EBA ESTIMATES: ANALYSIS OF 2021 CURRENT ACCOUNTS AND REAL EFFECTIVE EXCHANGE RATES[1]

Introduction

The attached tables contain estimates from the External Balance Assessment (EBA) analysis used as input in the *2022 External Sector Report*, including the Individual Economy Assessments. The EBA analysis is of the 2021 outturns of the current account (CA) and 2021 year-average real effective exchange rates (REER). The external sustainability (ES) analysis is with reference to the 2021 current accounts.

The estimates are based on the latest vintage of the EBA methodology, which can be found in the *2022 External Sector Report* Online Annex.

EBA estimates presented in the attached tables are provided for the 26 economies that are analyzed in the *2022 External Sector Report*. In addition, estimates are also shown for the euro area aggregate, which are constructed using weighted averages of the EBA estimates for the 11 largest euro area economies.

Data Vintage

The individual economy assessments for 2021 are based on data and IMF staff projections as of June 30, 2022. The analyses draw on the following data sources:

• World Economic Outlook (WEO) database as of June 30, 2022[2].

• Demographic data from UN World Population Prospects 2019.

• The Financial Account Restriction Index (FARI) constructed by Fund staff in the Monetary and Capital Markets (MCM) department, updated through 2019.[3]

• Other third-party indicators (for example, ICRG) updated accordingly.

Organization

The attached tables are organized in four sections. As with past External Sector Reports, these correspond to four sets of estimates:

Section I: Regression-based analysis of 2021 Current Accounts
Section II: Regression-based analysis of the 2021 REER Index
Section III: Regression-based analysis of the 2021 REER Level
Section IV: External Sustainability Analysis

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[1] Prepared by the IMF Research Department. For queries please email: RESEBA@imf.org.
[2] For some countries, revisions in official CA balances not available in WEO live by June 30 were taken into account.
[3] FARI data was preliminary as of June 30, 2022.

SECTION I—CURRENT ACCOUNT REGRESSION-BASED ANALYSIS

The tables on this section present the results from the EBA analysis of 2021 current account balances (CA, as percent of GDP).

Table 1 decomposes the 2021 CA balances into a cyclical and short-term component (related to the business cycle, the commodity price cycle and short-term exchange rate movements) and a cyclically-adjusted component. The latter is further decomposed into a cyclically-adjusted CA "norm" (a benchmark calculated using desirable P* policy settings), the observed gap with respect to said norm that arises from the estimated contributions of four policy gaps, and a regression residual. The last column is the Total CA Gap, the sum of the overall policy gaps and the residual.

The CA numbers in Table 1 include small adjustments that have been applied uniformly across economies (in terms of an economy's own GDP) to ensure multilateral consistency. Thus, the cross-economy sum of the CA norm levels, when measured in U.S. dollars, matches the sum of the actual 2021 CA levels of all 52 EBA economies.

Table 2 breaks down the policy gap contributions by the four policies covered in the EBA CA analysis (fiscal balance, public expenditure on health, the interaction between reserve accumulation and capital controls, and private credit). For each policy gap, the reported estimates include both the total contribution and the subcomponent that is "domestic" (i.e., arising from an economy's own policies).

The four subsequent tables (Tables 3-6) show further detail on the derivation of the contribution of each policy gap. The abbreviation "wo" is used to denote the world average counterparts of the variables (in all cases, world averages are obtained as GDP-weighted averages of the relevant variables).

Table 7 shows the derivation of the cyclical component of the CA.

Table 8 shows the estimated coefficients of the EBA CA model.

