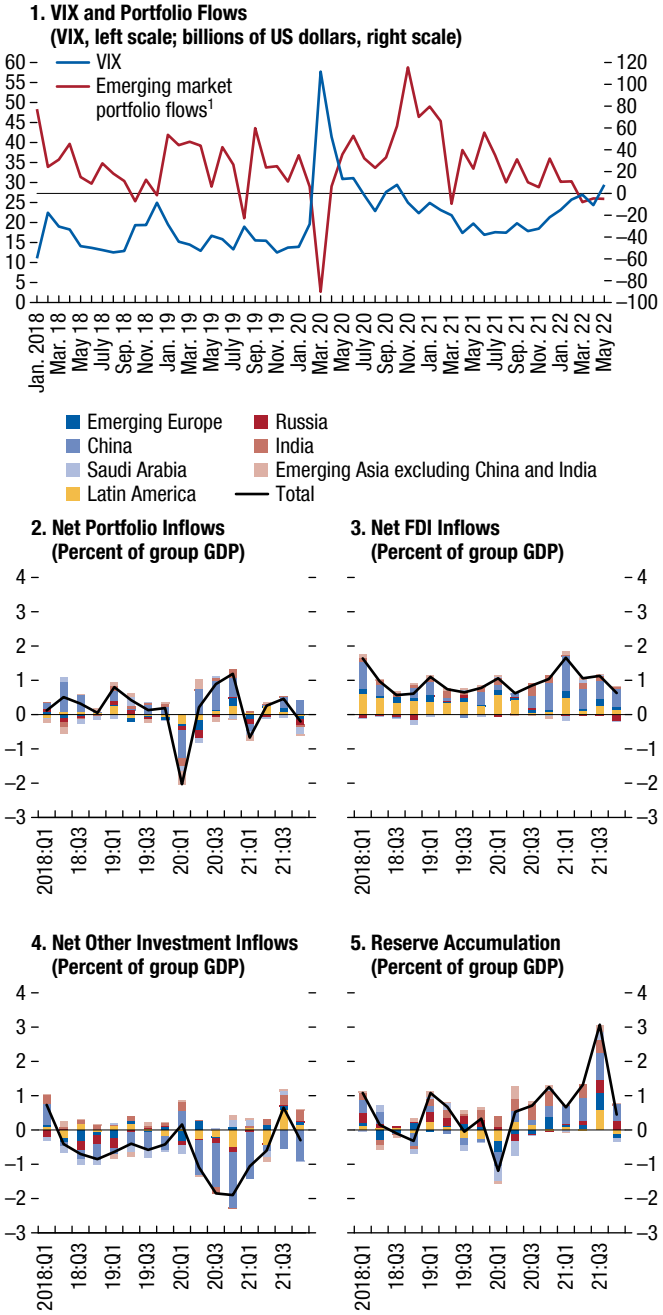
Creditor and debtor stock positions remain elevated in 2021, though they have moderated from their 2020 peaks (Figure 1.13). The narrowing of net international investment position dispersion in 2021 reflects valuation changes, which more than offset the concurrent widening of current account balances. Most economies experienced a reversal in valuation effects between 2020 and 2021. Tighter financial conditions in the United States in 2022 could mean lower asset prices, leading to valuation losses for foreign holders of US assets, while further US dollar appreciation could lead to valuation gains in emerging markets, which tend to have long positions in foreign currency (see 2019 *External Sector Report*, Box 1.4). The United States remains the largest

Figure 1.11. Estimated Change in Foreign Exchange Reserves[1] and Nominal Effective Exchange Rate[2] Change
(March 2021–December 2021)



Sources: Adler and others (2021); IMF, *International Financial Statistics*; IMF, Information Notice System; and IMF staff calculations.
Note: NEER = nominal effective exchange rate. Data labels use International Organization for Standardization country codes.
[1]The change in foreign exchange reserves is based on the change in the stock of reserves, adjusted for valuation changes, reserve income flows, and changes in foreign exchange assets and liabilities in relation to residents and nonresidents, and operations with foreign exchange derivatives. It may differ from actual foreign currency market transactions data when available.
[2]An increase in NEER corresponds to an appreciation.

Figure 1.12. Capital Flows to Emerging Market and Developing Economies and the VIX

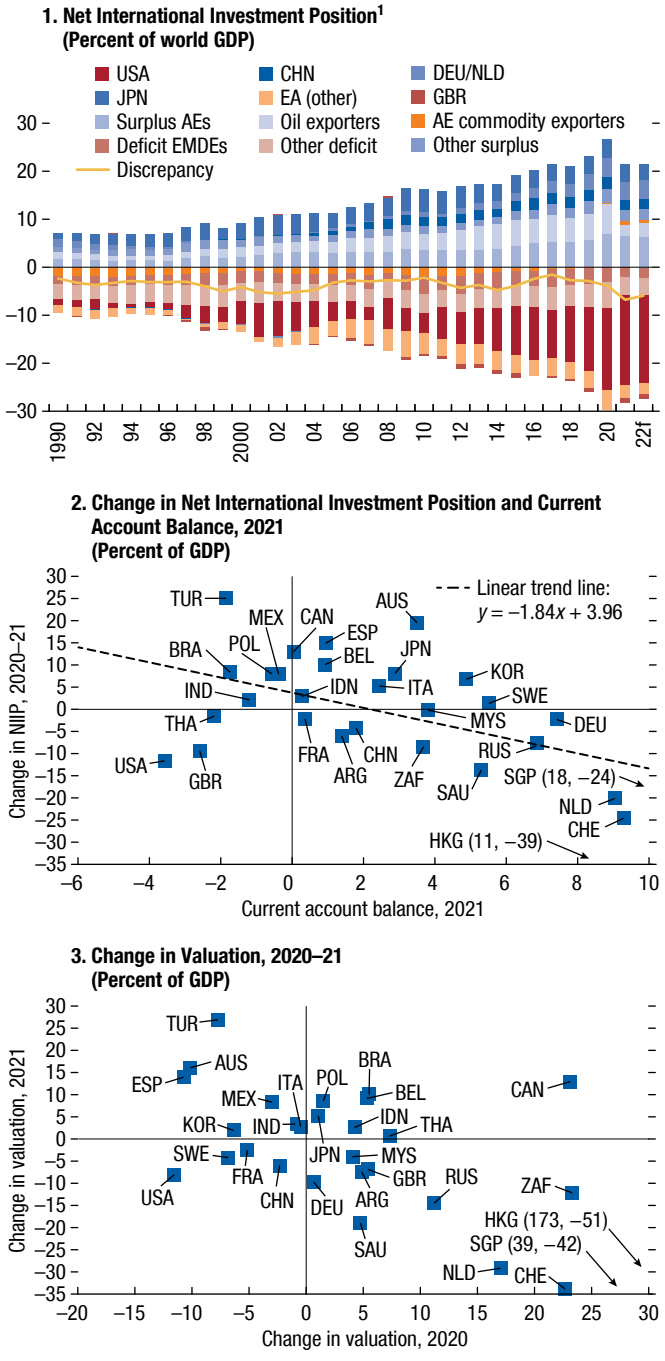


Sources: IMF, *International Financial Statistics*; Institute of International Finance; and IMF staff calculations.
Note: FDI = foreign direct investment; VIX = Chicago Board Options Exchange Volatility Index. Group GDP is the total GDP of all economies considered in the figure, which include Brazil, Chile, China, Colombia, India, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, Thailand, and Türkiye. For panels 2–4, positive numbers represent net inflow of capital.
[1]Net nonresident purchases of emerging market stocks (portfolio equity flows) and bonds (portfolio debt flows) in billions of US dollars, proxy for portfolio flows as measured in the balance of payments.

debtor economy, and its net international investment position declined from –67 percent of GDP in 2020 to –79 percent of GDP in 2021. Other large debtor economies include Australia, Spain, and the United Kingdom. Large creditor economies include China, Germany, Hong Kong Special Administrative Region, Japan, The Netherlands, Singapore, and Switzerland (Table 1.2).

The global financial safety net expanded in 2020 to accommodate the COVID-19 shock, driven largely by the Federal Reserve's temporary bilateral swap lines, and it narrowed back in 2021 when the Federal Reserve's temporary bilateral swap lines expired. As of 2021, the global financial safety net stood at 19 percent of global GDP ($18.4 trillion), down from 22 percent of global GDP in 2020 ($18.6 trillion; Figure 1.14). The global financial safety net in 2021 comprised $14.8 trillion in reserves (including the August 2021 SDR allocation of $650 billion), $1.4 trillion in bilateral swap lines, $1.2 trillion in regional financing arrangements, and $1 trillion in

Figure 1.13. Net International Investment Positions, 1990–2022



Sources: External Wealth of Nations database; IMF, *World Economic Outlook*; and IMF staff calculations.
Note: AE = advanced economy; EA = euro area; EMDE = emerging market and developing economy; "f" = IMF staff forecasts; FX = foreign exchange; NFA = net foreign assets; NIIP = net international investment position. Data labels use International Organization for Standardization country codes.
[1]AE commodity exporters comprise Australia, Canada, and New Zealand; creditor AEs comprise Hong Kong SAR, Korea, Singapore, Sweden, Switzerland, and Taiwan Province of China; deficit EMDEs comprise Brazil, Chile, India, Indonesia, Mexico, Peru, South Africa, and Türkiye; oil exporters comprise *World Economic Outlook* definition plus Norway.

IMF funds. About 40 percent of bilateral swap lines in place in 2021 were permanent swap lines among major advanced economies (Figure 1.15).

Assessments of External Positions in 2021

The assessment of external positions requires a multilateral approach that reconciles positive and negative excess external imbalances. The IMF's external assessment framework combines numerical inputs from models of the refined 2022 External Balance Assessment (EBA) methodology (see Online Annex 1.1 for more details), the estimated effects of the COVID-19 crisis, and analytically grounded judgment and country-specific insights.

The EBA methodology produces multilaterally consistent estimates for current account and real exchange rate norms by applying the estimated coefficients from a cross-country panel regression to country-specific macroeconomic, structural, and desired policy variables (Figure 1.16).[7] The norms are compared with current account and real exchange rate levels (after adjusting for cyclical and other temporary or country-specific factors) to derive gaps. Based on those gaps and considering other external sector indicators (such as the net international investment position, capital flows, and foreign exchange reserves), the IMF staff arrives at a holistic overall external sector assessment for 30 of the world's largest economies, which represent 87 percent of global GDP.[8] Annex Table 1.1.2 summarizes the IMF staff–assessed current account and real effective exchange rate gaps and the external sector assessments for the 30 economies.

Special adjustments to EBA model estimates have been made to strip out factors associated with the pandemic—the travel and medical trade shocks, the shift in consumption, and transportation costs (see Online Annex 1.2).[9] Adjustments for

[7]See Cubeddu and others (2019) for a detailed description. Advanced economies with higher incomes, older populations, and lower growth prospects have positive current account norms with both the current and refined models, while current account norms are negative for most emerging market and developing economies, as they are expected to import capital to invest and exploit their higher growth potential.

[8]While the *External Sector Report* assesses 30 economies, the IMF staff provides a holistic assessment of the external sector for all member countries in the context of bilateral surveillance.

[9]The oil balance adjustor, which captured the impact of the drop in the volume of oil trade in 2020, was dropped because oil demand and world prices moved closer to pre-pandemic levels.

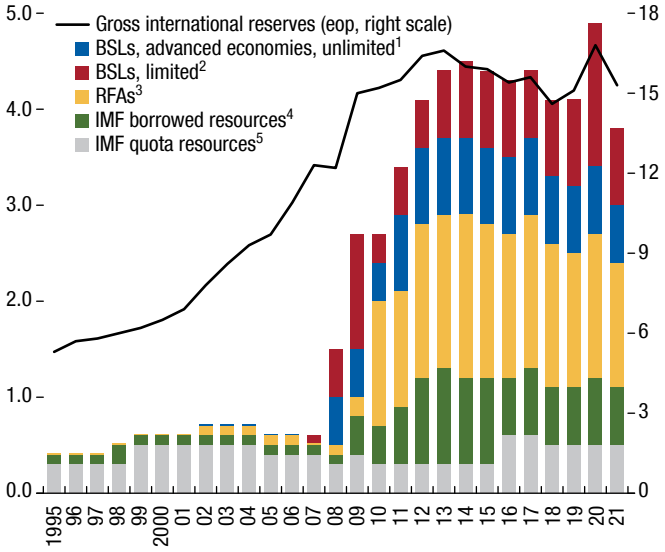
Table 1.2. Selected Economies: Net International Investment Position, 2018–21

	Billions of US Dollars				Percent of World GDP				Percent of GDP			
	2018	2019	2020	2021	2018	2019	2020	2021	2018	2019	2020	2021
Advanced Economies												
Australia	–746	–658	–747	–579	–0.9	–0.8	–0.9	–0.6	–52.6	–47.5	–55.0	–35.4
Belgium	181	219	245	327	0.2	0.3	0.3	0.3	33.2	40.9	44.5	57.1
Canada	473	598	877	1,368	0.6	0.7	1.0	1.4	27.4	34.3	53.3	68.8
France	–518	–686	–846	–1,014	–0.6	–0.8	–1.0	–1.0	–18.6	–25.1	–32.2	–34.3
Germany	2,102	2,327	2,597	2,759	2.4	2.7	3.1	2.9	52.8	59.8	67.6	65.3
Hong Kong SAR	1,283	1,579	2,122	2,134	1.5	1.8	2.5	2.2	354.6	435.0	615.2	578.0
Italy	–100	–22	41	155	–0.1	0.0	0.0	0.2	–4.8	–1.1	2.2	7.4
Japan	3,033	3,271	3,417	3,748	3.5	3.7	4.0	3.9	60.2	63.8	67.8	75.9
Korea	436	518	487	660	0.5	0.6	0.6	0.7	25.3	31.4	29.6	36.4
The Netherlands	666	818	1,040	956	0.8	0.9	1.2	1.0	72.8	89.9	113.9	93.8
Singapore	685	845	969	1,018	0.8	1.0	1.1	1.1	181.6	225.2	280.8	256.4
Spain	–1,097	–1,037	–1,159	–998	–1.3	–1.2	–1.4	–1.0	–80.1	–75.0	–84.9	–70.4
Sweden	44	87	84	105	0.1	0.1	0.1	0.1	7.8	16.2	15.5	16.8
Switzerland	779	651	860	730	0.9	0.7	1.0	0.8	105.9	88.9	114.4	89.8
United Kingdom	–381	–733	–622	–1,020	–0.4	–0.8	–0.7	–1.1	–13.1	–25.5	–22.5	–32.0
United States	–9,685	–11,231	–14,011	–18,101	–11.3	–12.9	–16.5	–18.7	–47.2	–52.6	–67.1	–78.7
Emerging Market and Developing Economies												
Argentina	66	115	122	124	0.1	0.1	0.1	0.1	12.5	25.5	31.2	25.2
Brazil	–595	–786	–552	–479	–0.7	–0.9	–0.6	–0.5	–31.1	–41.9	–38.1	–29.8
China	2,108	2,300	2,287	1,983	2.5	2.6	2.7	2.1	15.2	16.0	15.4	11.2
India	–437	–375	–355	–354	–0.5	–0.4	–0.4	–0.4	–16.2	–13.3	–13.3	–11.1
Indonesia	–317	–338	–280	–279	–0.4	–0.4	–0.3	–0.3	–30.4	–30.2	–26.4	–23.5
Malaysia	–18	–9	19	21	0.0	0.0	0.0	0.0	–4.9	–2.6	5.7	5.5
Mexico	–555	–614	–533	–532	–0.6	–0.7	–0.6	–0.6	–45.4	–48.4	–48.9	–41.0
Poland	–315	–301	–276	–258	–0.4	–0.3	–0.3	–0.3	–53.7	–50.4	–45.9	–37.9
Russia	374	360	517	483	0.4	0.4	0.6	0.5	22.6	21.2	34.8	27.2
Saudi Arabia	658	671	599	613	0.8	0.8	0.7	0.6	80.5	83.5	85.2	73.5
South Africa	45	31	112	104	0.1	0.0	0.1	0.1	11.1	8.0	33.5	25.0
Thailand	–6	0	58	49	0.0	0.0	0.1	0.1	–1.1	0.0	11.5	9.5
Türkiye	–336	–310	–385	–253	–0.4	–0.4	–0.5	–0.3	–43.1	–40.8	–53.4	–31.4
Memorandum item:												
Euro Area	–987	–574	625	–218	–1.1	–0.7	0.7	–0.2	–7.2	–4.3	4.8	–1.5
Statistical Discrepancy	–2,949	–3,281	–3,744	–6,561	–3.4	–3.8	–4.4	–6.8	. . .	. . .	. . .	. . .
Overall Creditors[1]	15,859	17,616	19,836	21,034	18.5	20.2	23.3	21.8	. . .	. . .	. . .	. . .
Of which: Advanced Economies	12,202	13,778	15,769	17,331	14.2	15.8	18.5	17.9	. . .	. . .	. . .	. . .
Overall Debtors[1]	–18,808	–20,897	–23,580	–27,595	–21.9	–23.9	–27.7	–28.6	. . .	. . .	. . .	. . .
Of which: Advanced Economies	–14,118	–15,990	–19,085	–23,279	–16.4	–18.3	–22.4	–24.1	. . .	. . .	. . .	. . .

