



STATISTICS

## The IMF's External Sector Report (BOPCOM 23/09)

Forty-Second (Virtual) Meeting of the IMF  
Committee on Balance of Payments Statistics

October 24–26, 2023

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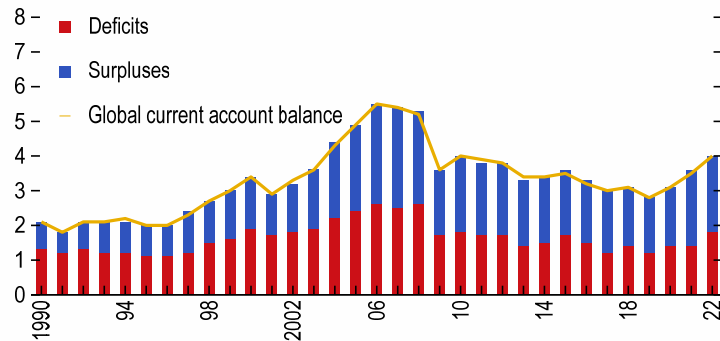
### The IMF's Mandate in External Sector Surveillance

- IMF's mandate:
  - Promote the stability of the international monetary system (a public good).
    - Understanding and monitoring external imbalances is key
- External positions are a key aspect of macroeconomic diagnostics.
  - Individual viewpoint
    - Manifestation of internal imbalances
  - Multilateral perspective
    - Accumulation/decumulation of external wealth: Build-up of risks for the global economy (e.g., Global Financial Crisis, Euro Area Crisis)

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## External Imbalances Over Time

**Global Current Account Balance<sup>1</sup>**  
(Percent of world GDP)



Sources: IMF, Information Notice System; IMF, *April 2023 World Economic Outlook*; and IMF staff calculations.

<sup>1</sup>Global current account balance is defined as the sum of absolute values of current account balances.

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## The External Sector Report

- Provides multilaterally consistent assessments of external positions of the world's largest economies (current accounts, real exchange rates, capital flows, external balance sheets, international reserves).
- Identifies excess CA deficits and surpluses (global imbalances).
- Detects external sector vulnerabilities.
- Discusses policies to promote external rebalancing.
- Fulfills IMF core mandate.

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# 2023 External Sector Report, Chapter 1: Recovery, War, and Policy Shocks

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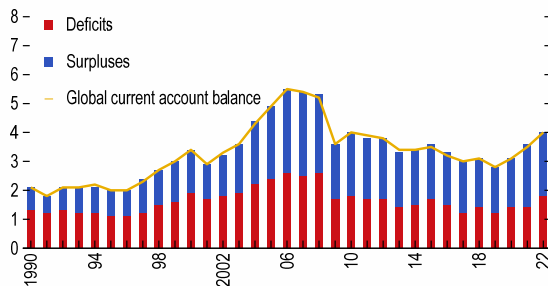
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## Growing Imbalances in 2022

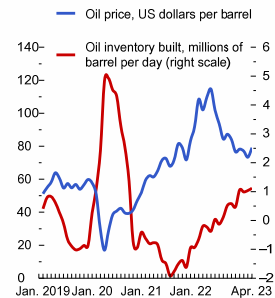
The sum of borrowing and lending between countries has increased again in 2022, driven by the sharp rise in commodity prices, uneven recovery from COVID and tightening of US monetary policy.

**Global Current Account Balance<sup>1</sup>**  
(Percent of world GDP)



Sources: IMF, Information Notice System; IMF, *April 2023 World Economic Outlook*; and IMF staff calculations. <sup>1</sup>Global current account balance is defined as the sum of absolute values of current account balances.

**Oil Inventory Built and Price**



Sources: CEIC Global Economic Data; Haver Analytics; IMF, Primary Commodity Price System; Joint Organisations Data Initiative; and US Energy Information Administration. Note: Oil inventory built is calculated as the six-month moving average of total world petroleum production minus total world petroleum consumption, and oil price refers to crude oil (petroleum), West Texas Intermediate 40 American Petroleum Institute (API), in US dollars per barrel.