Table 1. EBA Regression Analysis of 2021 Current Accounts
(In percent of GDP, includes multilateral consistency adjustments)

	Actual CA	Cyclical Contributions (incl. ToT) 1/	Cyclically Adjusted CA	Cyclically Adjusted CA Norm 2/	Contribution of Identified Policy Gaps	Unexplained Residual	Total Gap, including Residual
Argentina	1.4%	0.9%	0.5%	0.2%	0.7%	-0.4%	**0.3%**
Australia	3.5%	1.8%	1.7%	-0.9%	-1.1%	3.6%	**2.6%**
Belgium	-0.4%	-0.4%	0.0%	3.1%	-0.7%	-2.4%	**-3.1%**
Brazil	-1.7%	1.1%	-2.8%	-1.6%	0.3%	-1.5%	**-1.2%**
Canada	0.0%	0.4%	-0.4%	2.6%	-1.2%	-1.8%	**-3.0%**
China	1.8%	-0.4%	2.2%	0.8%	1.3%	0.1%	**1.4%**
France	0.4%	0.1%	0.2%	0.3%	-0.4%	0.3%	**-0.1%**
Germany	7.4%	-0.1%	7.6%	3.3%	-0.8%	5.1%	**4.3%**
India	-1.2%	0.4%	-1.6%	-1.9%	1.1%	-0.8%	**0.3%**
Indonesia	0.3%	1.8%	-1.5%	-0.8%	0.7%	-1.5%	**-0.7%**
Italy	2.4%	0.3%	2.2%	3.4%	0.2%	-1.4%	**-1.2%**
Japan	2.9%	0.0%	2.9%	3.9%	-1.8%	0.9%	**-0.9%**
Korea	4.9%	-0.7%	5.6%	5.0%	0.1%	0.5%	**0.6%**
Malaysia	3.8%	1.2%	2.6%	-0.1%	1.3%	1.4%	**2.7%**
Mexico	-0.4%	1.1%	-1.5%	-1.2%	1.3%	-1.6%	**-0.2%**
Netherlands	9.0%	-0.2%	9.2%	5.1%	1.9%	2.2%	**4.1%**
Poland	-0.6%	-0.3%	-0.3%	-2.4%	2.7%	-0.6%	**2.1%**
Russia	6.9%	-0.2%	7.1%	4.4%	1.8%	0.8%	**2.6%**
South Africa	3.6%	2.3%	1.3%	2.6%	0.5%	-1.7%	**-1.3%**
Spain	0.9%	1.0%	-0.1%	0.0%	0.2%	-0.3%	**-0.1%**
Sweden	5.5%	0.2%	5.3%	1.2%	0.2%	3.9%	**4.1%**
Switzerland	9.3%	-0.6%	9.9%	6.8%	0.0%	3.0%	**3.1%**
Thailand	-2.2%	0.6%	-2.8%	1.4%	-1.2%	-3.0%	**-4.2%**
Türkiye	-1.7%	-1.1%	-0.6%	-0.8%	1.6%	-1.4%	**0.2%**
United Kingdom	-2.6%	-0.6%	-2.0%	-0.7%	-0.4%	-0.9%	**-1.3%**
United States	-3.6%	-0.4%	-3.2%	-1.3%	-1.1%	-0.8%	**-1.9%**
Euro Area 3/	2.4%	0.1%	2.3%	0.6%	-0.1%	1.8%	**1.7%**

1/ Sum of estimated contributions of output cycle and commodity terms of trade cycle.

2/ Current account norm determined by regression evaluated at observed fundamentals and desirable policy settings (and zero cyclical contributions).

3/ Euro area current account gaps and policy gap contributions are calculated as GDP-weighted averages of values for the 11 largest Euro area economies. The CA norm is corrected for reporting discrepancies in intra-area transactions, since the CA of the entire Euro area is about 1.41 percent of GDP less than the sum of the individual 11 countries' CA balances (for which no such correction is available).