Sources: IMF, *World Economic Outlook*; US Bureau of Economic Analysis; and IMF staff calculations.
Note: ". . ." indicates that data are not available or not applicable.
[1]Overall creditors and debtors (and the "of which" advanced economies) include non–*External Sector Report* economies.

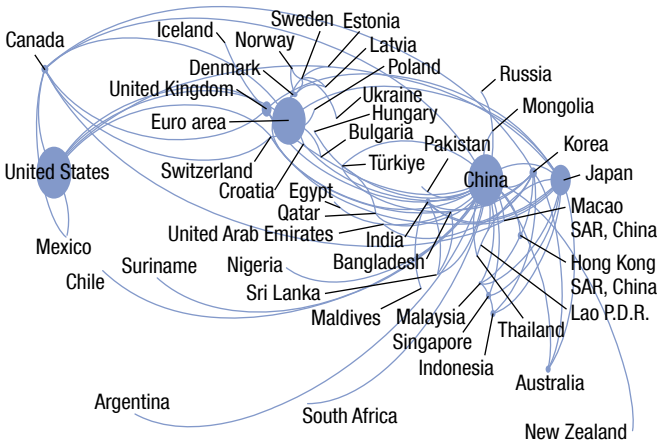
Figure 1.14. Evolution of the Global Financial Safety Net, 1995–2021

(Percent of world GDP)



Sources: Perks and others 2021; central bank websites; RFA annual reports; and IMF staff estimates.
Note: BSLs = bilateral swap lines; eop = end of period; RFAs = regional financing arrangements; RHS = right-hand scale. Two-way arrangements are counted only once.
[1]Permanent swap lines among major advanced economy central banks (Federal Reserve, European Central Bank, Bank of England, Bank of Japan, Swiss National Bank, Bank of Canada). The estimated amount is based on known past usage or, if undrawn, on average past maximum drawings of the remaining central bank members in the network, following the methodology in Denbee and others 2016.
[2]Limited-amount swap lines include all arrangements with an explicit amount limit and exclude all the Chiang Mai Initiative Multilateralization arrangements, which are included under RFAs.
[3]Based on explicit lending capacity or limit where available, committed resources, or estimated lending capacity based on country access limits and paid-in capital.
[4]After prudential balances.
[5]Quota for countries in the financial transaction plan after deducting prudential balance.

Figure 1.15. Evolution of Bilateral Swap Line Networks,[1] 2021



Sources: Perks and others 2021; central bank websites; and IMF staff estimates.
[1]The size of each bubble represents the total amount of bilateral swap lines in US dollar terms.

country-specific factors, such as measurement issues, severe drought, demographics, and net international investment position considerations, have also been included.[10] The COVID-19-related factors explained a larger share of the movement in current account balances in 2021 compared with 2020, implying (as in 2020) that without their use, the 2021 external sector assessments would be distorted and harder to interpret. Annex Table 1.1.3 reports the overall set of IMF staff adjustments to reflect both the COVID-19 factors and other country-specific factors.

[10]Measurement issues arise primarily because of differences between the statistical definition of income in the balance of payments and the relevant economic concept (for example, in relation to the treatment of retained earnings on portfolio equity).

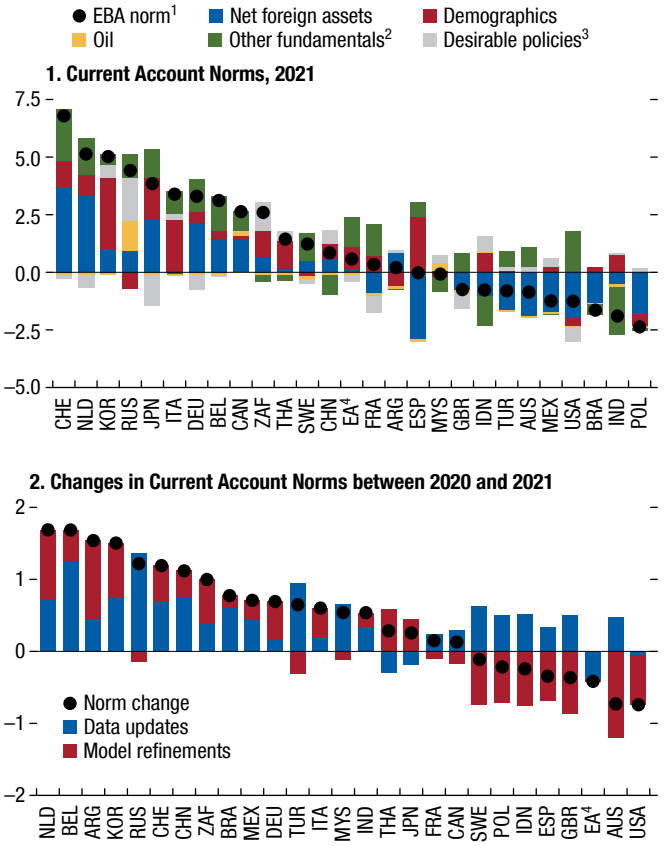
Changes in External Assessments in 2021

In 12 of the 30 economies, assessments changed categories in 2021 compared with 2020 (Figure 1.17; Annex Table 1.1.2; Annex Table 1.1.3).[11] External positions compared with the levels consistent with medium-term fundamentals and desirable policies were as follows:

- *Moderately stronger, stronger, or substantially stronger than the level consistent with medium-term fundamentals and desirable policies:* The ten economies with such positions are Germany, Malaysia, The Netherlands, Poland, Russia, Singapore, Sweden, and Thailand, along with Australia and the euro area, which entered the category in 2021.

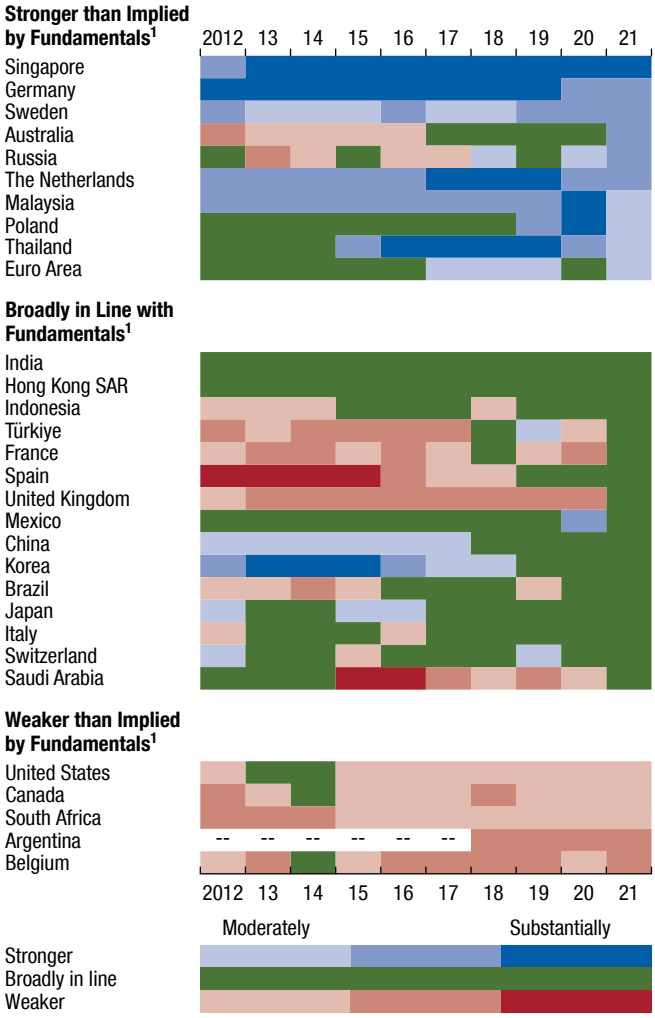
[11]Assessments of the external position are holistic but generally anchored on the current account assessment. Generally, *broadly in line* is consistent with a current account gap of ±1 percent of GDP. *Moderately stronger, stronger,* and *substantially stronger* are generally consistent with a current account gap of [1 percent to 2 percent], [2 percent to 4 percent], and greater than 4 percent, respectively. *Moderately weaker, weaker,* and *substantially weaker* are symmetrically defined. Real effective exchange rate gaps are generally assessed in the range that reflects the country-specific exchange rate semielasticity.

Figure 1.16. External Balance Assessment Current Account Norms, 2021
(Percent of GDP)



Source: IMF, External Balance Assessment estimates.
Note: EA = euro area; EBA = External Balance Assessment; ICRG = *International Country Risk Guide*. The figure excludes Hong Kong SAR, Saudi Arabia, and Singapore as they are not included in the EBA regression model. Data labels use International Organization for Standardization country codes.
[1]The EBA current account norm is multilaterally consistent and cyclically adjusted.
[2]Other fundamentals include output per worker, expected GDP growth, and ICRG.
[3]Desirable policies include desirable credit gap, desirable fiscal balance, desirable foreign exchange intervention, desirable health, and constant and multilaterally consistent adjustment.
[4]The current account norm is corrected for reporting discrepancies in intra-area transactions, since the current account of the entire euro area is about 1.41 percent of GDP less than the sum of the individual 11 countries' balances (for which no such correction is available).

Figure 1.17. The Evolution of External Sector Assessments, 2012–21

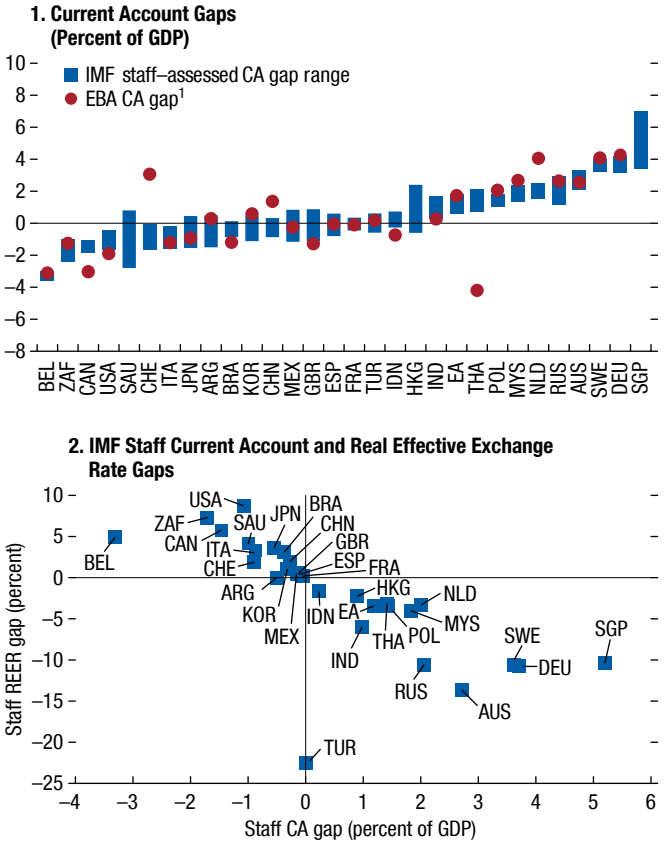


Source: IMF staff assessments.
[1]Grouping and ordering based on economies' excess imbalance during 2021. Coverage of Argentina in the *External Sector Report* started in the 2018 *External Sector Report*.

- *Moderately weaker or weaker than the level consistent with medium-term fundamentals and desirable policies:* The five economies with such positions are Argentina, Belgium, Canada, South Africa, and the United States.
- *Broadly in line with the level consistent with medium-term fundamentals and desirable policies:* The 15 economies with such positions are Brazil, China, Hong Kong Special Administrative Region, India, Indonesia, Italy, Japan, Korea, Spain, and Switzerland, along with France, Mexico, Saudi Arabia, Türkiye, and the United Kingdom, which entered this category in 2021.

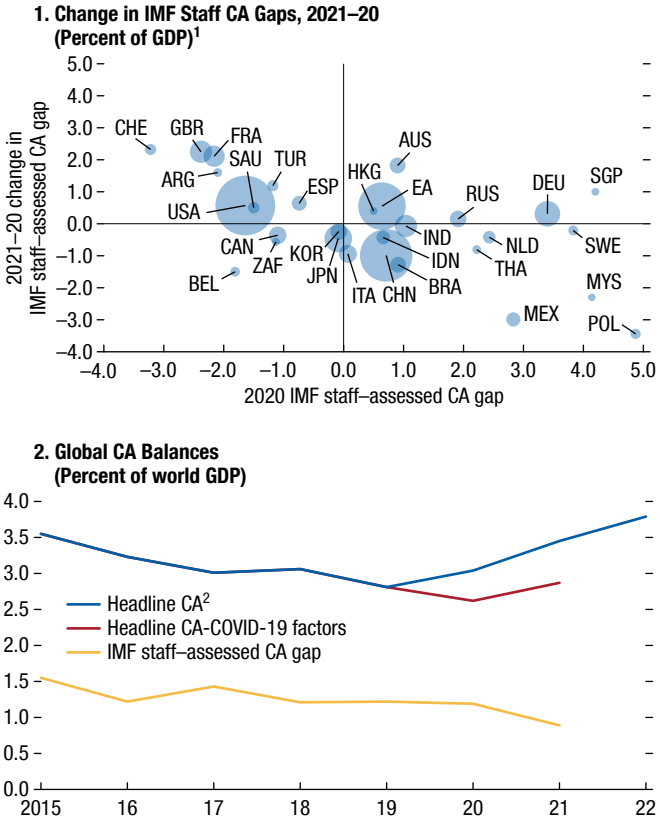
IMF staff–assessed real effective exchange rate gaps were generally consistent with IMF staff–assessed current account gaps. Economies with estimated excess current account surpluses (deficits) generally also had an undervalued (overvalued) real effective exchange rate, according to IMF staff estimates (Figure 1.18, panel 2; Annex Table 1.1.2; and

Figure 1.18. IMF Staff and External Balance Assessment Current Account and Real Exchange Rate Gaps, 2021



Source: IMF staff assessments.
Note: CA = current account; EBA = External Balance Assessment; REER = real effective exchange rate. REER gap is based on 2021 *External Sector Report*. Data labels use International Organization for Standardization country codes.
[1]There are no EBA estimates for Hong Kong SAR, Saudi Arabia, and Singapore.

Figure 1.19. Evolution of Headline Current Account Balances and IMF Staff Gaps



Source: IMF staff calculations.
Note: CA = current account. Data labels use International Organization for Standardization country codes.
[1]Bubble sizes proportional to 2021 GDP in US dollars.
[2]The headline CA in 2022 is a projection.

Annex Table 1.1.4).[12] In the case of Türkiye, given the large depreciation of the lira, as the non-energy current account continues to adjust, the IMF staff assessed the real effective exchange rate gap to be more in line with the results from the EBA REER models, which suggest an undervaluation.

Global excess current account balances—the sum of absolute IMF staff–assessed current account gaps—narrowed to 0.9 percent of world GDP in 2021 compared with 1.2 percent of world GDP in 2020, while global current account balances widened by ½ percentage point of world GDP to 3.5 percent of world GDP (Figure 1.19). The absolute sum of current account norms also widened to reach 1.4 percent of GDP in 2021, from 1.1 percent of GDP in 2020, while on average getting closer to actual current account balances. The narrowing of global excess current account balances is mostly driven by the application of the refined model, as the imbalances would have declined by less, to 1.1 percent of world GDP, under the previous model. The improved cyclical adjustment through the new terms-of-trade gap variable contributed to bringing, on average, the estimated norms closer to the actual current account balances. IMF staff–assessed current account gaps narrowed for several economies, particularly China, Malaysia, Mexico, Poland, the United Kingdom, and the United States (Figure 1.19). To a lesser extent,

[12]Figure 1.18 reports the ranges for IMF staff–assessed current account gaps and the EBA model–based current account gap estimates. As reported in Annex Table 1.1.3, the EBA and IMF staff–assessed current account gaps differ in several cases, reflecting the use of adjustors to account for country-specific cases and the COVID-19 shock. For example, Thailand includes large COVID-19 adjustors to account for the travel shock and transportation costs. Switzerland includes country-specific adjustors to account for measurement biases.

IMF staff–assessed current account gaps widened for some countries, such as Australia, Belgium, and Singapore.