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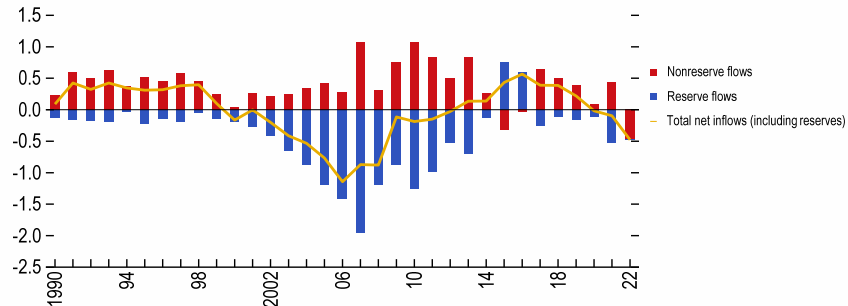
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## Uphill Capital Flows Reappeared

In contrast to past episodes, the accumulation of official reserves played a limited role.

**Emerging Market and Developing Economies: Net Financial Inflows**  
(Percent of world GDP)

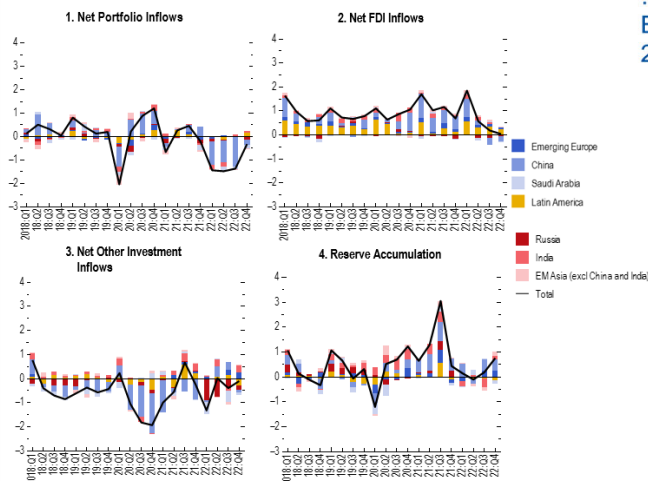


Sources: IMF, Information Notice System; IMF, April 2023 World Economic Outlook; and IMF staff calculations

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## A Large Share of Net Capital Outflows in EMDEs was Driven by Portfolio Flows

**Capital Inflows to EMDE (percent of group GDP)**

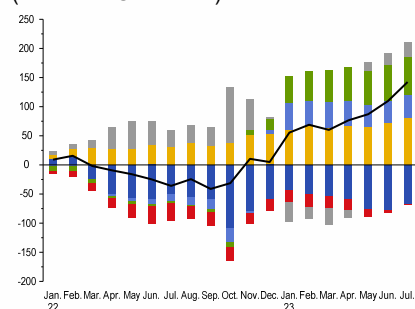


Sources: IMF, International Financial Statistics; Institute of International Finance; and IMF staff calculations.  
Note: Group GDP is the total GDP of all economies considered in the figure.

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... nonetheless, short-run portfolio inflows to EMDEs resumed in the first few months of 2023

**Cumulative High-Frequency Portfolio Flows to EMDEs**  
(Billions of US dollars)



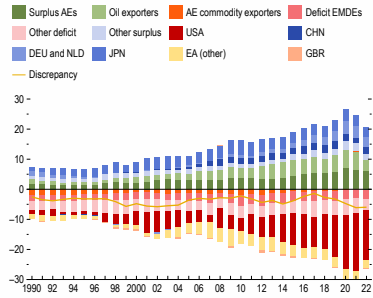
Sources: Institute of International Finance; and IMF staff calculations.