Table 2. EBA-Estimated Policy Gap Contributions to 2021 Current Accounts

	All (sum)		Fiscal Balance		Health Exp.		Δ Reserves * KC		Credit	
	Total	Dom.	Total	Dom.	Total	Dom.	Total	Dom.	Total	Dom.
Argentina	0.7%	-0.3%	0.8%	-0.5%	0.0%	0.0%	0.0%	0.2%	-0.1%	0.0%
Australia	-1.1%	-2.0%	-0.9%	-2.2%	-0.1%	-0.1%	-0.1%	0.1%	0.0%	0.2%
Belgium	-0.7%	-1.7%	-0.2%	-1.5%	-0.1%	-0.1%	-0.1%	0.1%	-0.3%	-0.2%
Brazil	0.3%	-0.7%	1.1%	-0.2%	0.2%	0.2%	-0.3%	-0.1%	-0.7%	-0.5%
Canada	-1.2%	-2.2%	0.1%	-1.1%	-0.9%	-1.0%	-0.1%	0.1%	-0.2%	-0.1%
China	1.3%	0.3%	0.2%	-1.1%	0.1%	0.1%	0.3%	0.5%	0.7%	0.8%
France	-0.4%	-1.3%	0.0%	-1.3%	-0.2%	-0.2%	-0.2%	0.0%	0.0%	0.1%
Germany	-0.8%	-1.8%	0.5%	-0.7%	-0.3%	-0.3%	-0.1%	0.1%	-1.0%	-0.9%
India	1.1%	0.1%	0.4%	-0.9%	0.1%	0.1%	-0.1%	0.1%	0.7%	0.8%
Indonesia	0.7%	-0.2%	0.9%	-0.4%	0.4%	0.4%	-0.4%	-0.2%	-0.2%	-0.1%
Italy	0.2%	-0.8%	-0.5%	-1.8%	0.0%	0.0%	-0.2%	0.0%	0.8%	0.9%
Japan	-1.8%	-2.8%	-0.6%	-1.9%	0.0%	0.0%	-0.1%	0.1%	-1.1%	-1.0%
Korea	0.1%	-0.9%	1.3%	0.1%	0.3%	0.3%	-0.2%	0.0%	-1.4%	-1.3%
Malaysia	1.3%	0.3%	0.6%	-0.7%	0.6%	0.6%	0.6%	0.8%	-0.6%	-0.4%
Mexico	1.3%	0.3%	1.2%	0.0%	0.1%	0.1%	0.0%	0.2%	-0.1%	0.0%
Netherlands	1.9%	0.9%	1.0%	-0.3%	-0.1%	-0.2%	-0.2%	0.0%	1.2%	1.4%
Poland	2.7%	1.7%	1.0%	-0.2%	0.3%	0.2%	0.5%	0.7%	0.8%	1.0%
Russia	1.8%	0.9%	0.3%	-1.0%	0.3%	0.3%	0.7%	0.9%	0.5%	0.7%
South Africa	0.5%	-0.5%	0.5%	-0.7%	-0.1%	-0.1%	-0.3%	-0.1%	0.4%	0.5%
Spain	0.2%	-0.7%	0.7%	-0.5%	0.0%	0.0%	-0.1%	0.1%	-0.4%	-0.3%
Sweden	0.2%	-0.8%	1.0%	-0.3%	-0.1%	-0.1%	-0.1%	0.1%	-0.6%	-0.5%
Switzerland	0.0%	-0.9%	1.4%	0.2%	-0.1%	-0.1%	0.5%	0.7%	-1.9%	-1.8%
Thailand	-1.2%	-2.2%	0.1%	-1.2%	0.1%	0.1%	-0.4%	-0.2%	-1.1%	-0.9%
Türkiye	1.6%	0.6%	1.4%	0.1%	-0.4%	-0.4%	0.1%	0.3%	0.5%	0.6%
United Kingdom	-0.4%	-1.3%	-0.2%	-1.5%	-0.7%	-0.7%	-0.1%	0.1%	0.7%	0.8%
United States	-1.1%	-2.0%	-0.7%	-2.0%	0.0%	0.0%	-0.1%	0.1%	-0.3%	-0.1%
Euro Area (agg) 1/	-0.1%	-1.1%	0.3%	-1.0%	-0.1%	-0.1%	-0.1%	0.1%	-0.1%	0.0%

1/ Euro area policy gap contributions are GDP-weighted averages of the 11 largest Euro area economies.