Most of the excess balances in 2021 pertained to advanced economies, higher than the 70 percent in 2020. The largest contributors to lower-than-warranted (at least 1 percent of GDP below their norm) current account balances as a share of world GDP were, in descending order, the United States, Canada, and Belgium. The largest contributors to larger-than-warranted (at least 1 percent of GDP above their norm) current account balances were, in a descending order, Germany, Australia, Russia, and Sweden. Current account gaps tend to narrow over time, though slowly, with adjustments occurring faster in excess deficit economies than in excess surplus economies (Box 1.2).

Outlook for Current Account Balances and Risks

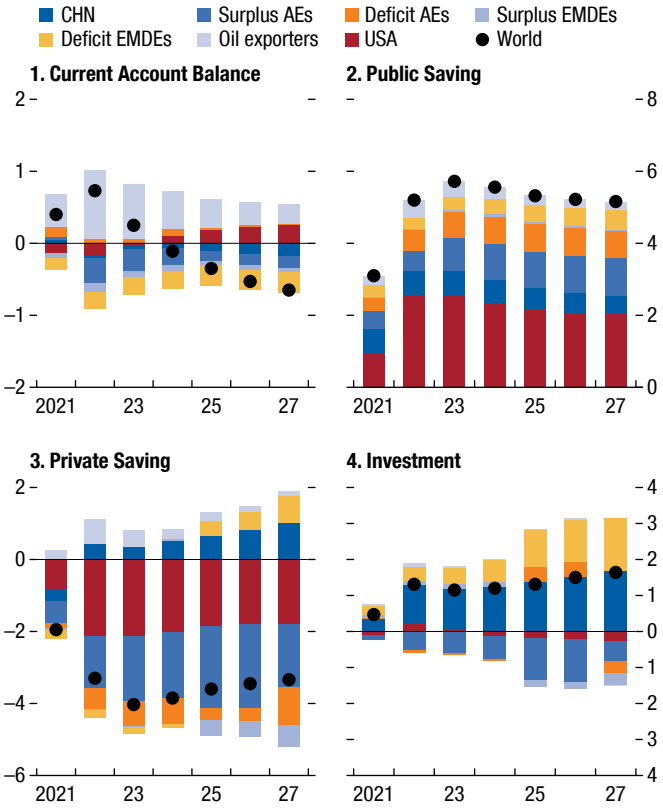
Medium-Term Current Account Forecasts

Global current account balances are projected to widen further in 2022, driven by an expansion in oil exporters' surplus and the US deficit, as monetary tightening by the Federal Reserve in response to inflation pressures contributes to the dollar's appreciation. Balances will narrow gradually over 2023–27 as these factors moderate (Figure 1.20). As the pandemic support is withdrawn, governments will increase their saving over the medium term, notably in the United States and, to a lesser extent, in some surplus advanced economies. This increase in public saving will offset the projected decline in private saving that peaked during the pandemic. Investment is set to increase globally in the medium term, driven largely by China.

Within these aggregate trends, projected changes in current account balances for major economies vary widely (Table 1.1).

- *Advanced economies*: The current account surplus in surplus advanced economies is projected to narrow in percent of GDP in 2022 across the board. In Germany, a projected decline in the surplus by 1.3 percentage points of GDP is driven by an increase in the cost of energy imports and a collapse in exports to Russia stemming from sanctions related to the war in Ukraine. In Japan, the projected narrowing of the current account surplus by 1 percentage point is driven by higher energy costs. However, the current account deficit in the United States is projected to remain elevated at 3.7 percent of GDP, with the decrease in public dissaving countered by a decline in private saving and an increase in investment.
- *Emerging market economies*: China's current account surplus is projected to decline by 0.4 percentage point of GDP to 1.4 percent of GDP in 2022, driven by an increase in investment. Commodity prices and the war in Ukraine are expected to drive movements in current account balances in several other emerging markets for 2022. Current account balances in commodity exporters are projected to increase in 2022 (for example, by 12.1 percentage points of GDP in Saudi Arabia and by 1.9 percentage points of GDP in Indonesia). The impact is the opposite for commodity importers, with the current account deficit in India, for example, increasing by 1.9 percentage points of GDP. The current account surplus in Russia is projected to increase by 5 percentage points of GDP, driven by import

Figure 1.20. Global Saving-Investment Balances, 2020–27
(Change from 2020, percent of World GDP)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
Note: AE = advanced economy; EMDE = emerging market and developing economy. Data from 2022 onward are projections. Data labels use International Organization for Standardization country codes.

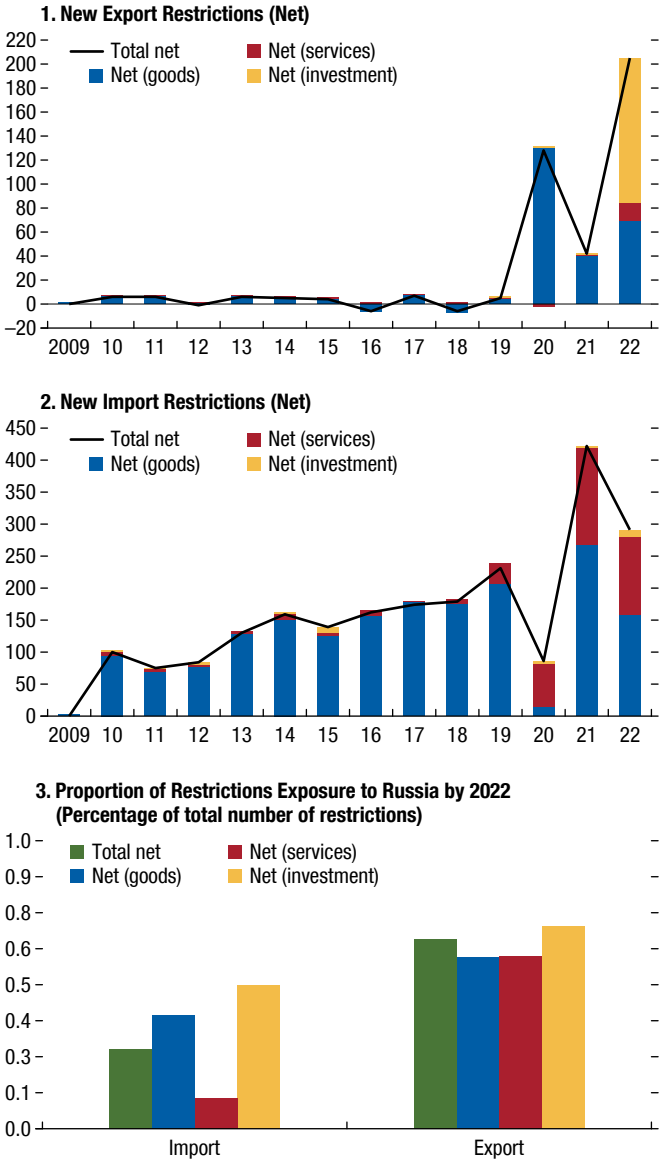
compression, positive terms of trade, and export volumes that have remained relatively resilient so far in the face of sanctions.

Risks Surrounding the Outlook

In the context of the lingering pandemic and the war in Ukraine, unusually high uncertainty and risks surround the external sector outlook:

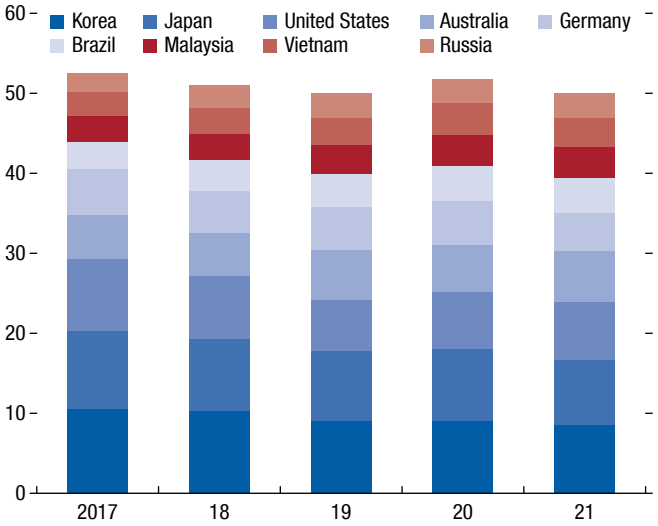
- *Commodity prices*: A prolonged war in Ukraine could lead to higher commodity prices for a longer time. Given the opposite impact on commodity exporters and importers and the fact that key commodity exporters are surplus economies, this could widen global current account balances in 2022 beyond the baseline projection and delay the adjustment in subsequent years. Higher oil and gas prices for longer would also increase vulnerabilities in importing countries and could lead to higher capital outflows, larger borrowing costs, and greater fiscal pressures, with potentially disruptive effects on exchange rates. In food-importing countries, higher prices could increase the cost of imports and fiscal pressures. Those risks can be exacerbated by escalating international sanctions on Russia and countersanctions by Russia.
- *Trade tensions and fragmentation*: While the baseline already incorporates the impact of sanctions related to the war in Ukraine, a wider deterioration in the geopolitical environment would further exacerbate trade tensions and supply disruptions globally, in the context of already-rising trade restrictions (Figure 1.21). This could result in trade fragmentation, for example, through the creation of new trade blocs based on "friendshoring," disruptions to established global value chains, and a reorganization in the international monetary system with implications for reserve asset composition, payments systems, and exchange rates. The need to adjust to new trade blocs would add stress to already-strained supply chains. Although a more fragmented trade system could either increase or decrease global balances, depending on the exact reconfiguration of trade blocs, it would unambiguously erode welfare gains from globalization, reduce technology transfers, and decrease the potential for export-led growth in low-income countries.
- *A worsening slowdown in China*: A prolonged slowdown in China would affect trading partners directly, the largest of which are located often in Asia and the Pacific (Figure 1.22). The slowdown would also have global repercussions beyond major trading partners by affecting commodities for which China has a large share of global demand. The impact on global balances from lower demand for commodities will depend on the net effect on current accounts of commodity importers

Figure 1.21. New Trade Restrictions, 2009–22



Source: Global Trade Alert.
Note: "Net" is defined as the difference between harmful and liberalizing interventions. Export controls includes export restricting measures, and import reforms includes import liberalizing measures in the medical goods and medicine sectors. See Evenett (2021) for details.

Figure 1.22. China: Major Import Sources, 2017–21
(Percent of total China imports)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

and exporters.[13] Risks to growth are amplified by risks from the reemergence of COVID-19 and zero-COVID-19 policies that could lead to more lockdowns and additional disruptions in global supply chains.

- *Financial tightening*: The prospects for continued tightening of monetary policy in the United States and major economies imply a further tightening of global financial conditions, leaving open risks for disruptive capital outflows from emerging markets, a depreciation of their currencies, and a higher probability of default. Tighter-than-expected monetary policy in the United States could disrupt market conditions, while a larger tightening by the Federal Reserve than by the European Central Bank could contribute to further dollar appreciation and widening in global balances. Negative wealth effects of monetary and financial tightening could impact fiscal balances and saving behavior. The stock of external liabilities at the end of 2021 exceeded reserves for most emerging and developing economies (Figure 1.23). The IMF staff estimates capital flows at risk at the 5 percent level to be 2.3 percent of GDP and the probability of outflows to be about 30 percent in the April 2022 *Global Financial Stability Report*.
- *Fiscal policy path*: In the baseline, fiscal policy is projected to contribute to a narrowing of global balances because of faster withdrawal of fiscal support by current account deficit economies, but deviations from the projected fiscal path could have significant consequences. As discussed in the 2021 *External Sector Report*, additional fiscal expansions by current account deficit economies could hinder the predicted narrowing in global balances over the coming years. Deviations of fiscal policy from the baseline path could be brought about, for example, by a resurgence of COVID-19 strains that require strict lockdowns and additional fiscal support and by the need for transfers to ease the impact of higher food and fuel prices on vulnerable households. A faster-than-expected pace of fiscal consolidation among current account surplus economies would also expand global balances.
- *Climate change*: Natural disasters can have large effects on current accounts of disaster-prone countries (Box 1.3). Although those countries are small from a systemic point of view, if climate change worsens (for example, because of lack of progress on mitigation policies [see Chapter 2]), those types of events could become more widespread and potentially affect larger countries in the long term, with a possible effect on global balances. Global balances could also widen due to unbalanced implementation of climate mitigation policies (see Chapter 2).

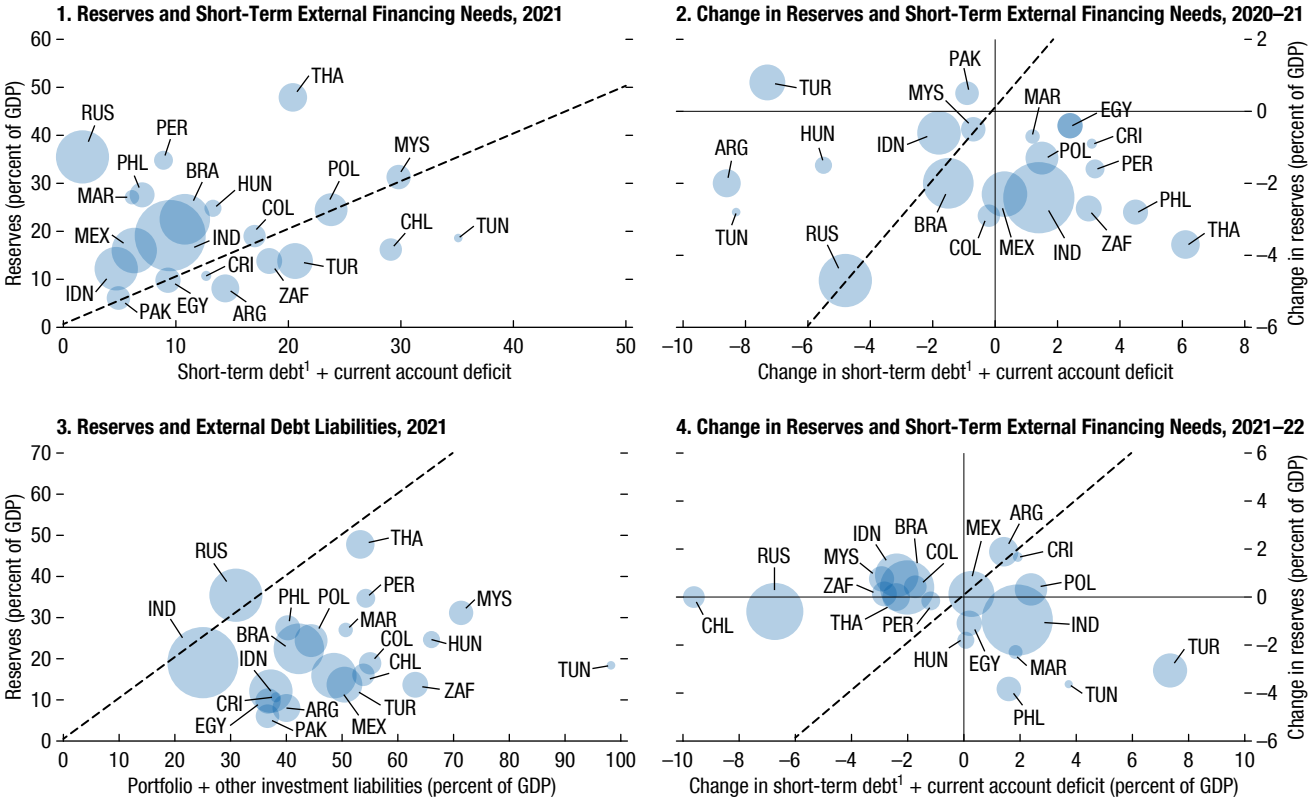
[13]For example, a lower commodity price would increase the deficit of a commodity exporter that runs a current account deficit, thereby contributing to widening global current account balances. The opposite effect would arise if the commodity exporter ran a current account surplus.

Policy Priorities for Promoting External Rebalancing

As emphasized in the April 2022 *World Economic Outlook*, the war in Ukraine has exacerbated existing trade-offs for policymakers, including between fighting inflation and safeguarding economic recovery and between providing support to those affected and rebuilding fiscal buffers. Policies to address fallouts from the pandemic and war need to be balanced with the need to fight inflation and rebuild fiscal buffers while prioritizing fiscal spending to protect the most vulnerable. Consistent with such overall needs, policies should also enhance external stability and facilitate external rebalancing.

Multilateral cooperation is key in dealing with the policy challenges generated by the pandemic and the

Figure 1.23. Emerging Market and Developing Economies: External Vulnerabilities



Sources: IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; and IMF staff calculations.
Note: Bubble sizes are proportional to US dollar GDP. Data labels use International Organization for Standardization country codes.
[1]Short-term debt on a residual maturity basis. 2020 portfolio positions are reported when 2021 data are unavailable.

war in Ukraine, including to tackle the humanitarian crisis. Multilateral cooperation could greatly facilitate the green transition: in Chapter 2, a coordinated implementation of climate change policies has been found to reduce global current account balances and help to bring forward net zero emissions. Coordinated policy efforts will also be needed to counter the risks of global economy fragmentation, including by eschewing new barriers to trade, which would reduce growth with no significant effect on external imbalances (see Box 1.4). Addressing global food security challenges would also require coordinated policy efforts, including to support the vulnerable, promote open trade of food and agricultural inputs, and invest in climate-resilient agriculture.