# Outstanding International Borrowing and Lending Remains Elevated

... reflecting offsetting effects of widening CA and valuation effects ...

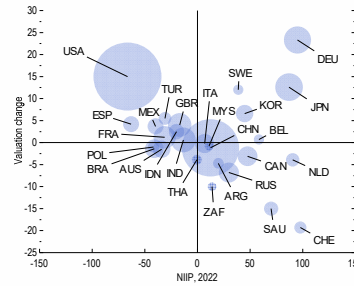
... with net debtors tend to experience valuation gains

## Net International Investment Positions, 1990–2022 (Percent of world GDP)



Sources: External Wealth of Nations database; IMF, April 2023 World Economic Outlook; and IMF staff calculations

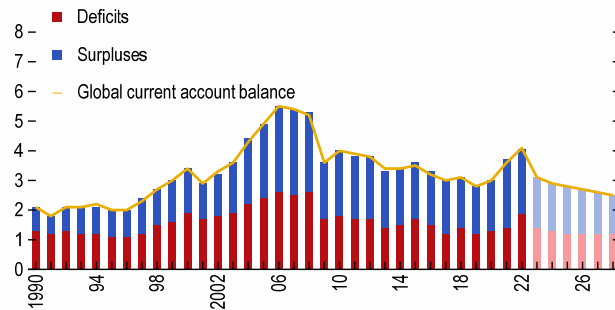
## International Investment Position Valuation Change and Net International Investment Position, 2022 (Percent of GDP)



Sources: IMF, April 2023 World Economic Outlook; and IMF staff calculations. Note: Valuation changes are calculated as the difference between changes in net international investment position (NIP) and current account. For some countries, NIIPs are still projections. Bubble sizes are proportional to 2022 GDP in US dollars. Singapore and Hong Kong SAR are excluded because of the size of their NIIPs.

# Risks to the Outlook for Global Balances

## Global Current Account Balance<sup>1</sup> (Percent of world GDP)



Sources: IMF, Information Notice System; IMF, April 2023 World Economic Outlook; and IMF staff calculations.

<sup>1</sup>Global current account balance is defined as the sum of absolute values of current account balances. Note: Shaded bars indicate forecasted values based on the April 2023 IMF World Economic Outlook.

- Severe tightening of global financial conditions
- Adjustments to Japan's yield curve control policy
- Rising commodity prices
- Faltering growth in China
- Fiscal policy path
- Climate change
- Geoeconomic fragmentation further hampering global trade and other international flows

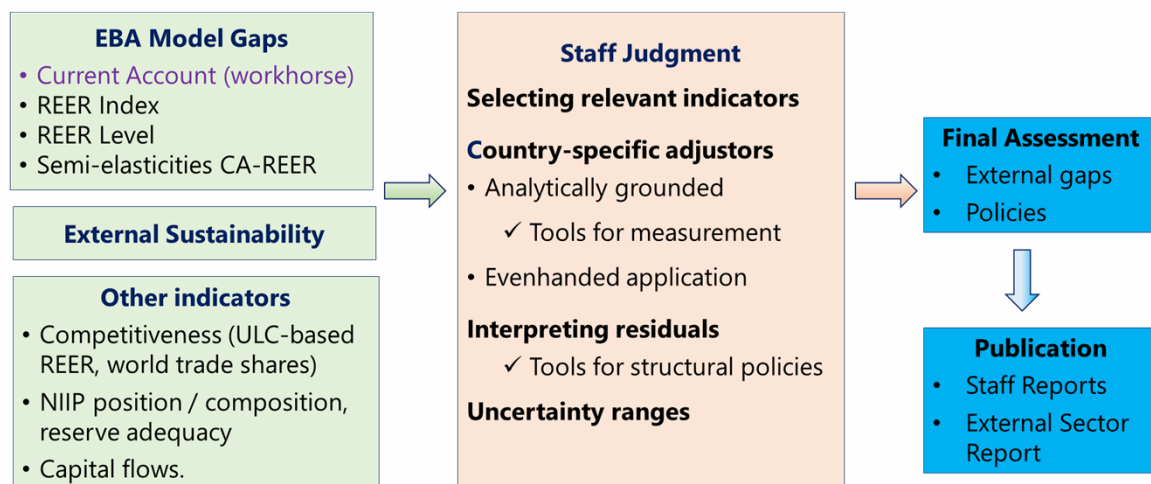
## IMF External Sector Assessment: Methodology and Results for 2022