Table 3. Breakdown of 2021 Policy Gap Contribution: Fiscal Balance/GDP

	Overall Contribution	Beta	Policy Gap 1/	(P-P*)	P	P*	P_wo	P*_wo
Argentina	0.8%	0.31	2.5%	-1.6%	-3.1%	-1.5%	-5.7%	-1.6%
Australia	-0.9%	0.31	-3.0%	-7.1%	-7.1%	0.0%	-5.7%	-1.6%
Belgium	-0.2%	0.31	-0.8%	-4.9%	-5.3%	-0.4%	-5.7%	-1.6%
Brazil	1.1%	0.31	3.5%	-0.6%	-4.1%	-3.5%	-5.7%	-1.6%
Canada	0.1%	0.31	0.4%	-3.7%	-4.4%	-0.7%	-5.7%	-1.6%
China	0.2%	0.31	0.6%	-3.5%	-5.4%	-1.9%	-5.7%	-1.6%
France	0.0%	0.31	-0.1%	-4.2%	-5.3%	-1.1%	-5.7%	-1.6%
Germany	0.5%	0.31	1.7%	-2.4%	-2.9%	-0.5%	-5.7%	-1.6%
India	0.4%	0.31	1.2%	-2.9%	-8.7%	-5.8%	-5.7%	-1.6%
Indonesia	0.9%	0.31	2.8%	-1.3%	-3.8%	-2.5%	-5.7%	-1.6%
Italy	-0.5%	0.31	-1.7%	-5.8%	-5.3%	0.5%	-5.7%	-1.6%
Japan	-0.6%	0.31	-2.0%	-6.1%	-6.6%	-0.5%	-5.7%	-1.6%
Korea	1.3%	0.31	4.4%	0.3%	0.3%	0.0%	-5.7%	-1.6%
Malaysia	0.6%	0.31	1.8%	-2.3%	-4.8%	-2.5%	-5.7%	-1.6%
Mexico	1.2%	0.31	4.1%	0.0%	-2.8%	-2.8%	-5.7%	-1.6%
Netherlands	1.0%	0.31	3.2%	-0.9%	-1.9%	-1.0%	-5.7%	-1.6%
Poland	1.0%	0.31	3.4%	-0.7%	-1.7%	-1.0%	-5.7%	-1.6%
Russia	0.3%	0.31	0.8%	-3.3%	0.5%	3.8%	-5.7%	-1.6%
South Africa	0.5%	0.31	1.7%	-2.4%	-3.8%	-1.4%	-5.7%	-1.6%
Spain	0.7%	0.31	2.3%	-1.8%	-3.8%	-2.0%	-5.7%	-1.6%
Sweden	1.0%	0.31	3.2%	-0.9%	-0.5%	0.3%	-5.7%	-1.6%
Switzerland	1.4%	0.31	4.7%	0.6%	-0.4%	-1.0%	-5.7%	-1.6%
Thailand	0.1%	0.31	0.3%	-3.8%	-6.1%	-2.3%	-5.7%	-1.6%
Türkiye	1.4%	0.31	4.4%	0.3%	-4.0%	-4.3%	-5.7%	-1.6%
United Kingdom	-0.2%	0.31	-0.7%	-4.8%	-7.2%	-2.4%	-5.7%	-1.6%
United States	-0.7%	0.31	-2.3%	-6.4%	-8.1%	-1.7%	-5.7%	-1.6%
Euro Area (agg)	0.3%	0.31	0.9%	-3.2%	-3.9%	-0.6%	-5.7%	-1.6%

1/ (P-P_wo) - (P*-P*_wo).