Maintaining liquidity in the global financial system, including via the global financial safety net, will be essential to helping economies manage risks related to tightening of global financial conditions and financial system fragmentation because of geopolitical tensions. To this end, the IMF's lending programs also help provide a safety net for countries hit by balance-of-payment shocks.

The review of the IMF's Institutional View on the liberalization and management of capital flows provides guidance on how to manage capital flow volatility (IMF 2022). While exchange rate flexibility can in general help absorb shocks, in economies with shallow foreign exchange markets, foreign exchange intervention may be needed to address disorderly conditions, and temporary capital flow management measures may be warranted, for example, in imminent crisis circumstances or during capital inflow surges. Additionally, when a large stock of unhedged external debt (particularly if denominated in foreign currency but in some cases also in local currency) generates systemic financial risks, preemptive capital flow management measures that are also macro-prudential measures to restrict inflows can mitigate these risks. However, they should not be used in a manner that leads to excessive

distortions and should not substitute for necessary macroeconomic and structural policies or exchange rate adjustment.

Policies to promote external rebalancing differ based on individual economies' positions and needs, as detailed in the Individual Economy Assessments in Chapter 3 (and summarized in Annex Table 1.1.6).

- *Economies with weaker-than-warranted external positions*: Where excess current account deficits in 2021 partially reflected fiscal deficits above desirable medium-term levels (as in the United States) and where such imbalances persist, fiscal consolidation will be critical to support external rebalancing and bring the current account balance closer to its norm. However, fiscal consolidation should be implemented in a way that prevents long-term scarring from the pandemic, including by protecting spending for infrastructure, health care, and education. Policies should also help the most vulnerable households cope with the impact of rising oil and food prices. In several emerging market economies with weaker-than-warranted external positions in 2021 (such as Argentina and South Africa), gradual but substantial growth-friendly fiscal consolidation while providing space for infrastructure and social spending to help reduce poverty and inequality would help current account rebalancing and help accumulate international reserves to more adequate levels. Countries with lingering competitiveness challenges would also need to address structural challenges, including through labor, product market, and other reforms, to promote green, digital, and inclusive growth while boosting productivity.
- *Economies with stronger-than-warranted external positions*: In economies where excess current account surpluses persist, intensifying reforms that encourage investment and discourage excessive private saving is warranted. Fiscal policies can help achieve those objectives, especially where there is fiscal space and inflation expectations are well-anchored. For example, in Germany and the Netherlands, additional fiscal spending can help foster investment in physical and human capital and deal with the repercussions from the war in Ukraine, while promoting external rebalancing. Policies to encourage public and corporate investment, including those facilitating a greener structural transformation of the economy (see also Chapter 2), would also help reduce external imbalances (for example, in Poland and Sweden). In some emerging markets, reforms to discourage excessive precautionary saving and support consumption by expanding social safety nets (Malaysia, Thailand) and tackling widespread informality (Thailand) would also help reduce excess current account surpluses.
- *Economies with external positions broadly in line with fundamentals*: In such cases, policies should continue to address domestic imbalances to prevent excessive external imbalances. Relevant policies include accelerating structural reforms—including state-owned enterprise reforms—to boost potential growth and strengthening social protection to reduce high household precautionary savings (as in China). In countries with large external liabilities (such as Spain), keeping the current account balance in line with its norm will require a combination of fiscal consolidation efforts and higher private savings, to be achieved through productivity gains that will require continued wage flexibility, addressing labor market duality, and actions to enhance education outcomes and encourage innovation.

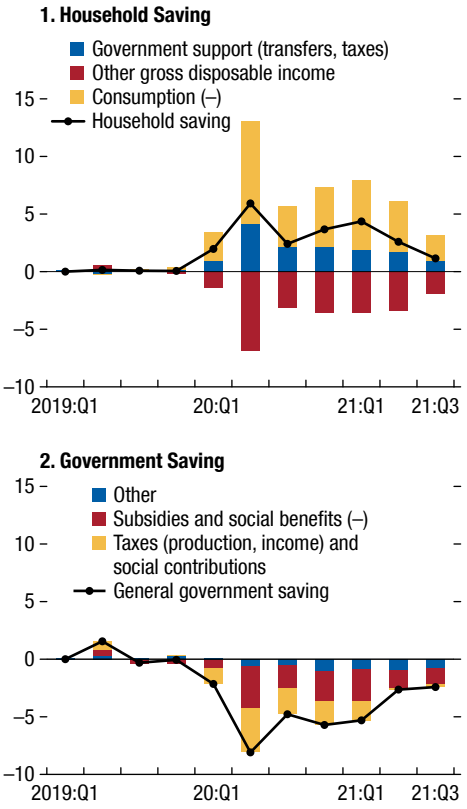
Box 1.1. Saving and Wealth Dynamics in the Aftermath of COVID-19

After increasing sharply during the COVID-19 crisis, household saving has returned to close to pre-pandemic levels in many countries as pandemic-related fiscal support measures expire.[1] However, large increases in household balance sheets (because of saving and valuation gains) during the pandemic persist and tend to be distributed unequally, which could have important implications for the future path of external balances.

Decomposition of saving by institutional sector: The pandemic has led to very large and opposite changes in saving by households, firms, and the public sector, leading to small net changes in national saving and current account balances. The fall in consumption caused by lockdowns explains a significant part of the household saving increase, and public support aimed at maintaining incomes also contributed (Aggarwal and others 2022). In the corporate sector, the fall in production was offset by lower employee compensation and higher public support, leaving corporate saving broadly unchanged. The flip side of these evolutions has been a sharp decrease in public saving, reflecting fiscal support to both firms and households and lower economic activity. As the recovery takes hold, household and public saving have progressively returned to close to their pre-pandemic levels (Figure 1.1.1). However, there has been little drawdown of the stock of excess household savings so far. This reflects the limited role of pent-up demand for consumption of services such as restaurants and travel and the unequal distribution of pandemic excess saving across income levels (see below).

Excess private saving and public dissaving and the current account in the United States and Europe: The cumulative change in household saving relative to the first quarter of 2020 (excess saving) is strongly associated with large government dissaving across countries (in line with Aggarwal and others [2022]). To understand its implications for external accounts, the cumulative change in the current account can be decomposed into changes in (excessive) private saving, fiscal saving, and net domestic investment in the United States and in Europe using national accounts' identities.[2]

Figure 1.1.1. Decomposing Excess Household Saving and Public Dissaving in the European Union
(Percent of pre-crisis GDP trend)



Sources: Eurostat (quarterly sector accounts); IMF, *World Economic Outlook;* and IMF staff calculations.
Note: Household and government saving and their components are shown as cumulated changes from the first quarter of 2019. For households, "government support" includes social benefits, social contributions, taxes on income and wealth, and other transfers. "Other gross disposable income" includes gross operating surplus and mixed income, compensation of employees, and net property income. For the government, "other" includes gross value added, compensation of employees, net property income, public consumption, and other current transfers.

Figure 1.1.2 shows that the magnitude of excessive public and private saving is much larger in the United States in percent of GDP. In addition, the large increase in fiscal deficits more than offsets the increase in private saving in the United States, leading to larger current account deficits. By contrast,

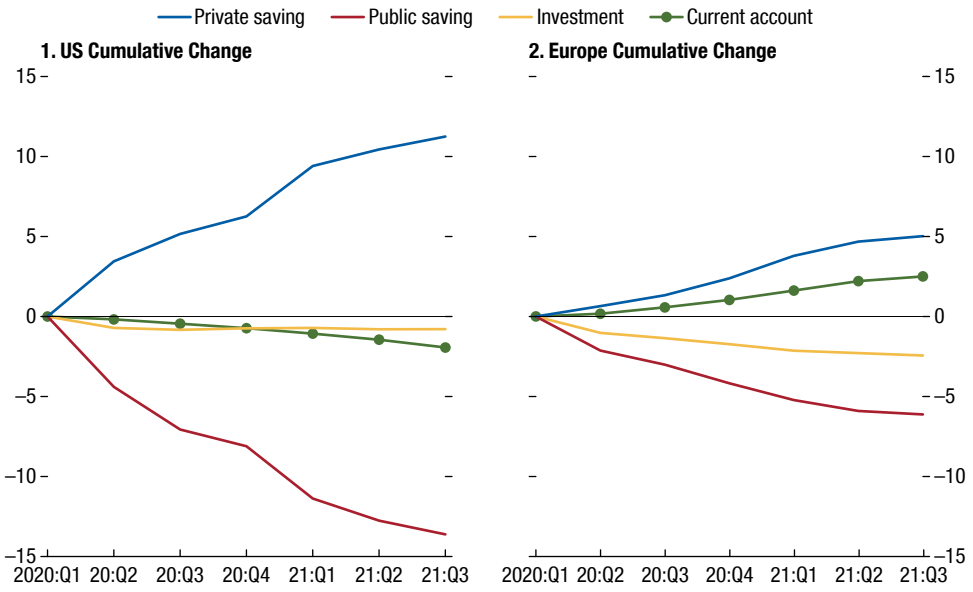
This box was prepared by Cian Allen and Cyril Rebillard.

[1]See Chapter 1 of the April 2022 *Fiscal Monitor* for an in-depth discussion on the relation between government support and changes in household saving during the pandemic.

[2]The current account balance is equal to saving (both private and public) minus investment.

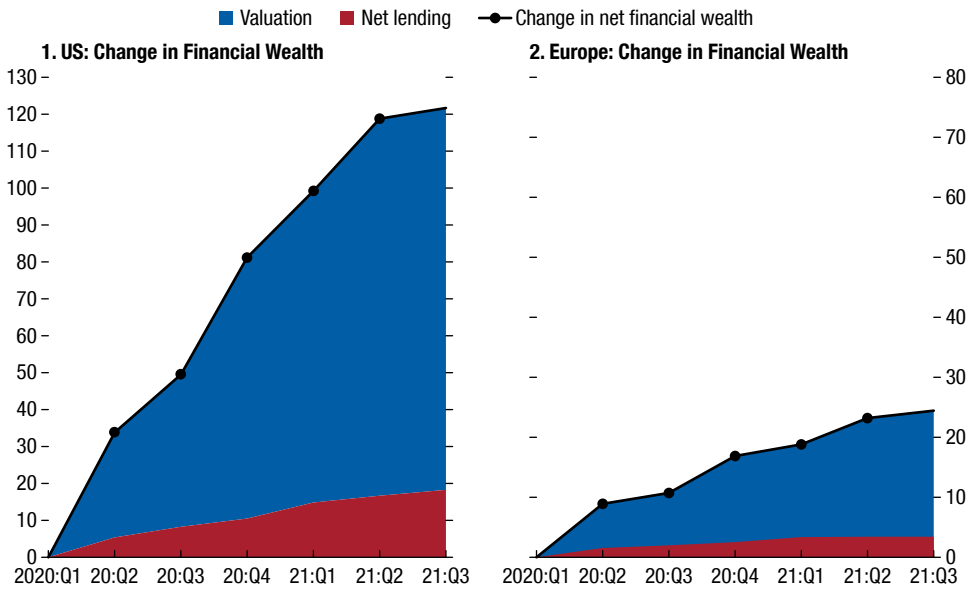
Box 1.1 *(continued)*

Figure 1.1.2. Cumulative Change in the Current Account
(Percent of 2019 GDP)



Sources: Eurostat; Organisation for Economic Co-operation and Development; and IMF staff calculations.
Note: Weighted average Europe (including UK). Each item is shown as cumulated changes from the first quarter of 2020.

Figure 1.1.3. Change in Financial Wealth
(Percent of 2019 GDP)



Sources: Eurostat; Organisation for Economic Co-operation and Development; and IMF staff calculations.
Note: Weighted average Europe (including UK). The change in financial wealth is decomposed into valuation changes and the sum of net lending.

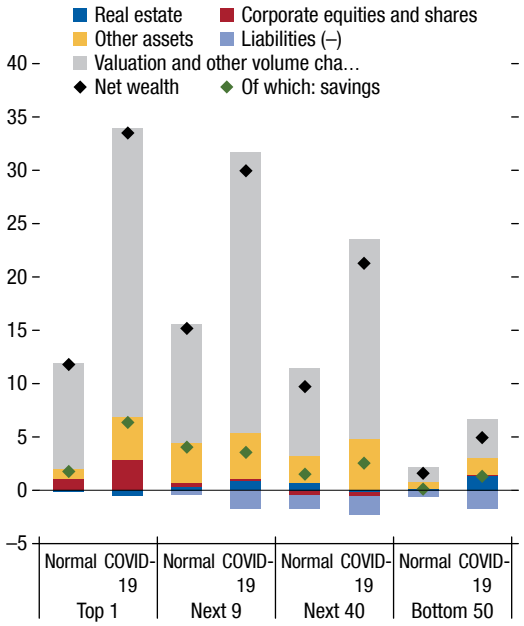
Box 1.1 *(continued)*

in Europe, the higher private saving combined with lower investment more than offset fiscal deficits, leading to increases in the cumulative current account balance.

Bolstered household balance sheets: Accumulated savings explain only part of the increase in wealth, because surging equity and housing prices also made some households wealthier.[3] Regarding financial wealth, Figure 1.1.3 shows that the increase in the household sector's aggregate net financial wealth was much larger in the United States than in Europe.[4] It also shows that most of the increase in financial wealth in the United States was driven by valuation changes (that is, asset price changes), whereas in Europe, the relative contributions of net (financial) saving and changes in asset prices to wealth were more balanced. In addition, since the beginning of 2021, most of the increases in net wealth are due to changes in valuations in both the United States and Europe, as net financial saving flows have reverted to pre-pandemic levels. This suggests that looking only at the cumulated flow of savings could underestimate the overall improvement in accumulated wealth, which, in turn, could underestimate the magnitude of funds available for future spending. Recent data for the United States show a drawdown in accumulated saving in early 2022, possibly related to the inflation surge and large valuation losses. Further data releases will indicate if this pattern also holds more generally across countries.

Unequal distribution of saving: The implications of the accumulation of wealth on future spending and external balances also depends on the distribution of these gains. Figure 1.1.4, based on data published by the Federal Reserve, plots the changes in household net wealth by percentile (expressed as a ratio of total aggregate personal disposable income) during the pandemic and during a period before the pandemic referred to as "normal times." This overall increase in net wealth was also distributed unevenly, with much of it accruing to individuals at the top of the distribution: the equity price boom mostly benefited the rich, while lockdowns more heavily affected spending on dining and travel, which make a larger part of wealthier households' consumption habits. At the same time, the distribution of wealth across groups did not change much, as the increases in net wealth were relatively in line with the pre-pandemic

Figure 1.1.4. United States: Change in Household Net Wealth, by Wealth Percentile, COVID-19 versus Normal Times
(Percent of disposable income)



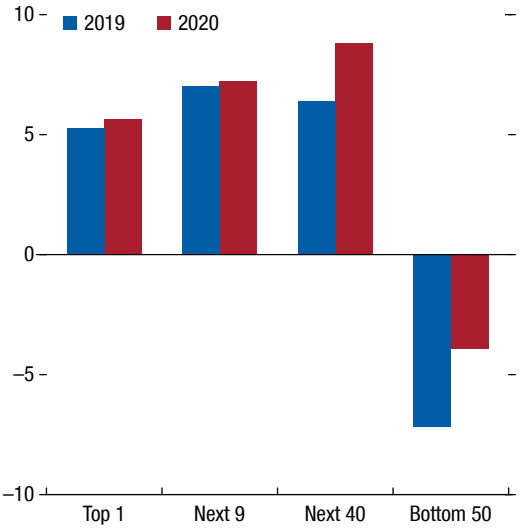
Sources: Federal Reserve, Distributional Financial Accounts; and IMF staff calculations.
Note: The figure reports the change in household wealth between the fourth quarter of 2019 and the fourth quarter of 2021 (COVID-19 period) and between the fourth quarter of 2014 and the fourth quarter of 2019 (normal times). Numbers are normalized using total nationwide personal disposable income during the corresponding period (for example, the first quarter of 2020 to the fourth quarter of 2021 for the COVID-19 period). Abstracting from valuation changes, the change in the top 1 percent's household net wealth during COVID-19 can be interpreted as the top 1 percent's contribution to the average nationwide household saving rate over the period. "Other assets" includes pension entitlement, private businesses, consumer durables, and other assets.