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### External Assessments at the IMF: a Holistic Approach



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## EBA CA Regression

$$\frac{CA}{Y}_{it} = \alpha + C_{it}\beta + F_{it}\lambda + P_{it}\gamma + u_{it}$$

### Cyclical and Short-Term Factors (C)

Output gap  
Commodity terms of trade  
Lagged REER annual change

### Fundamentals (F)

#### Macroeconomic

Net foreign assets  
Output per worker  
Expected growth

#### Structural

Demographics  
Institutional quality  
Oil and gas resources

### Actual Policies (P)

Fiscal balance  
Health spending  
Credit gap  
FXI/Capital controls

## CA Norms and Gaps

- **Norms:** Based on medium-term structural features and desirable policies (P\*)

$$Norm_{it} = \hat{\alpha} + F_{it}\hat{\lambda} + P_{it}^*\hat{\gamma}$$

- **Gaps:** Difference between cyclically-adjusted CA balance and norm.

$$\begin{aligned} Gap_{it} &= \left( \frac{CA}{Y}_{it} - C_{it}\hat{\beta} \right) - \left( \hat{\alpha} + F_{it}\hat{\lambda} + P_{it}^*\hat{\gamma} \right) \\ &= \underbrace{(P_{it} - P_{it}^*)\hat{\gamma}}_{\text{Contribution of Policy Gaps (P-P*)}} + \underbrace{u_{it}}_{\text{Regression Residual: Unexplained factors}} \end{aligned}$$

**Contribution of Policy Gaps (P-P\*):**  
how much policies contribute to CA gap?

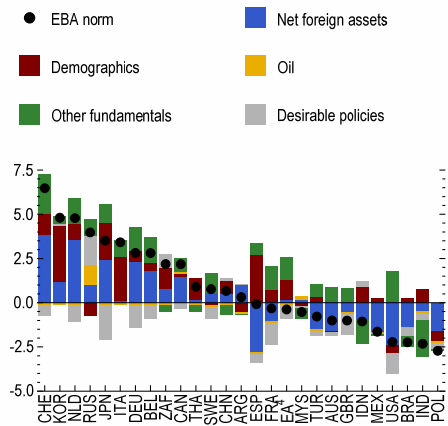
**Regression Residual:**  
Unexplained factors

## Estimated Current Account Norms

$$Norm_{it} = \hat{\alpha} + F_{it}\hat{\lambda} + P_{it}^*\hat{\gamma}$$

- Advanced economies with higher incomes, older populations, and lower growth prospects tend to have positive current account norms.
- Norms are negative for most emerging markets, as they are expected to import capital to invest and exploit the higher growth prospects.

### External Balance Assessment Current Account Norms, 2022 (percent of GDP)



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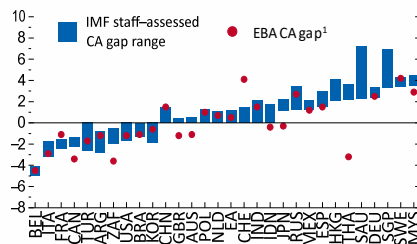
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## Assessment of 2022 External Positions: CA and REER Gaps

IMF staff gap includes country-specific adjustments (e.g., COVID, measurement)

### IMF Staff and External Balance Assessment Current Account and Real Exchange Rate Gaps, 2022 (Percent of GDP)



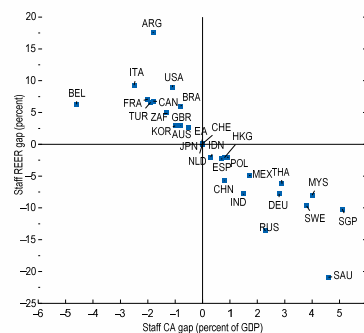
Source: IMF staff assessments.