Table 4. Breakdown of 2021 Policy Gap Contribution: Public Expenditure on Health/GDP 1/

	Overall Contribution	Beta	Policy Gap 2/	(P-P*)	P	P*	P_wo	P*_wo	P* Bench-mark from Regression 3/
Argentina	0.0%	-0.30	-0.1%	0.0%	6.5%	6.5%	6.7%	6.6%	4.6%
Australia	-0.1%	-0.30	0.3%	0.4%	7.6%	7.2%	6.7%	6.6%	7.1%
Belgium	-0.1%	-0.30	0.3%	0.3%	8.2%	7.9%	6.7%	6.6%	7.5%
Brazil	0.2%	-0.30	-0.6%	-0.5%	3.9%	4.4%	6.7%	6.6%	3.5%
Canada	-0.9%	-0.30	3.1%	3.2%	10.2%	7.0%	6.7%	6.6%	7.2%
China	0.1%	-0.30	-0.4%	-0.3%	3.7%	4.0%	6.7%	6.6%	3.9%
France	-0.2%	-0.30	0.5%	0.6%	9.9%	9.3%	6.7%	6.6%	8.0%
Germany	-0.3%	-0.30	1.0%	1.1%	10.7%	9.6%	6.7%	6.6%	8.2%
India	0.1%	-0.30	-0.3%	-0.3%	1.5%	1.8%	6.7%	6.6%	1.5%
Indonesia	0.4%	-0.30	-1.5%	-1.4%	1.6%	3.0%	6.7%	6.6%	2.6%
Italy	0.0%	-0.30	-0.1%	0.0%	7.6%	7.6%	6.7%	6.6%	7.9%
Japan	0.0%	-0.30	-0.1%	0.0%	9.1%	9.1%	6.7%	6.6%	9.2%
Korea	0.3%	-0.30	-1.0%	-0.9%	5.1%	6.1%	6.7%	6.6%	6.1%
Malaysia	0.6%	-0.30	-2.2%	-2.1%	2.0%	4.1%	6.7%	6.6%	4.3%
Mexico	0.1%	-0.30	-0.5%	-0.4%	3.2%	3.6%	6.7%	6.6%	3.7%
Netherlands	-0.1%	-0.30	0.4%	0.5%	9.3%	8.8%	6.7%	6.6%	8.0%
Poland	0.3%	-0.30	-0.9%	-0.8%	5.5%	6.3%	6.7%	6.6%	6.5%
Russia	0.3%	-0.30	-1.0%	-0.9%	4.6%	5.5%	6.7%	6.6%	5.6%
South Africa	-0.1%	-0.30	0.3%	0.4%	4.5%	4.1%	6.7%	6.6%	2.8%
Spain	0.0%	-0.30	-0.1%	0.0%	6.4%	6.4%	6.7%	6.6%	6.8%
Sweden	-0.1%	-0.30	0.2%	0.3%	9.3%	9.0%	6.7%	6.6%	8.3%
Switzerland	-0.1%	-0.30	0.2%	0.3%	7.8%	7.5%	6.7%	6.6%	8.0%
Thailand	0.1%	-0.30	-0.4%	-0.3%	3.8%	4.1%	6.7%	6.6%	4.3%
Türkiye	-0.4%	-0.30	1.3%	1.4%	5.0%	3.6%	6.7%	6.6%	4.7%
United Kingdom	-0.7%	-0.30	2.3%	2.3%	10.2%	7.9%	6.7%	6.6%	7.4%
United States	0.0%	-0.30	-0.1%	0.0%	8.4%	8.4%	6.7%	6.6%	7.6%
Euro Area (agg)	-0.1%	-0.30	0.4%	0.5%	9.0%	8.5%	6.7%	6.6%	7.8%

1/ This variable is lagged in estimation, thus 2020 values are shown ; before small M.C. adjustment.

2/ (P-P_wo) - (P*-P*_wo).

3/ Fitted value from cross-country regression of public health expenditure on relative per capita income, old age dependency, and income inequality (Gini coefficient). For reference; desk value may differ.