[3]In the nonfinancial accounts: change in household wealth is equal to saving plus valuation changes. In the financial accounts: change in household financial wealth is equal to net lending plus valuation change. Net lending is the difference between total income and total spending, or equivalently, between gross saving and total investment.

[4]Recent data for net financial wealth are more readily available than for overall net wealth (including nonfinancial assets). Net financial wealth is equal to financial assets minus liabilities. Nonfinancial wealth, which consists mainly of real estate, represented about half of the increase in overall wealth between 2019 and 2020 in countries with available data.

Box 1.1 *(continued)*

Figure 1.1.5. Europe: Unequal Distribution of Saving, by Income Percentile
(Percent of disposable income)



Sources: Allen, Kolerus, and Xu 2022; and IMF staff calculations.
Note: This figure plots an estimation of the distribution of private saving in percent of national income. It uses constant consumption-to-income ratios, following Mian, Straub, and Sufi (2021) and Allen, Kolerus, and Xu (2022). The median values for 24 European countries are reported.

shares in the wealth distribution (Blanchet, Saez, and Zucman 2022).[5] Similar distributional balance sheet data are not available for other countries in a timely manner, but existing estimates of the distribution of saving across the income distribution can be combined with changes in saving and inequality in a sample of European economies between 2019 and 2020.[6] Figure 1.1.5 shows that the increase in saving is relatively broad based in Europe, which can be explained by the relatively muted changes to measured income inequality over that period (Chancel and others, forthcoming).[7]

[5]Blanchet, Saez, and Zucman (2022) show that there was very little change in headline income inequality, with the share of disposable income going to the top 10 percent decreasing in US over the period.

[6]Ideally, the analysis should also focus on the distribution of saving across wealth percentiles in Europe (like in the US). However, such data are not available in a broad sample of countries.

[7]These are back-of-the envelope calculations based on previous estimates of the distribution of saving. Also, these calculations do not include any changes in valuation.

Box 1.2. Current Account Rebalancing: At What Speed? Assessment of Current Account Gaps Historical Persistence

The External Balance Assessment (EBA) framework produces multilaterally consistent assessments of current account balances and real effective exchange rates. These assessments tend to persist over time, as evidenced by Figure 1.17 (see also 2017 *External Sector Report*). This box evaluates how and how fast excess external imbalances adjust by relating initial EBA assessments and policy gaps to subsequent adjustments.[1] The analysis shows that EBA gaps tend to adjust over time, but the adjustment is slow and asymmetric across countries. Adjustment is mainly driven by changes in actual current account balances, with changes in current account norms ("norm creep") playing only a modest role. Closing policy gaps contributes to external adjustment only when policy gaps and overall current account gaps are aligned.

The sample consists of 48 economies in the baseline EBA regression (Ireland is excluded because of large current account volatility in recent years). Two sub-periods are studied: (i) 2012–19, where actual assessments are used based on three subsequent vintages of EBA models and available optimal policies P*; and (ii) 1987–2019, where the refined EBA specification is used (assuming optimal policies P* are kept constant at their 2019 level).[2] Panel regressions are estimated as follows:

$$X_{i,t} - X_{i,t-1} = \alpha.Gap_{i,t-1} + \varepsilon_{i,t}$$

where X represents IMF staff current account gaps, EBA current account gaps, current account norms, policy gaps, and EBA residuals in different specifications. When $X = Gap$ and $\alpha < 0$, the gap follows an exponential process converging toward zero. Half-lives $HL(Gap)$ are then defined as the number of years it takes for the gap to close by half.[3] Unlike previous similar studies, regressions do not include any constant or country fixed effects, as the EBA approach has a strong normative dimension relying on the notion that gaps should close to zero over time.[4]

All gaps adjust, but slowly and with asymmetries across countries. In nearly all cases, regression coefficients α are found to be negative and statistically significant, indicating convergence to zero over time.[5] However, adjustment is slow: based on 2012–19 and the *External Sector Report* sample, IMF staff current account gaps take 6.9 years to close by half (see Figure 1.2.1). Adjustment is somewhat faster for EBA gaps over the whole period (half-life of 4.7 years) or 2012–19 (5.7 years).[6]

However, there is significant cross-country heterogeneity, with adjustment fastest in deficit emerging economies (1.5 years) and slowest in advanced surplus economies (6.4 years). Adjustment is quicker

This box was prepared Cian Allen and Cyril Rebillard.

[1]Other studies have looked at similar assessment of EBA's predecessor, called Consultative Group on Exchange Rate assessments (see, for instance, Abiad, Kannan, and Lee [2009] and Yeşin [2016]) or a similar exercise on benchmark current account models (see, for instance, Coutinho, Turrini, and Zeugner [2022]). Moreover, Lane and Milesi-Ferretti (2012) document that the excess imbalances before the global financial crisis have strong predictive power on subsequent adjustments of current account imbalances.

[2]The EBA methodology was introduced in 2012 and was subsequently refined in 2015, 2018, and 2022. Computing EBA norms and gaps requires country teams' inputs on desirable policies, which are not available before 2012. Restricting the second approach (refined model, constant P*) over 2012–19 leads to very similar results compared with the first approach using actual models and assessments. This is reassuring and enables the analysis to be focused on results over the longer sample (including crisis episodes).

[3]The concept of half-life comes from nuclear physics but has been used in previous papers that study real exchange rate adjustment (see, for instance, Rogoff [1996]). Concretely, $HL(Gap) = -\ln(2)/\ln(1+\alpha)$.

[4]A robustness exercise assessed how results changed when introducing country fixed effects and a constant. In most cases, country-specific levels of convergence of EBA gaps were found to be nonstatistically different from zero. In the remaining cases, EBA gaps not converging toward zero could be related to factors outside EBA (for example, persistent measurement biases or structural factors as laid out in the IMF staff's complementary tools).

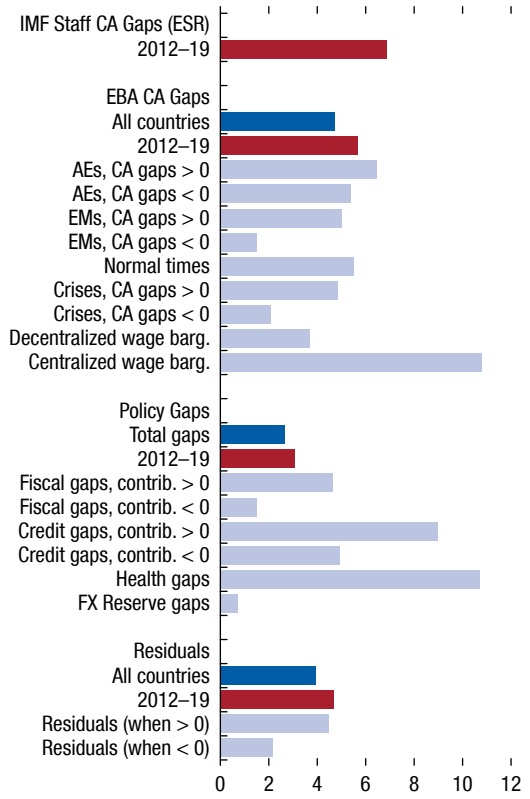
[5]Results do not change much if 2020 and 2021 are included. These years were excluded because of COVID-19's impact.

[6]Half-lives between 4.7 and 6.7 years correspond to α coefficients between –0.098 and –0.138 (both significant at the 1 percent level). This is in line with Coutinho, Turrini, and Zeugner (2022), who find a coefficient of –0.083 (also significant at the 1 percent level) with a regression over nonoverlapping five-year periods with time fixed effects.

Box 1.2 *(continued)*

Figure 1.2.1. IMF Staff and EBA CA Gaps Adjustment: Half-Lives

(Years)



Sources: IMF, External Balance Assessment estimates; IMF country classification; Laeven and Valencia 2020; The OECD/AIAS database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts; and IMF staff calculations.
Note: AE = advanced economy; CA = current account; EBA = External Balance Assesment; EM = emerging market; ESR = *External Sector Report*; FX = foreign exchange. Red bars are derived from regressions over 2012–2019 (actual P*s); blue bars are derived from regressions over the whole period (P*s assumed constant).

during crisis episodes,[7] especially in deficit countries (2.1 years) compared with normal times (5.5 years), in line with Lane and Milesi-Ferretti (2012). Other country-specific features such as labor market institutions may affect adjustment speed, which is faster when wage bargaining is decentralized (3.7 years) versus centralized (10.8 years),[8] in line with Nieminen, Heimonen, and Tohmo (2019).[9]

EBA gaps adjustment (Table 1.2.1, column 1) is mainly driven by changes in actual current account or cyclically adjusted current account balances (columns 2 and 3), with norm creeping playing only a modest role (column 4). Norm creeping is mainly related to the net foreign assets variable (columns 6 and 9), as persistent external imbalances (desirable or excessive) lead to building large external positions over time; however, other fundamentals are also at play for surplus economies (column 7), generating some asymmetry between surplus and deficit countries (columns 5 and 8).[10]

Policy gaps tend to adjust more quickly than the EBA current account gap, but asymmetrically across countries and for domestic instead of external reasons. All policy gaps are found to adjust over time, with varying speed, depending on the type of gap and country characteristics (Figure 1.2.1). Policy gaps tend to adjust faster than overall EBA current account gaps, with respective half-lives of 2.7 and 4.7 years. Adjustment speed is asymmetric for fiscal gaps (slower when fiscal stance is tighter than warranted) and credit gaps (slower after a credit crunch). Health gaps, meant to proxy for the development of social safety nets, adjust very slowly while foreign exchange reserve gaps (characterizing near-crisis situations) adjust extremely rapidly. Residuals adjust relatively slowly, with some asymmetry between surplus and deficit countries (half-lives of 4.5 and 2.2 years, respectively). Quantitively, policy gaps contribute only modestly to

[7]Crisis episodes are defined using the Laeven and Valencia (2020) database, including banking, currency, and debt crises, to which all recession episodes were added (extended to three years to include the immediate crisis aftermath).

[8]Wage bargaining frameworks are taken from the Organisation for Economic Co-operation and Development and Amsterdam Institute for Advanced Labour Studies Institutional Characteristics of Trade Unions, Wage Setting, State Intervention, and Social Pacts database. Decentralized (respectively centralized) systems correspond to *coord* = 1,2,3 (respectively *coord* = 4,5).

[9]Additional analysis shows that economies that are more financially closed (based on the Fiscal Analysis of Resource Industries Index) and have less flexible exchange rate regimes (based on the Annual Report on Exchange Arrangements and Exchange Restrictions classification) tend to adjust faster.

[10]As oil and gas producers, which are often surplus countries, deplete their hydrocarbon reserves, the temporariness of these reserves increases, boosting the need to save and the CA norm. In addition, rapid convergence in emerging countries tend to increase their CA norm (due to closing development gap), which will contribute to norm creeping in surplus emerging economies (but would tend to widen the CA gap in deficit emerging economies, all else equal).

Box 1.2 *(continued)*

Table 1.2.1. EBA Gaps Adjustment: Changes in CA Balances or Norm Creeping?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
					Surplus Countries (CA Gaps > 0)			Deficit Countries (CA Gaps < 0)		
Variables	Change in EBA CA Gap	Change in Actual CA	Change in Cycl. Adj. CA	Change in EBA CA Norm	Change in EBA CA Norm	Change in NFA Contrib.	Change in Norm Excl. NFA	Change in EBA CA Norm	Change in NFA contrib.	Change in Norm Excl. NFA
EBA CA Gap (lagged)	**–0.1358*** **	–0.1258***	–0.1098***	0.0212***	**0.0255*** **	0.0135***	0.0106***	**0.0086*** **	0.0128***	–0.0072
	(0.000)	(0.000)	(0.000)	(0.000)	**(0.000)**	(0.000)	(0.000)	**(0.093)**	(0.000)	(0.115)
Observations	**1,331**	1,331	1,331	1,331	**750**	750	750	**581**	581	581
R-squared	**0.070**	0.047	0.047	0.042	**0.073**	0.049	0.019	**0.005**	0.043	0.004
Number of ifs_code	**48**	48	48	48	**46**	46	46	**45**	45	45
Rho	**0.0445**	0.0600	0.0269	0.140	**0.136**	0.502	0.114	**0.0737**	0.475	0.0288

Sources: IMF, External Balance Assessment estimates; and IMF staff calculations.

Note: CA = current account; Cycl. Adj. = cyclically adjusted; EBA = External Balance Assessment; NFA = net foreign assets. Regressions are based on the whole period (P*s assumed constant); columns (6) and (9) correspond to the change in EBA norm due to the contribution of the NFA variable, whereas columns (7) and (10) correspond to the change in norm excluding the contribution of the NFA variable); p-values are in parentheses; *** p < 0.01; * p < 0.1.

Table 1.2.2. EBA Gaps Adjustment: Contribution of Policy Gaps and Residuals

	(1)	(2)	(3)	(4)	(5)
				Change in Policy Gaps	
Variables	Change in EBA CA Gap	Change in EBA Residual		if Aligned	if Nonaligned
EBA CA Gap (lagged)	**–0.1251*** **	**–0.1110*** **	**–0.0140**	–0.0509***	0.1185***
	(0.000)	**(0.000)**	**(0.110)**	(0.000)	(0.000)
Observations	**1,331**	**1,331**	**1,331**	849	482
R-squared	**0.064**	**0.049**	**0.002**	0.030	0.087

Sources: IMF, External Balance Assessment estimates; and IMF staff calculations.

Note: CA = current account; EBA = External Balance Assessment. Regressions based on the whole period (P*s assumed constant); p-values are in parentheses; *** p < 0.01.

overall external adjustment, compared with residuals (Table 1.1.2, columns 1–3). Indeed, policy gaps are aligned with overall external gaps in about two-thirds of cases (columns 4 and 5):[11] consistent with IMF staff advice, policy gaps should (and do) close for domestic reasons above all, regardless of their impact on external rebalancing (sometimes calling for additional policy measures aimed at external rebalancing).

[11]If policy gaps are closed in 2019, absolute EBA gaps in percent of GDP increase by 0.1 percent of country GDP on average (they are reduced in US dollar terms). Closing each policy gap has varying impacts on the absolute dollar amount of EBA gaps: closing fiscal gaps reduces the overall EBA gap (by $150 billion), whereas closing the credit gap increases the overall EBA gap (by $125 billion).

Box 1.3. External Sector Impact of Disaster Shocks

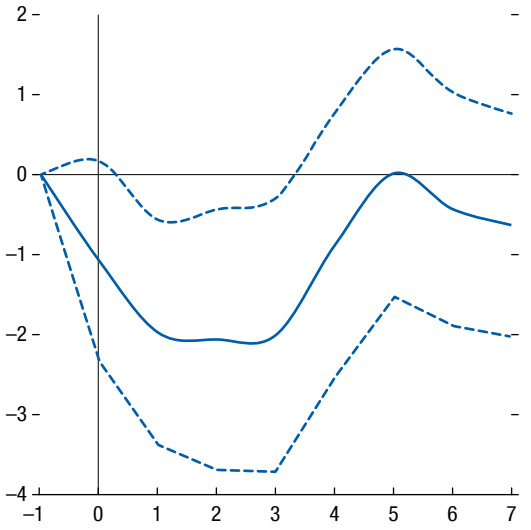
Climate change is expected to worsen the reach of natural disasters, by increasing the intensity and frequency of extreme events (IPCC 2014). Empirical estimates suggest that this trend will have important implications for the external sector. Natural disasters tend to widen the current account deficit to finance reconstruction through increased investment. Climate change is expected to amplify this channel, because more intense and frequent disaster events will inflict greater economic losses and damage to physical infrastructure. Simulations from a structural model show that the impact can be softened by investing in ex ante adaptation. The presence of a contingency fund reduces reliance on external debt to finance reconstruction, which can help smooth the recovery.

Empirical background: Using data from the Emergency Events Database, Figure 1.3.1 shows the current account impact of a disaster shock using local projections (Jordà 2005). The sample consists of 31 economies classified as disaster-prone countries (defined as the top quartile of the probability of disaster per 1,000 square kilometers, as in Cantelmo, Melina, and Papageorgiou [2019]).[1]

After the initial shock, the current account (as percent of GDP) deteriorates up to 2 percentage points. Disaster shocks trigger an increase in investment, which is needed to rebuild the capital stock and support the recovery. Imports and GDP also increase, as countries need to import intermediates and investment goods for reconstruction.

Model simulations: This box also presents the estimated impact of a natural disaster on the external sector of a disaster-prone country for different ex ante policy choices. The framework used is a dynamic general equilibrium model, the Debt, Investment, Growth, and Natural Disasters model (Marto, Papageorgiou, and Klyuev 2018), calibrated to a typical disaster-prone country (Cantelmo, Melina, and Papageorgiou 2019) with the following features: financially constrained households; two sectors of production (nontraded goods and traded goods); and a government with access to various fiscal instruments, external debt, and a contingency fund.