Note: CA = current account; EBA = External Balance Assessment; REER = real effective exchange rate. REER gap is based on 2021 *External Sector Report*.

\*There are no EBA estimates for Hong Kong SAR, Saudi Arabia, and Singapore.

In most cases, the REER gap is derived using country-specific CA-REER elasticity

### IMF Staff Current Account and Real Effective Exchange Rate Gaps



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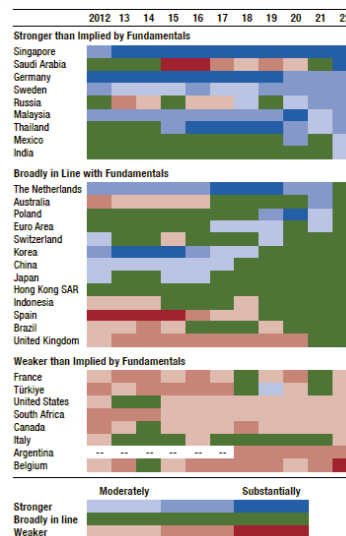
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## Excess External Balances Over Time

- Generally, a country with a staff CA gap of +/- 1 percent of GDP is considered broadly in line with fundamentals and desirable policies. 1 to 2 percent is moderately stronger, 2 to 4 stronger, above 4 substantially stronger; and symmetrically for weaker.
- Compared with those for 2021, assessments for 2022 changed for nearly half of the 30 ESR economies.
- The assessments have moved farther away from the “broadly in line” category for nearly a third ESR economies.

### Evolution of External Sector Assessments, 2012–22 (percent of GDP)



Source: IMF staff assessments.  
Note: Grouping and ordering are based on economies' excess imbalance during 2022. Coverage of Argentina in the *External Sector Report* started in 2018.

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## Policies to Promote External Rebalancing

Policies differ based on individual economies' positions and needs:

- **Excess surpluses:** where fiscal space is available, policies should support recovery through public investment in digitalization, upgrading infrastructure, climate change mitigation; stimulate private investment by selected product market reforms, notably removing barriers to entry.
- **Excess deficits:** fiscal consolidation; productivity raising reforms to boost competitiveness.

Coordinated policy efforts are also essential, including:

- Strengthening the current rule-based trading system.
- Ensuring any industrial policies do not introduce distortions and should be consistent with international agreements and WTO rules.
- Maintaining liquidity in global financial system.

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## Data Limitations in External Sector Statistics

- Key elements of external sector assessments are:
  - Accurate measurement of the current account balances, reflecting the real accumulation of external wealth by domestic residents (especially the income balance).
    - Retained earnings on portfolio equity are not recorded in the income balance (income not attributed to the ultimate owner, discrepancy with IIP).
  - Accurate measurements of the International Investment Position and its composition.
    - Stock/flow reconciliation (proper estimates of IIP valuation changes), currency composition of IIP (study of exchange rate channels), ultimate owner basis (analysis of bilateral exposure and vulnerability).
- [Update of BPM6](#) addresses these limitations (through Guidance Notes B.4 and F.2).
- New series should seek to extend coverage back in time for as long as possible to allow for the analysis of the external sector.

## Questions for the Committee

- Do Committee Members have any views on the findings of the 2023 ESR?
- Do Committee Members have any other suggestions on the ESR in general?