Table 5. Breakdown of 2021 Policy Gap Contribution: (Change in FX Reserves)/GDP 1/

	Overall Contri-bution	Beta	Policy Gap 2/	(P_KC)-(P_KC)*	(P_KC)	(P_KC)*	(P_KC)_wo	(P_KC)*_wo	Components			
									P	P*	KC	KC*
Argentina	0.0%	0.63	0.0%	0.3%	0.6%	0.3%	0.3%	0.0%	0.9%	1.0%	0.64	0.29
Australia	-0.1%	0.63	-0.2%	0.1%	0.1%	0.0%	0.3%	0.0%	1.0%	0.0%	0.12	0.12
Belgium	-0.1%	0.63	-0.1%	0.2%	0.2%	0.0%	0.3%	0.0%	1.4%	0.0%	0.14	0.14
Brazil	-0.3%	0.63	-0.5%	-0.2%	-0.2%	0.0%	0.3%	0.0%	-0.5%	0.0%	0.46	0.29
Canada	-0.1%	0.63	-0.2%	0.1%	0.1%	0.0%	0.3%	0.0%	1.0%	0.0%	0.08	0.08
China	0.3%	0.63	0.5%	0.8%	0.8%	0.0%	0.3%	0.0%	1.1%	0.0%	0.72	0.29
France	-0.2%	0.63	-0.3%	0.1%	0.1%	0.0%	0.3%	0.0%	0.9%	0.0%	0.07	0.07
Germany	-0.1%	0.63	-0.1%	0.2%	0.2%	0.0%	0.3%	0.0%	0.9%	0.0%	0.25	0.25
India	-0.1%	0.63	-0.1%	0.2%	0.2%	0.0%	0.3%	0.0%	0.2%	0.0%	0.78	0.29
Indonesia	-0.4%	0.63	-0.6%	-0.3%	-0.3%	0.0%	0.3%	0.0%	-0.6%	0.0%	0.46	0.29
Italy	-0.2%	0.63	-0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	1.2%	0.0%	0.03	0.03
Japan	-0.1%	0.63	-0.2%	0.1%	0.1%	0.0%	0.3%	0.0%	1.8%	0.0%	0.05	0.05
Korea	-0.2%	0.63	-0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.5%	0.0%	0.07	0.07
Malaysia	0.6%	0.63	1.0%	1.3%	1.3%	0.0%	0.3%	0.0%	2.3%	0.0%	0.58	0.29
Mexico	0.0%	0.63	0.0%	0.3%	0.3%	0.0%	0.3%	0.0%	0.8%	0.0%	0.44	0.29
Netherlands	-0.2%	0.63	-0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	1.1%	0.0%	0.03	0.03
Poland	0.5%	0.63	0.8%	1.2%	1.2%	0.0%	0.3%	0.0%	2.8%	0.0%	0.41	0.29
Russia	0.7%	0.63	1.2%	1.5%	1.5%	0.0%	0.3%	0.0%	3.7%	0.0%	0.41	0.29
South Africa	-0.3%	0.63	-0.5%	-0.2%	0.7%	0.9%	0.3%	0.0%	1.1%	3.0%	0.61	0.29
Spain	-0.1%	0.63	-0.2%	0.2%	0.2%	0.0%	0.3%	0.0%	1.0%	0.0%	0.17	0.17
Sweden	-0.1%	0.63	-0.2%	0.1%	0.1%	0.0%	0.3%	0.0%	0.9%	0.0%	0.15	0.15
Switzerland	0.5%	0.63	0.9%	1.2%	1.2%	0.0%	0.3%	0.0%	6.3%	0.0%	0.19	0.19
Thailand	-0.4%	0.63	-0.6%	-0.3%	-0.3%	0.0%	0.3%	0.0%	-0.6%	0.0%	0.53	0.29
Türkiye	0.1%	0.63	0.2%	0.5%	0.9%	0.4%	0.3%	0.0%	2.3%	1.2%	0.39	0.29
United Kingdom	-0.1%	0.63	-0.2%	0.1%	0.1%	0.0%	0.3%	0.0%	0.9%	0.0%	0.10	0.10
United States	-0.1%	0.63	-0.2%	0.1%	0.1%	0.0%	0.3%	0.0%	0.6%	0.0%	0.20	0.20
Euro Area (agg)	-0.1%	0.63	-0.2%	0.1%	0.1%	0.0%	0.3%	0.0%	1.0%	0.0%	0.14	0.14

1/ Before small Multilateral Consistency adjustment.
2/ [(P_KC)-(P_KC)_wo] - [(P_KC)*-(P_KC)*_wo].