Figure 1.3.1. Effects of a Disaster Shock on the Current Account
(Percent of GDP)



Source: IMF staff estimates.
Note: *x*-axis units are years, where $t = 0$ denotes the year of the disaster. Dashed lines indicate 90 percent confidence intervals.

The baseline scenario considers an economy that does not undertake any ex ante policies and is hit by a natural disaster that damages both public and private infrastructure and reduces the level of Total Factor Productivity and reconstruction efficiency because of capacity constraints. The disaster inflicts total economic losses equivalent to 20 percent of GDP (stemming largely from the value of the destroyed capital stock), which in turn reduce GDP by 6.9 percent in the first two years, and then recovers slowly (red line in Figure 1.3.2, panel 2). External debt increases to fund reconstruction, with the capital inflows triggering a real exchange rate appreciation and a 2 percentage point increase in the current account deficit after the disaster, remaining elevated for 10 years after the initial impact, as shown in the red line in panel 1 of Figure 1.3.2.

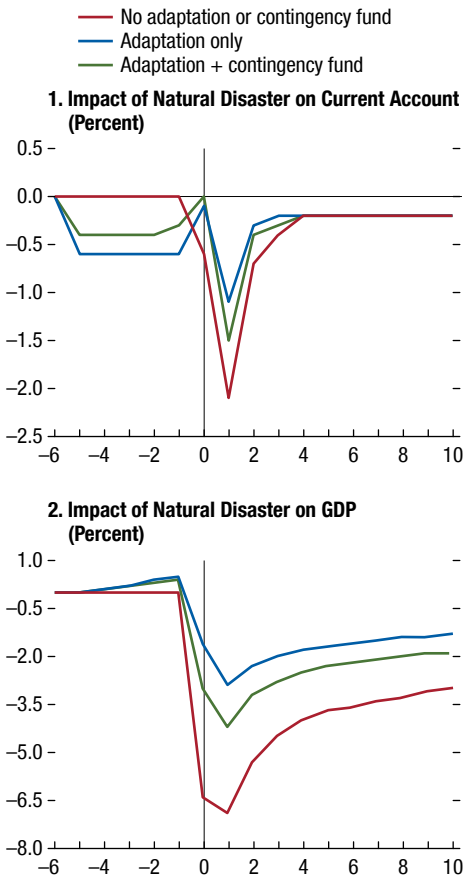
The second scenario considers ex ante investment in adaptation infrastructure (for example, climate-proofed roads, seawalls, and so on) amounting to 2.5 percent of GDP cumulatively over the five years before the disaster hits, funded by external borrowing.

This box was prepared by Zamid Aligishiev, Luciana Juvenal, and Cian Ruane.

[1]The economies in the sample are Albania, Belize, Burundi, Cabo Verde, Comoros, Costa Rica, Dominica, the Dominican Republic, El Salvador, Eswatini, Fiji, The Gambia, Grenada, Haiti, Jamaica, Kiribati, Lebanon, former Yugoslav Republic of Macedonia, Maldives, Mauritius, Micronesia, Moldova, Montenegro, Rwanda, Samoa, the Solomon Islands, Sri Lanka, St. Lucia, Timor-Leste, Tonga, and Vanuatu. Data cover 1950–2015.

Box 1.3 *(continued)*

Figure 1.3.2. Impact of Natural Disaster
(Deviation from baseline)



Source: IMF staff estimates (DIGNAD model simulations).
Note: *x*-axis units are years, where 0 is the year in which the disaster occurs. The adaptation only scenario entails ex ante investment of 2.5 percent of GDP cumulatively over the five years before the disaster hits. The adaptation + contingency fund considers a mix of ex ante investment in adaptation infrastructure and investment in an external disaster contingency fund, each amounting to 1.25 percent of GDP cumulatively over the five years before the disaster.

As shown in the blue line in panel 1 of Figure 1.3.2, the pre-disaster appreciation of the real exchange rate triggers an increase in the current account deficit of 0.6 percentage point. However, the increased share of adaptation infrastructure dampens the disaster's impact on GDP, which falls by 2.9 percent within two years of the disaster. The lower reconstruction burden dampens the real exchange rate appreciation and the worsening of the current account deficit, smoothing it more over time.

The final scenario considers a mix of ex ante investment in adaptation infrastructure and investment in an external disaster contingency fund, each amounting to 1.25 percent of GDP cumulatively over the five years before the disaster.[2] After the disaster, the contingency fund is used to finance reconstruction rather than external debt. The green line in panel 1 of Figure 1.3.2 shows that the current account deficit worsens by only 0.4 percentage point before the disaster, given that the domestic adaptation investment is lower than in the adaptation-only scenario. However, the lower level of adaptation infrastructure leads to greater damage from the natural disaster, requiring more funds for reconstruction. The withdrawals from the contingency fund and a larger financing need for post-disaster reconstruction trigger a larger real exchange rate appreciation than under adaptation-only scenario, worsening the current account deficit by 1.1 percentage points after the disaster.

Building resilience through structural and financial protection in disaster-prone countries can address external sector vulnerabilities that will be exacerbated by climate change. The choice of an appropriate ex ante adaptation policy will depend on the country context and should be based on a wider cost-benefit analysis (Bellon and Massetti 2022; Aligishiev, Bellon, and Massetti 2022). Resilient public capital softens the impact of natural disasters on the economy and smoothes resulting current account fluctuations because the need for externally funded post-disaster reconstruction is minimized. Financial protection provides resources for immediate relief and reconstruction after a natural disaster and improves the government's net asset position.

[2]Note that the scenario of adaptation plus contingency fund involves the same investment in relation to GDP as the adaptation-only scenario. However, it is split equally between ex ante investment in adaptation and investment in a contingency fund.

Box 1.4. The Worst of Both Worlds: Trade Restrictions Hurt Growth with No Benefit for External Positions

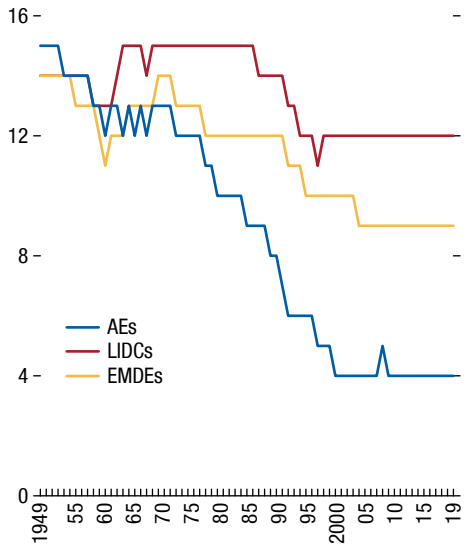
A novel and comprehensive index of trade restrictions shows significant scope for reducing nontariff barriers (NTBs) in emerging market and developing economies. Empirical analysis suggests that imposing restrictions has no beneficial effects on external positions but is associated with potentially large macroeconomic losses.

The slowdown in trade seen in recent years has coincided with a period of reduced momentum on trade reforms. With tariffs already at low levels, there is limited scope for further reduction. However, NTBs can also be a significant impediment to trade, but concrete analysis has been challenging because of data limitations (Goldberg and Pavcnik 2016).

To overcome this data constraint, Estefania-Flores and others (2022) compile a novel measure of trade restrictions covering tariffs and NTBs for 157 countries going as far back as 1949. The index is constructed by using a narrative approach, exploiting detailed information on trade restrictions recorded in the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions*. Various barriers are captured, including restrictions on exports and imports of goods (for example, licensing requirements), multiple currency practices, and payment restrictions. The NTBs index varies from 0 to 20, with lower levels indicating fewer trade restrictions.[1]

Significant scope remains to reduce NTBs, especially in emerging market and developing economies (Figure 1.4.1). The NTB index was high across income levels in the 1960s but has declined significantly in advanced economies. However, restrictions remain high in emerging markets and low-income countries, especially import and export restrictions, including in many large emerging markets such as India and South Africa.

Figure 1.4.1. Nontariff Barriers Index
(Simple average)



Source: Estefania-Flores and others (2022).
Note: AE = advanced economy; EMDE = emerging market and developing economy; LIDC = low-income developing country.

Econometric analysis suggests that increases in nontariff restrictions affect trade volumes significantly but have little effect on external positions (Figure 1.4.2, panel 1). A two standard deviation increase in the NTB index is associated with an almost 4 percent decline in import volumes after five years, and export volumes fall by about 3 percent.[2] On net, the trade balance and the current account balance are unchanged in the medium term.[3] Results are similar when restricting to import nontariff restrictions only. Furthermore, imposing NTBs also curtails participation in global value chains, as the costs of these

This box was prepared by Julia Estefania-Flores and Siddharth Kothari.

[1]The full Measure of Aggregate Trade Restrictions index in Estefania-Flores and others (2022) varies from 0 to 22, as it includes two tariff subcomponents: export and import taxes. Because this box focuses on NTBs, the tariff components of the index are excluded. Results are broadly similar when using the full index.

[2]Although the point estimate indicates a larger decline in import volumes compared with export volumes, the confidence intervals for the estimates overlap significantly.

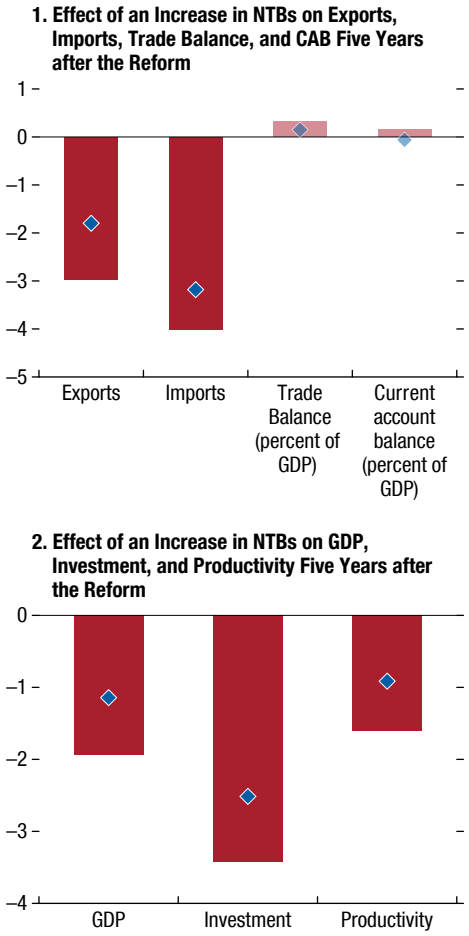
[3]The local projection method is used, estimating the equation $y_{i,t+k} = \alpha_i^k + \gamma_t^k + \beta^k \Delta R_{i,t} + \Sigma_{j=0}^{2} \vartheta_j^k \Delta R_{i,t-j} + \Sigma_{j=0}^{2} \theta_j^k y_{i,t-j} + \varepsilon_t^k$, where $y_{i,t+k}$ is the macroeconomic variable of interest in country i at horizon k, $R_{i,t}$ is the NTB index or the imports NTB subcomponent, and α_i^k and γ_t^k are country and time fixed effects.

Box 1.4 *(continued)*

barriers cascade with each border crossing from upstream to downstream industries (2021 *External Sector Report*).

Trade restrictions do not improve external positions, but they can lead to significant macroeconomic losses. A two standard deviation increase in the NTB index is associated with a reduction in GDP growth of about 1.7 percent five years after the reform (Figure 1.4.2, panel 2). Net exports do not contribute to output losses. Instead, a decrease in investment and productivity drives the losses, suggesting less efficient resource allocation and the reversal of benefits from specialization and technology transfers after an increase in NTBs.

Figure 1.4.2. Effect of an Increase in NTBs
(Percent)



Source: Estefania-Flores and others (2022).
Note: CAB = current account balance; NTB = nontariff trade barrier. Light shaded bars and dots represent nonstatistically significant estimations. The blue dots show the case of import nontariff restrictions only.

Annex Table 1.1.1. Selected Economies: Foreign Reserves, 2018–21[1]

	Gross Official Reserves[2] (Billions of US Dollars)				Gross Official Reserves[2] (Percent of GDP)				IMF Staff–Estimated Change in Official Reserves[3] (Percent of GDP)				Gross Official Reserves in Percent of ARA Metric (2021)[4]	FXI Data Publication
	2018	2019	2020	2021	2018	2019	2020	2021	2018	2019	2020	2021		
Advanced Economies														
Australia	54	58	43	58	3.8	4.2	3.1	3.5	0.1	–0.1	–0.1	1.0	. . .	Yes, daily
Canada	84	85	90	107	4.9	4.9	5.5	5.4	–0.1	0.0	0.1	1.0	. . .	Yes, monthly
Euro Area	823	914	1,078	1,196	6.0	6.8	8.3	8.2	0.3	0.1	0.1	1.1	. . .	Yes, quarterly
Hong Kong SAR	425	441	492	497	117.4	121.6	142.6	134.6	0.6	1.7	10.7	–0.4	. . .	Yes, daily
Japan	1,270	1,322	1,391	1,406	25.2	25.8	27.6	28.5	0.5	0.5	–0.1	1.8	. . .	Yes, monthly
Korea	403	409	443	463	23.4	24.8	27.0	25.6	0.1	0.1	0.9	0.5	99	Yes, quarterly
Singapore	288	279	362	418	76.3	74.4	104.9	105.3	5.0	0.7	28.5	6.5	. . .	Yes, semiannually
Sweden	61	56	58	62	10.9	10.4	10.8	9.9	–0.1	–1.3	0.1	0.9	. . .	Yes,Weekly
Switzerland	787	855	1,083	1,110	106.9	116.7	144.1	136.5	1.9	2.2	16.5	6.3	. . .	Yes, quarterly
United Kingdom	173	174	180	194	5.9	6.0	6.5	6.1	0.8	–0.1	–0.1	0.9	. . .	Yes, monthly
United States	450	517	628	716	2.2	2.4	3.0	3.1	0.1	0.0	–0.1	0.6	. . .	Yes, quarterly
Emerging Market and Developing Economies														
Argentina	66	45	39	40	12.6	9.9	10.1	8.2	–3.3	–8.3	–3.4	1.0	63	Yes, daily
Brazil	375	357	356	362	19.5	19.1	24.5	22.5	–2.2	0.4	–2.4	–0.5	162	Yes, daily
China	3,168	3,223	3,357	3,428	22.9	22.5	22.6	19.3	0.1	–0.1	0.2	1.1	109	No
India	399	463	590	638	14.8	16.4	22.1	20.1	–1.3	2.5	3.8	0.5	195	Yes, monthly
Indonesia	121	129	136	145	11.6	11.5	12.8	12.2	–1.4	0.7	0.5	–0.6	111	No
Malaysia	101	104	108	117	28.3	28.4	31.9	31.4	–2.5	2.5	0.9	2.3	122	No
Mexico	176	183	199	208	14.4	14.4	18.3	16.0	0.0	0.2	1.1	0.8	131	Yes, monthly
Poland	117	128	154	166	19.9	21.5	25.7	24.4	1.2	1.7	3.1	2.8	141	No
Russia	469	555	597	632	28.4	32.7	40.2	35.5	2.0	3.9	–0.9	3.7	339	Yes, daily
Saudi Arabia	509	515	473	474	62.4	64.1	67.2	56.9	0.1	0.6	–6.4	–1.8	. . .	No
South Africa	52	55	55	58	12.8	14.2	16.4	13.8	–0.1	0.4	–0.7	1.1	81	No
Thailand	206	224	258	246	40.6	41.2	51.6	47.9	0.8	2.7	1.3	–0.7	249	No
Türkiye	93	106	94	110	11.9	13.9	13.0	13.6	–1.5	–1.2	–10.8	2.3	91	Yes, daily
Memorandum item:														
Aggregate[5]	10,669	11,198	12,265	12,851	12.4	12.8	14.4	13.3	0.1	0.2	0.3	0.9	. . .	. . .
AEs	4,816	5,110	5,849	6,227	5.6	5.8	6.9	6.4	0.2	0.1	0.3	0.5	. . .	. . .
EMDEs	5,852	6,088	6,416	6,624	6.8	7.0	7.5	6.8	–0.1	0.1	0.0	0.3	. . .	. . .

Sources: IMF, Assessing Reserve Adequacy data set; IMF, *International Financial Statistics*; IMF, International Reserves and Foreign Currency Liquidity; IMF, *World Economic Outlook*; and IMF staff calculations.

Note: ". . ." indicates that data are not available or not applicable. AE = advanced economy; ARA = assessment of reserve adequacy; EMDE = emerging market and developing economy; FX = foreign exchange; FXI = foreign exchange intervention.

[1] Sample includes *External Sector Report* economies excluding individual euro area economies. Euro area is reported as aggregate.

[2] Total reserves from *International Financial Statistics*; includes gold reserves valued at market prices.