## **Background Slides**

## **Summary of the 2022 EBA Refinements**

- Data updates
- Extend series up to 2019
- Refined ToT gap, oil and gas reserves, capital controls index
- Expanded sample of economies
- Excluded variables not robustly associated with CA balances
- Complementary tools to analyze model residuals
  
- Basic principles remain unchanged!

## Summary of Explanatory Variables in EBA CA, REER index and REER level models

EBA CA Model	REER-Index Model <sup>FE</sup>	REER-Level Model
<b>Cyclical Factors</b> Output gap (-) Terms of Trade <sup>x</sup> (+) REER log change <sup>l</sup> (-)	<b>Cyclical Factors</b> Output gap (+) Terms of Trade (+)	<b>Cyclical Factors</b> Terms of Trade (+)
<b>Macroeconomic Fundamentals</b> Output per worker <sup>l</sup> (+) Net foreign assets <sup>l</sup> (+) Expected growth (-)	<b>Macroeconomic Fundamentals</b> Output per worker <sup>l</sup> (+) Net foreign assets <sup>l</sup> (-) Expected growth (+) Financial home bias (+)	<b>Macroeconomic Fundamentals</b> Output per worker <sup>l</sup> (+) Net foreign assets <sup>l</sup> (+) Expected growth (+) Reserve currency status <sup>l</sup> (-) Prod. Tradable/NonTrad (+)
<b>Structural features</b> Demographics (+/-) Institutional quality (-) Oil exporter (+)	<b>Structural features</b>	<b>Structural features</b> Demographics (+) Trade openness <sup>l</sup> (-) Institutional quality (+) VAT Revenue (+)
<b>Policies</b> Fiscal balance (+) Public health spending <sup>l</sup> (-) FXI, Capital controls <sup>x</sup> (+) Financial excesses (-)	<b>Policies</b> Monetary policy, Capital openness <sup>x</sup> (+) Public health spending <sup>l</sup> (+) FXI, Capital controls <sup>x</sup> (-) Financial excesses (+)	<b>Policies</b> Monetary policy, Capital openness <sup>x</sup> (+) Public health spending <sup>l</sup> (+) FXI, Capital controls <sup>x</sup> (-)

Note: The sign of the estimated coefficient is in brackets (in red if not aligned with economic priors). Lagged variables have an L superscript, while those interacted have an X superscript. Some policy variables (fiscal, FXI) are instrumented as well. Capital openness is defined as 1 minus the capital controls index. The REER-Index model includes country fixed effects (FE).

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## COVID Adjustors

### COVID adjustors:\*

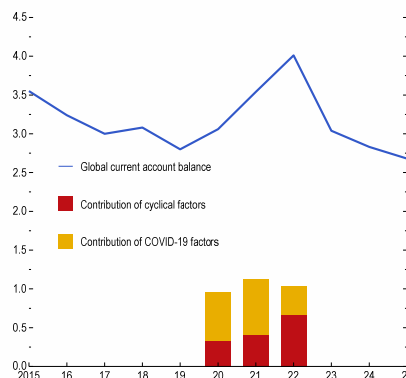
1. Medical trade
2. Shift in household consumption
3. Travel restrictions
4. Transportation cost shocks

### Cyclical factors:

1. Output gap
2. Commodity terms of trade
3. Lagged REER annual change

\*adjustors in grey are not no longer considered for the 2022 assessment

Global Current Account Balance, with the Contributions from Cyclical and COVID-19 Factors  
(Percent of world GDP)



Sources: CEIC Data, Global Database; IMF, Primary Commodity Price System; Refinitiv, Datastream; UN, Comtrade; UN Conference on Trade and Development; and IMF staff calculations. Note: Global current account balance is the sum of absolute values of current account; COVID-19 factors are the sum of absolute values of transportation and travel COVID-19 adjustors for *External Sector Report* countries only; and cyclical factors are the sum of absolute values of the contribution of cyclical factors to current accounts of *External Sector Report* countries only. Data from 2023 onward are projections, based on the April 2023 IMF *World Economic Outlook*.

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