Table 6. Breakdown of 2021 Policy Gap Contribution : Private Credit/GDP (HP detrended)

	Overall Contribution	Beta	Policy Gap 1/	(P-P*)	P	P*	P_wo	P*_wo
Argentina	-0.1%	-0.10	0.8%	-0.4%	-0.4%	0.0%	-0.8%	0.4%
Australia	0.0%	-0.10	-0.5%	-1.7%	-1.7%	0.0%	-0.8%	0.4%
Belgium	-0.3%	-0.10	3.4%	2.2%	2.2%	0.0%	-0.8%	0.4%
Brazil	-0.7%	-0.10	6.8%	5.6%	5.6%	0.0%	-0.8%	0.4%
Canada	-0.2%	-0.10	2.4%	1.2%	1.2%	0.0%	-0.8%	0.4%
China	0.7%	-0.10	-7.5%	-8.7%	-8.7%	0.0%	-0.8%	0.4%
France	0.0%	-0.10	0.1%	-1.1%	-1.1%	0.0%	-0.8%	0.4%
Germany	-1.0%	-0.10	10.2%	8.9%	8.9%	0.0%	-0.8%	0.4%
India	0.7%	-0.10	-7.5%	-8.7%	-8.7%	0.0%	-0.8%	0.4%
Indonesia	-0.2%	-0.10	1.9%	0.7%	0.7%	0.0%	-0.8%	0.4%
Italy	0.8%	-0.10	-8.6%	-9.8%	-9.8%	0.0%	-0.8%	0.4%
Japan	-1.1%	-0.10	11.2%	9.9%	18.9%	9.0%	-0.8%	0.4%
Korea	-1.4%	-0.10	14.7%	13.5%	13.5%	0.0%	-0.8%	0.4%
Malaysia	-0.6%	-0.10	5.8%	4.5%	4.5%	0.0%	-0.8%	0.4%
Mexico	-0.1%	-0.10	1.0%	-0.2%	-0.2%	0.0%	-0.8%	0.4%
Netherlands	1.2%	-0.10	-12.9%	-14.1%	-14.1%	0.0%	-0.8%	0.4%
Poland	0.8%	-0.10	-8.7%	-10.0%	-10.0%	0.0%	-0.8%	0.4%
Russia	0.5%	-0.10	-5.7%	-6.9%	-6.9%	0.0%	-0.8%	0.4%
South Africa	0.4%	-0.10	-3.7%	-4.9%	-4.9%	0.0%	-0.8%	0.4%
Spain	-0.4%	-0.10	4.2%	3.0%	2.0%	-1.0%	-0.8%	0.4%
Sweden	-0.6%	-0.10	6.5%	5.3%	5.3%	0.0%	-0.8%	0.4%
Switzerland	-1.9%	-0.10	19.5%	18.3%	18.3%	0.0%	-0.8%	0.4%
Thailand	-1.1%	-0.10	11.0%	9.8%	9.8%	0.0%	-0.8%	0.4%
Türkiye	0.5%	-0.10	-4.8%	-6.0%	-6.0%	0.0%	-0.8%	0.4%
United Kingdom	0.7%	-0.10	-7.2%	-8.4%	-8.4%	0.0%	-0.8%	0.4%
United States	-0.3%	-0.10	2.7%	1.5%	1.5%	0.0%	-0.8%	0.4%
Euro Area (agg)	-0.1%	-0.10	1.5%	0.3%	0.0%	-0.3%	-0.8%	0.4%

1/ (P-P_wo) - (P*-P*_wo).