[3] This item is not necessarily equal to actual FXI, but it is used as an FXI proxy in External Balance Assessment model estimates. The estimated change in official reserves is equivalent to the change in reserve assets in the financial account series from the *World Economic Outlook* (which excludes valuation effects but includes interest income on official reserves) plus the change in off-balance-sheet holdings (short and long FX derivative positions and other memorandum items) from International Reserves and Foreign Currency Liquidity minus net credit and loans from the IMF.

[4] The ARA metric reflects potential balance of payments FX liquidity needs in adverse circumstances and is used to assess the adequacy of FX reserves against potential FX liquidity drains (see IMF 2015). The ARA metric is estimated only for selected EMDEs and Korea and includes adjustments for capital controls for China. For Argentina, the adjusted measure uses a four-year average to smooth the temporary effect of the sharp reductions in short-term debt and exports and a collapse in the valuation of debt portfolio investments in the wake of the sovereign debt restructuring. Additional adjusted figures are available in the individual country pages in Chapter 3.

[5] The aggregate is calculated as the sum of *External Sector Report* economies only. The percent of GDP is calculated relative to total world GDP.

Annex Table 1.1.2. External Sector Report Economies: Summary of External Assessment Indicators, 2021

Economy	Overall Assessment	Current Account (Percent of GDP)		IMF Staff CA Gap (Percent of GDP)		IMF Staff REER Gap (Percent)		International Investment Position (Percent of GDP)			CA NFA Stabilizing (Percent of GDP)	SE of CA Norm (Percent)
		Actual	Cycl. Adj.	Midpoint	Range	Midpoint	Range	Net	Liabilities	Assets		
Argentina	Weaker	1.4	0.5	–0.5	±1	0.0	±5	25	61	86	1.3	0.5
Australia	Stronger	3.5	1.7	2.7	±0.6	–13.7	±3	–35	184	148	–2.0	0.6
Belgium	Weaker	–0.4	0.0	–3.3	±0.3	4.9	±0.4	57	403	460	1.8	0.3
Brazil	Broadly in line	–1.7	–2.8	–0.4	±0.5	3.1	±4.2	–30	90	60	–1.5	0.5
Canada	Moderately weaker	0.0	–0.4	–1.5	±0.4	5.8	±1.6	69	243	311	3.2	0.4
China	Broadly in line	1.8	2.2	–0.3	±0.6	1.9	±4.2	11	41	53	0.8	0.6
Euro Area[1]	Moderately stronger	2.4	2.3	1.2	±0.6	–3.4	±1.7	–2	276	275	–0.1	0.6
France	Broadly in line	0.4	0.2	–0.1	±0.4	0.2	±1.5	–34	375	341	–1.3	0.4
Germany	Stronger	7.4	7.6	3.7	±0.5	–10.8	±1.5	65	237	302	2.9	0.5
Hong Kong SAR	Broadly in line	11.3	10.7	1.0	±1.5	–2.6	±3.8	578	1169	1747	. . .	. . .
India	Broadly in line	–1.2	–1.6	1.0	±0.7	–6.0	±4.3	–11	42	31	–1.0	0.7
Indonesia	Broadly in line	0.3	–1.5	0.2	±0.5	–1.7	±3.6	–24	60	36	–1.9	0.5
Italy	Broadly in line	2.4	2.2	–0.9	±0.7	3.3	±2.7	7	181	188	0.3	0.7
Japan	Broadly in line	2.9	2.9	–0.5	±1	3.6	±6.6	76	155	231	2.7	1.1
Korea	Broadly in line	4.9	5.6	–0.3	±0.8	1.0	±2.6	36	84	120	2.0	0.8
Malaysia	Moderately stronger	3.8	2.6	1.8	±0.5	–4.0	±1.1	6	131	137	0.7	0.5
Mexico	Broadly in line	–0.4	–1.5	–0.2	±1	0.5	±3.1	–41	99	58	–2.2	0.4
The Netherlands	Stronger	9.0	9.2	2.0	±0.5	–3.3	±0.8	94	1026	1120	4.1	0.5
Poland	Moderately stronger	–0.6	–0.3	1.4	±0.4	–3.5	±1	–38	93	56	–2.3	0.4
Russia	Stronger	6.9	7.1	2.1	±0.9	–10.6	±4.6	27	65	93	1.1	0.9
Saudi Arabia	Broadly in line	5.3	5.4	–1.0	±1.8	4.1	±9	74	77	150	. . .	. . .
Singapore	Substantially stronger	18.1	18.8	5.2	±1.8	–10.4	±3.6	256	984	1240	. . .	. . .
South Africa	Moderately weaker	3.6	1.3	–1.7	±0.7	7.3	±3	25	107	132	1.1	0.7
Spain	Broadly in line	0.9	–0.1	–0.1	±0.7	0.4	±2.6	–70	283	213	–3.4	0.7
Sweden	Stronger	5.5	5.3	3.6	±0.4	–4.4	±5	17	279	296	0.9	0.4
Switzerland	Broadly in line	9.3	9.9	–0.9	±0.8	1.9	±1.7	90	663	753	4.3	0.8
Thailand	Moderately stronger	–2.2	–2.8	1.4	±0.7	–3.2	±1.6	9	111	120	0.6	0.7
Türkiye	Broadly in line	–1.7	–0.6	0.0	±0.6	–22.5	±2.5	–31	67	36	–1.8	0.6
United Kingdom	Broadly in line	–2.6	–2.0	–0.1	±1	0.5	±4.1	–32	565	533	–1.6	0.3
United States	Moderately weaker	–3.6	–3.2	–1.1	±0.6	8.7	±4.9	–79	232	153	–4.0	0.6

Sources: IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; US Bureau of Economic Analysis; and IMF staff assessments.
Note: CA = current account; Cycl. Adj. = cyclically adjusted; NFA = net foreign assets; REER = real effective exchange rate; SE = standard error.
[1]The IMF staff–assessed euro area CA gap is calculated as the GDP-weighted averages of IMF staff–assessed CA gaps for the 11 largest euro area economies.

Annex Table 1.1.3. *External Sector Report* Economies: Summary of IMF Staff–Assessed Current Account Gaps and IMF Staff Adjustments, 2021

(Percent of GDP)

Economy	Assessment 2021	Actual CA Balance [A]	Cycl. Adj. CA Balance [B]	EBA CA Norm [C]	EBA CA Gap[1] [D=B–C]	IMF Staff-Assessed CA Gap[2] [E=D+F]	IMF Staff Adjustments[3]				Comments on Non–COVID-19-related Adjustments
							Total [F=G+H-I]	Covid-19 [G]	Other CA [H]	Other Norm [I]	
Argentina	Weaker	1.4	0.5	0.2	0.3	–0.5	–0.8	0.0	0.0	0.8	NIIP/financing risk considerations
Australia	Stronger	3.5	1.7	–0.9	2.6	2.7	0.2	0.2	0.0	0.0	
Belgium	Weaker	–0.4	0.0	3.1	–3.1	–3.3	–0.2	–0.2	0.0	0.0	
Brazil	Broadly in line	–1.7	–2.8	–1.6	–1.2	–0.4	0.8	–0.2	1.0	0.0	Severe drought + end of Repetro
Canada	Moderately weaker	0.0	–0.4	2.6	–3.0	–1.5	1.6	0.1	1.5	0.0	Measurement biases
China	Broadly in line	1.8	2.2	0.8	1.4	–0.3	–1.6	–1.6	0.0	0.0	
Euro Area[4]	Moderately stronger	2.4	2.3	0.6	1.7	1.2	–0.5	0.1	–0.4	0.2	Country-specific adjustments
France	Broadly in line	0.4	0.2	0.3	–0.1	–0.1	0.0	0.0	0.0	0.0	
Germany	Stronger	7.4	7.6	3.3	4.3	3.7	–0.6	–0.6	0.0	0.0	
India	Broadly in line	–1.2	–1.6	–1.9	0.3	1.0	0.7	0.7	0.0	0.0	
Indonesia	Broadly in line	0.3	–1.5	–0.8	–0.7	0.2	1.0	0.6	0.0	–0.4	Demographics (high mortality risk)
Italy	Broadly in line	2.4	2.2	3.4	–1.2	–0.9	0.3	0.3	0.0	0.0	
Japan	Broadly in line	2.9	2.9	3.9	–0.9	–0.5	0.4	0.4	0.0	0.0	
Korea	Broadly in line	4.9	5.6	5.0	0.6	–0.3	–0.9	–0.9	0.0	0.0	
Malaysia	Moderately stronger	3.8	2.6	–0.1	2.7	1.8	–0.8	–0.8	0.0	0.0	
Mexico	Broadly in line	–0.4	–1.5	–1.2	–0.2	–0.2	0.1	0.1	0.0	0.0	
The Netherlands	Stronger	9.0	9.2	5.1	4.1	2.0	–2.1	–0.4	–1.7	0.0	Measurement biases
Poland	Moderately stronger	–0.6	–0.3	–2.4	2.1	1.4	–0.6	–0.6	0.0	0.0	
Russia	Stronger	6.9	7.1	4.4	2.6	2.1	–0.6	–0.6	0.0	0.0	
South Africa	Moderately weaker	3.6	1.3	2.6	–1.3	–1.7	–0.5	–2.7	1.6	–0.6	SACU transfers and measurement biases (CA); demographics (high mortality risk, norm)
Spain	Broadly in line	0.9	–0.1	0.0	–0.1	–0.1	0.0	1.7	0.0	1.7	NIIP/financing risk considerations
Sweden	Stronger	5.5	5.3	1.2	4.1	3.6	–0.5	–0.5	0.0	0.0	
Switzerland	Broadly in line	9.3	9.9	6.8	3.1	–0.9	–4.0	–0.6	–3.4	0.0	Measurement biases
Thailand	Moderately stronger	–2.2	–2.8	1.4	–4.2	1.4	5.6	5.6	0.0	0.0	
Türkiye	Broadly in line	–1.7	–0.6	–0.8	0.2	0.0	–0.2	–0.2	0.0	0.0	

(*Continued*)

Annex Table 1.1.3 *(continued)*

Economy	Assessment 2021	Actual CA Balance [A]	Cycl. Adj. CA Balance [B]	EBA CA Norm [C]	EBA CA Gap[1] [D=B–C]	IMF Staff-Assessed CA Gap[2] [E=D+F]	IMF Staff Adjustments[3]				Comments on non–COVID-19-related adjustments
							Total [F=G+H-I]	Other			
								Covid-19 [G]	CA [H]	Norm [I]	
United Kingdom	Broadly in line	–2.6	–2.0	–0.7	–1.3	–0.1	1.2	0.3	0.9	0.0	Measurement biases, Brexit
United States	Moderately weaker	–3.6	–3.2	–1.3	–1.9	–1.1	0.8	0.8	0.0	0.0	
Hong Kong SAR	Broadly in line	11.3	10.7	. . .	. . .	1.0	–0.5	–0.5	0.0	0.0	
Singapore	Substantially stronger	18.1	18.8	. . .	. . .	5.2	–1.4	–1.4	0.0	0.0	
Saudi Arabia	Broadly in line	5.3	5.4	. . .	. . .	–1.0	1.1	1.1	0.0	0.0	
Absolute sum of excess surpluses and deficits[5]		. . .	. . .	. . .	1.6	0.9	. . .	. . .	. . .	. . .	
Discrepancy for all EBA/ESR economies[6]		. . .	. . .	. . .	. . .	–0.04	. . .	. . .	. . .	. . .	
Of which: ESR economies		. . .	. . .	. . .	. . .	–0.04	. . .	. . .	. . .	. . .	
Of which: Non-ESR economies		. . .	. . .	. . .	. . .	0.00	. . .	. . .	. . .	. . .	

Source: IMF staff estimates.

Note: CA = current account; Cycl. Adj. = cyclically adjusted; EBA = external balance assessment; ESR = *External Sector Report*; NIIP = net international investment position; SACU = Southern African Customs Union. ". . ." indicates that data are not available or not applicable.

[1]Figures may not add up due to rounding effects.

[2]Refers to the midpoint of the IMF staff–assessed CA gap.

[3]Total IMF staff adjustments include rounding in some cases. See Online Annex 1.1 for a description of COVID-19 adjustors. Country specific adjustments to the CA and norm are explained the last column.

[4]The EBA euro area CA norm is calculated as the GDP-weighted average of norms for the 11 largest euro area economies, adjusted for reporting discrepancies in intra-area transactions. The IMF staff–assessed CA gap is calculated as the GDP-weighted average of IMF staff–assessed gaps for the 11 largest euro area economies.

[5]Sum of absolute value of IMF Staff–Assessed CA gaps in percent of aggregate GDP for economies included in the ESR exercise.

[6]Sum of IMF staff–assessed CA gaps in percent of aggregate GDP for economies included in the EBA and/or ESR exercise.

Annex Table 1.1.4. *External Sector Report* Economies: Summary of IMF Staff–Assessed Real Effective Exchange Rate and External Balance Assessment Model Gaps, 2021

Economy	IMF Staff-Assessed REER Gap[1]	REER Gap Implied from IMF Staff-Assessed CA Gap[2]	EBA REER-Level Gap	EBA REER-Index Gap	CA/REER Elasticity[3]	REER (Percent Change)	
						Average 2021/ Average 2020	May 2022/ Average 2021
Argentina	0.0	4.0	–8.7	7.6	0.13	4.4	18.3
Australia	–13.7	–13.7	24.6	–2.3	0.20	6.1	0.6
Belgium	4.9	4.9	26.1	12.0	0.68	0.1	–1.8
Brazil	3.1	3.1	–19.6	–36.4	0.12	–3.2	17.8
Canada	5.8	5.8	–7.2	6.7	0.25	4.9	–0.3
China	1.9	1.9	10.5	10.5	0.14	3.0	–1.3
Euro Area	–3.4	–3.4	7.1	6.8	0.35	0.5	–5.4
France	0.2	0.2	8.2	–2.1	0.26	–0.6	–4.7
Germany	–10.8	–10.8	–7.9	7.7	0.34	0.9	–3.0
India	–6.0	–6.0	8.5	10.1	0.16	–0.4	2.4
Indonesia	–1.7	–1.7	–18.1	1.9	0.14	–1.3	2.7
Italy	3.3	3.3	10.8	8.6	0.26	–0.2	–4.1
Japan	3.6	3.6	–18.4	–20.1	0.15	–8.6	–13.4
Korea	1.0	1.0	4.2	–0.8	0.31	0.1	–4.7
Malaysia	–4.0	–4.0	–29.1	–22.4	0.46	–1.3	–2.5
Mexico	0.5	0.5	7.7	–9.1	0.33	5.9	4.0
The Netherlands	–3.3	–3.3	6.0	21.9	0.60	0.2	–1.7
Poland	–3.5	–3.5	–20.2	–1.0	0.41	–0.4	–0.2
Russia	–10.6	–10.6	–33.8	–11.2	0.19	–1.8	38.0
South Africa	7.3	7.3	15.9	1.2	0.23	9.3	–1.5
Spain	0.4	0.4	26.4	8.8	0.26	0.9	–1.5
Sweden	–4.4	–10.7	–14.8	–11.1	0.34	2.8	–6.3
Switzerland	1.9	1.9	16.8	10.5	0.47	–2.6	–2.7
Thailand	–3.2	–3.2	–2.8	6.0	0.44	–5.6	0.6
Türkiye	–22.5	0.0	–50.5	–41.1	0.26	–10.3	–1.4
United Kingdom	0.5	0.5	5.6	–7.5	0.24	3.8	–1.4
United States	8.7	8.7	8.9	1.6	0.12	–2.1	8.6
Hong Kong SAR	–2.6	–2.6	. . .	. . .	0.39	–4.6	2.3
Singapore	–10.4	–10.4	. . .	. . .	0.50	–0.3	4.1
Saudi Arabia	4.1	4.1	. . .	. . .	0.20	–1.8	4.1
Discrepancy[4]	1.6	. . .	. . .	. . .	. . .	. . .	. . .

Sources: IMF, Information Notice System; and IMF staff estimates.
Note: CA = current account; EBA = External Balance Assessment; REER = real effective exchange rate. ". . ." indicates that data are not available or not applicable.
[1]Refers to the midpoint of the IMF staff-assessed REER gap.
[2]Implied REER gap = –(IMF staff-assessed CA gap/CA-to-REER elasticity).
[3]CA-to-REER semi-elasticity used by IMF country teams.
[4]GDP-weighted average sum of IMF staff-assessed REER gaps.

Annex Table 1.1.5. Selected *External Sector Report* Economies: External Balance Assessment Current Account Regression Policy Gap Contributions, 2021

(Percent of GDP)

	EBA Gap				Fiscal Gap					Public Health Expenditure Gap					Private Credit Gap					Foreign Exchange Intervention and Capital Controls Gap						
						Domestic					Domestic					Domestic					Domestic					
Economy	Total[1]	Identified	Dom[2]	Residual	Total[1]	Dom[3]	Coeff	P	P*	Total[1]	Dom[3]	Coeff	P	P*	Total[1]	Dom[3]	Coeff	P	P*	Total[1]	Dom[3]	Coeff	FXI P	FXI P*	KC P	KC P*
Argentina	0.3	0.7	–0.3	–0.4	0.8	–0.5	0.3	–3.1	–1.5	0.0	0.0	–0.3	6.5	6.5	–0.1	0.0	–0.1	–0.4	0.0	0.0	0.2	0.6	0.9	1.0	0.6	0.3
Australia	2.6	–1.1	–2.0	3.6	–0.9	–2.2	0.3	–7.1	0.0	–0.1	–0.1	–0.3	7.6	7.2	0.0	0.2	–0.1	–1.7	0.0	–0.1	0.1	0.6	1.0	0.0	0.1	0.1
Belgium	–3.1	–0.7	–1.7	–2.4	–0.2	–1.5	0.3	–5.3	–0.4	–0.1	–0.1	–0.3	8.2	7.9	–0.3	–0.2	–0.1	2.2	0.0	–0.1	0.1	0.6	1.4	0.0	0.1	0.1
Brazil	–1.2	0.3	–0.7	–1.5	1.1	–0.2	0.3	–4.1	–3.5	0.2	0.2	–0.3	3.9	4.4	–0.7	–0.5	–0.1	5.6	0.0	–0.3	–0.1	0.6	–0.5	0.0	0.5	0.3
Canada	–3.0	–1.2	–2.2	–1.8	0.1	–1.1	0.3	–4.4	–0.7	–0.9	–1.0	–0.3	10.2	7.0	–0.2	–0.1	–0.1	1.2	0.0	–0.1	0.1	0.6	1.0	0.0	0.1	0.1
China	1.4	1.3	0.3	0.1	0.2	–1.1	0.3	–5.4	–1.9	0.1	0.1	–0.3	3.7	4.0	0.7	0.8	–0.1	–8.7	0.0	0.3	0.5	0.6	1.1	0.0	0.7	0.3
Euro Area[4]	1.7	–0.1	–1.1	1.8	0.3	–1.0	0.3	–3.9	–0.6	–0.1	–0.1	–0.3	9.0	8.5	–0.1	0.0	–0.1	0.0	–0.3	–0.1	0.1	0.6	1.0	0.0	0.1	0.1
France	–0.1	–0.4	–1.3	0.3	0.0	–1.3	0.3	–5.3	–1.1	–0.2	–0.2	–0.3	9.9	9.3	0.0	0.1	–0.1	–1.1	0.0	–0.2	0.0	0.6	0.9	0.0	0.1	0.1
Germany	4.3	–0.8	–1.8	5.1	0.5	–0.7	0.3	–2.9	–0.5	–0.3	–0.3	–0.3	10.7	9.6	–1.0	–0.9	–0.1	8.9	0.0	–0.1	0.1	0.6	0.9	0.0	0.3	0.3
India	0.3	1.1	0.1	–0.8	0.4	–0.9	0.3	–8.7	–5.8	0.1	0.1	–0.3	1.5	1.8	0.7	0.8	–0.1	–8.7	0.0	–0.1	0.1	0.6	0.2	0.0	0.8	0.3
Indonesia	–0.7	0.7	–0.2	–1.5	0.9	–0.4	0.3	–3.8	–2.5	0.4	0.4	–0.3	1.6	3.0	–0.2	–0.1	–0.1	0.7	0.0	–0.4	–0.2	0.6	–0.6	0.0	0.5	0.3
Italy	–1.2	0.2	–0.8	–1.4	–0.5	–1.8	0.3	–5.3	0.5	0.0	0.0	–0.3	7.6	7.6	0.8	0.9	–0.1	–9.8	0.0	–0.2	0.0	0.6	1.2	0.0	0.0	0.0
Japan	–0.9	–1.8	–2.8	0.9	–0.6	–1.9	0.3	–6.6	–0.5	0.0	0.0	–0.3	9.1	9.1	–1.1	–1.0	–0.1	18.9	9.0	–0.1	0.1	0.6	1.8	0.0	0.1	0.1
Korea	0.6	0.1	–0.9	0.5	1.3	0.1	0.3	0.3	0.0	0.3	0.3	–0.3	5.1	6.1	–1.4	–1.3	–0.1	13.5	0.0	–0.2	0.0	0.6	0.5	0.0	0.1	0.1
Malaysia	2.7	1.3	0.3	1.4	0.6	–0.7	0.3	–4.8	–2.5	0.6	0.6	–0.3	2.0	4.1	–0.6	–0.4	–0.1	4.5	0.0	0.6	0.8	0.6	2.3	0.0	0.6	0.3
Mexico	–0.2	1.3	0.3	–1.6	1.2	0.0	0.3	–2.8	–2.8	0.1	0.1	–0.3	3.2	3.6	–0.1	0.0	–0.1	–0.2	0.0	0.0	0.2	0.6	0.8	0.0	0.4	0.3
The Netherlands	4.1	1.9	0.9	2.2	1.0	–0.3	0.3	–1.9	–1.0	–0.1	–0.2	–0.3	9.3	8.8	1.2	1.4	–0.1	–14.1	0.0	–0.2	0.0	0.6	1.1	0.0	0.0	0.0
Poland	2.1	2.7	1.7	–0.6	1.0	–0.2	0.3	–1.7	–1.0	0.3	0.2	–0.3	5.5	6.3	0.8	1.0	–0.1	–10.0	0.0	0.5	0.7	0.6	2.8	0.0	0.4	0.3
Russia	2.6	1.8	0.9	0.8	0.3	–1.0	0.3	0.5	3.8	0.3	0.3	–0.3	4.6	5.5	0.5	0.7	–0.1	–6.9	0.0	0.7	0.9	0.6	3.7	0.0	0.4	0.3
South Africa	–1.3	0.5	–0.5	–1.7	0.5	–0.7	0.3	–3.8	–1.4	–0.1	–0.1	–0.3	4.5	4.1	0.4	0.5	–0.1	–4.9	0.0	–0.3	–0.1	0.6	1.1	3.0	0.6	0.3
Spain	–0.1	0.2	–0.7	–0.3	0.7	–0.5	0.3	–3.8	–2.0	0.0	0.0	–0.3	6.4	6.4	–0.4	–0.3	–0.1	2.0	–1.0	–0.1	0.1	0.6	1.0	0.0	0.2	0.2
Sweden	4.1	0.2	–0.8	3.9	1.0	–0.3	0.3	–0.5	0.3	–0.1	–0.1	–0.3	9.3	9.0	–0.6	–0.5	–0.1	5.3	0.0	–0.1	0.1	0.6	0.9	0.0	0.2	0.2
Switzerland	3.1	0.0	–0.9	3.0	1.4	0.2	0.3	–0.4	–1.0	–0.1	–0.1	–0.3	7.8	7.5	–1.9	–1.8	–0.1	18.3	0.0	0.5	0.7	0.6	6.3	0.0	0.2	0.2
Thailand	–4.2	–1.2	–2.2	–3.0	0.1	–1.2	0.3	–6.1	–2.3	0.1	0.1	–0.3	3.8	4.1	–1.1	–0.9	–0.1	9.8	0.0	–0.4	–0.2	0.6	–0.6	0.0	0.5	0.3
Türkiye	0.2	1.6	0.6	–1.4	1.4	0.1	0.3	–4.0	–4.3	–0.4	–0.4	–0.3	5.0	3.6	0.5	0.6	–0.1	–6.0	0.0	0.1	0.3	0.6	2.3	1.2	0.4	0.3
United Kingdom	–1.3	–0.4	–1.3	–0.9	–0.2	–1.5	0.3	–7.2	–2.4	–0.7	–0.7	–0.3	10.2	7.9	0.7	0.8	–0.1	–8.4	0.0	–0.1	0.1	0.6	0.9	0.0	0.1	0.1
United States	–1.9	–1.1	–2.0	–0.8	–0.7	–2.0	0.3	–8.1	–1.7	0.0	0.0	–0.3	8.4	8.4	–0.3	–0.1	–0.1	1.5	0.0	–0.1	0.1	0.6	0.6	0.0	0.2	0.2

Source: IMF staff estimates.

Note: Coeff = coefficient; Dom = domestic; Dom = domestic; EBA = External Balance Assessment; FXI = foreign exchange intervention; KC = capital controls.

[1]Total contribution after adjusting for multilateral consistency. Total foreign exchange intervention and capital controls contribution = Coeff * [(FXI x KC) – (desirable FXI × desirable KC)].

[2]Includes the contribution of domestic policy gaps to the identified gap. The total foreign policy gap contribution is constant and equal to 1.0 percent for all countries. Foreign contributions are estimated as follows: fiscal = 1.3 percent of GDP; public health = 0.0 percent of GDP; private credit = –0.1 percent of GDP; foreign exchange intervention = –0.2 percent of GDP.

[3]Total domestic contribution is equivalent to coefficient*(P-P*).

[4]The euro area EBA CA gap and policy gap contributions are calculated as the GDP-weighted averages of EBA CA gaps and policy gap contributions for the 11 largest euro area economies.

Annex Table 1.1.6. 2021 Individual Economy Assessments: Summary of Policy Recommendations

Economy	Overall 2021 Assessment	Policy Recommendations
Argentina	Weaker	Implement growth-friendly fiscal consolidation and prudent monetary policies to maintain strong trade surplus, rebuild international reserves, regain market access, and ensure fiscal sustainability; introduce reforms to boost export capacity and encourage FDI.
Australia	Stronger	Boost investment by executing planned infrastructure spending, streamlining product market regulation, promoting R&D and innovation, and reducing the tax burden on companies.
Belgium	Weaker	Strengthen competitiveness by addressing structural challenges, including labor and product market reforms, to foster green, digital, and inclusive growth. Rebuild fiscal space through expenditure led consolidation.
Brazil	Broadly in line	Implement medium-term fiscal consolidation and structural reforms to raise potential growth and investment. FX intervention, including that using derivatives, may be appropriate to alleviate disorderly market conditions in the FX market.
Canada	Moderately weaker	Develop credible medium-term fiscal consolidation plan; boost nonfuel exports through improved labor productivity, investment in R&D and public infrastructure; implement policies to encourage green transformation and boost FDI.
China	Broadly in line	Accelerate structural reforms (by further opening domestic markets, reforming SOEs, and ensuring competitive neutrality with private firms), reduce high household savings (by strengthening the social safety net), and promote green investment. Further increase exchange rate flexibility to help the economy adjust to the changing external environment.
Euro Area	Moderately stronger	Implement area-wide initiatives (banking and capital markets union and fiscal capacity for macro-stabilization) to reinvigorate investment, thus reducing the aggregate CA surplus; see member country–specific recommendations to reduce internal and external imbalances.
France	Broadly in line	Improve competitiveness by reinvigorating structural reforms and rebuilding fiscal space over the medium term.
Germany	Stronger	Promote investment and diminish excess saving, including through an investment push to achieve climate, digital, and energy security goals. Structural reforms to foster innovation, including development of the venture capital market and reducing the administrative steps needed to start a business, would also stimulate investment.
Hong Kong SAR	Broadly in line	Ensure medium-term fiscal sustainability, given the rapidly aging population, and maintain policies that support wage and price flexibility to preserve competitiveness.
India	Broadly in line	Gradually withdraw fiscal and monetary policy stimulus, negotiate free trade agreements with main trading partners to boost exports, further liberalize the investment regime, and reduce tariffs. Structural reforms could deepen integration in global value chains and attract FDI, hence mitigating external vulnerabilities. Exchange rate flexibility should act as the main shock absorber, with intervention limited to addressing disorderly market conditions
Indonesia	Broadly in line	Pursue planned fiscal consolidation while boosting productivity and allowing for higher infrastructure and social spending to foster human capital development; facilitate sectoral adjustment, ease nontariff trade barriers and FDI restrictions; improve labor market flexibility. Flexibility of the exchange rate should continue to support external stability with the ongoing structural transformation of the Indonesian economy.
Italy	Broadly in line	Raise productivity and improve the business climate through higher investment and structural reforms, including by upskilling the workforce and increasing the quality of infrastructure and the effectiveness of the public administration. Reduce vulnerabilities associated with rollover of public debt by improving budget efficiency and fully implementing the National Recovery and Resilience Plan.
Japan	Broadly in line	Implement gradual fiscal consolidation within a well-specified medium-term fiscal framework, accommodative monetary policy, and structural reforms that support domestic demand. Focus on reforms to increase labor supply, boost productivity and wages, and encourage firms to deploy their accumulated savings.
Korea	Broadly in line	In a context of expected normalization of fiscal and monetary policies, implement structural policies to stimulate investment and facilitate rebalancing of the economy toward services and other new growth drivers, by reducing barriers to entry and deregulating the nonmanufacturing sector and strengthening the social safety net to reduce the need for precautionary saving. ER should remain market determined, with intervention limited to preventing disorderly market conditions.

(*Continued*)

Annex Table 1.1.6 *(continued)*

Economy	Overall 2021 Assessment	Policy Recommendations
Malaysia	Moderately stronger	Strengthen the social safety net, encourage private investment, and boost productivity growth. Fiscal policy should target a gradual and growth friendly consolidation.
Mexico	Broadly in line	Implement structural reforms to deliver stronger investment and boost growth and exports, including tackling economic informality and governance gaps. Continue using floating ER as the main shock absorber, with FX interventions used only to prevent disorderly market conditions.
The Netherlands	Stronger	Promote the recovery and support investment in physical and human capital to foster robust potential growth, including through structural investment and reform plans to allay housing market shortages; reinforce the education system and advance the climate transition and digitalization.
Poland	Moderately stronger	Boost public investment by deploying Next Generation EU grants to tackle infrastructure gaps, digitalization, and climate change; use public policies to encourage corporate investment and productivity, including through initiatives to increase the supply of skilled labor.
Russia	Stronger	. . .
Saudi Arabia	Broadly in line	Continued fiscal consolidation will help align the current account with its norm, including through energy price reform and by delinking spending decisions from international oil price fluctuations, maintaining the VAT rate, and improving public financial management; structural reforms would help diversify the economy and boost the non-oil tradable sector.
Singapore	Substantially stronger	Increase public investment, including spending on health care, green and other physical infrastructures, and human capital, to help reduce external imbalances over the medium term by lowering net public saving.
South Africa	Moderately weaker	Implement structural reforms and pursue gradual but substantial fiscal consolidation to tackle external imbalances, while providing space for infrastructure and social spending; focus on improving governance, efficiency of key product markets (to promote private sector participation), and functioning of labor markets; seize opportunities to build up reserves.
Spain	Broadly in line	Implement a combination of fiscal consolidation efforts and higher private savings. The latter could be achieved through productivity gains, which will require continued wage flexibility, addressing labor market duality, and actions to enhance education outcomes and encourage innovation.
Sweden	Stronger	Support greener and growth-enhancing private and public investments to facilitate structural transformation and support domestic demand; implement structural reforms to raise productive investment and boost potential output and policies to lower household debt.
Switzerland	Broadly in line	Ensure balanced domestic and external contributions to growth and improve the public-private mix in financial outflows, easing pressures on the franc; keep fiscal policy broadly balanced in structural terms; consider targeted FXIs to mitigate disruptive volatility.
Thailand	Moderately stronger	Implement a more gradual consolidation of pandemic era policy stimulus alongside structural reforms to support domestic demand through targeted social transfers and infrastructure investment; continue reforming social safety nets and addressing widespread informality to reduce precautionary saving and support consumption; pursue revenue mobilization to keep the deficit and debt sustainable.
Türkiye	Broadly in line	Implement a tighter monetary policy and a broadly neutral fiscal stance while carefully monitoring credit growth. This overall tightening of the policy stance and the rebuilding of policy credibility would contain demand and reduce imports, thus improving the current account; help sustain capital inflows, support de-dollarization, and allow needed reserve build up over time.
United Kingdom	Broadly in line	Implement gradual fiscal consolidation, while maintaining sufficient targeted fiscal support to lower-income households to cushion the impact of the escalating cost of living. Implement structural reforms to boost productivity and international competitiveness, including via upgrading the labor skill base to support labor reallocation to fast-growing sectors.
United States	Moderately weaker	Implement fiscal consolidation over the medium term. Implement structural policies to increase competitiveness, including upgrading infrastructure; enhancing schooling, training, and mobility of workers; supporting the working poor; and policies to increase growth in the labor force (including skill-based immigration reform). Roll back tariff barriers and resolve trade and investment disagreements, supporting a global trading system.

Source: 2021 Individual External Balance Assessments.
Note: CA = current account; ER = exchange rate; EU = European Union; FDI = foreign direct investment; FX = foreign exchange; FXI = foreign exchange intervention; R&D = research and development; SOE = state-owned enterprise; VAT = value added tax.

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