Table 7. Estimated Contribution to Current Account of Output Gap and TOT Gap in 2021

	Relative output gap coefficient =			**-0.30**	ToT Gap * Openness Coefficient =			**0.29**	REER log-change (lagged) Coefficient =	**-0.01**	Contribution Sum
	Contribution	Data			Contribution	Data			Contribution	Data	
	rel. ygap	rel. ygap	ygap	ygap_wo	tgap*open	tgap*open	tgap	open2y	L.REER log chg	L.REER log chg	
Argentina	0.7%	-2.4%	-3.5%	-1.1%	0.2%	0.7%	4.6%	16.2%	0.0%	2.3%	0.9%
Australia	-0.1%	0.3%	-0.8%	-1.1%	1.9%	6.5%	30.7%	21.1%	0.0%	-0.8%	1.8%
Belgium	-0.2%	0.6%	-0.5%	-1.1%	-0.2%	-0.7%	-0.9%	85.8%	0.0%	1.4%	-0.4%
Brazil	0.0%	0.0%	-1.2%	-1.1%	0.7%	2.6%	13.5%	19.1%	0.3%	-23.1%	1.1%
Canada	0.1%	-0.4%	-1.5%	-1.1%	0.3%	1.1%	3.5%	30.7%	0.0%	-1.1%	0.4%
China	0.1%	-0.3%	-1.5%	-1.1%	-0.5%	-1.7%	-9.0%	18.7%	0.0%	2.0%	-0.4%
France	0.2%	-0.8%	-1.9%	-1.1%	-0.1%	-0.4%	-1.2%	31.8%	0.0%	1.0%	0.1%
Germany	0.1%	-0.4%	-1.6%	-1.1%	-0.3%	-0.9%	-2.0%	44.8%	0.0%	1.3%	-0.1%
India	0.8%	-2.6%	-3.7%	-1.1%	-0.3%	-1.2%	-5.2%	22.6%	0.0%	0.3%	0.4%
Indonesia	1.0%	-3.4%	-4.6%	-1.1%	0.7%	2.6%	13.1%	19.6%	0.0%	-1.3%	1.8%
Italy	0.6%	-2.1%	-3.3%	-1.1%	-0.4%	-1.2%	-3.9%	31.6%	0.0%	0.5%	0.3%
Japan	0.4%	-1.3%	-2.5%	-1.1%	-0.4%	-1.5%	-7.7%	18.8%	0.0%	0.9%	0.0%
Korea	0.0%	0.0%	-1.1%	-1.1%	-0.8%	-2.6%	-6.4%	40.6%	0.0%	-1.9%	-0.7%
Malaysia	0.8%	-2.7%	-3.8%	-1.1%	0.4%	1.2%	1.9%	65.3%	0.1%	-3.7%	1.2%
Mexico	1.2%	-4.0%	-5.1%	-1.1%	-0.2%	-0.7%	-1.6%	41.1%	0.1%	-7.9%	1.1%
Netherlands	0.0%	0.1%	-1.1%	-1.1%	-0.1%	-0.3%	-0.4%	78.1%	0.0%	1.9%	-0.2%
Poland	-0.2%	0.8%	-0.3%	-1.1%	0.0%	0.0%	0.0%	58.4%	0.0%	0.7%	-0.3%
Russia	-0.5%	1.6%	0.5%	-1.1%	0.2%	0.6%	2.3%	26.1%	0.1%	-7.7%	-0.2%
South Africa	1.4%	-4.7%	-5.8%	-1.1%	0.8%	2.7%	9.5%	27.9%	0.1%	-9.7%	2.3%
Spain	1.2%	-4.0%	-5.2%	-1.1%	-0.2%	-0.6%	-1.8%	34.2%	0.0%	0.5%	1.0%
Sweden	0.0%	-0.2%	-1.3%	-1.1%	0.2%	0.7%	1.5%	44.4%	0.0%	2.4%	0.2%
Switzerland	-0.2%	0.5%	-0.6%	-1.1%	-0.4%	-1.2%	-1.9%	63.3%	-0.1%	3.7%	-0.6%
Thailand	0.9%	-3.0%	-4.1%	-1.1%	-0.3%	-1.2%	-2.1%	57.4%	0.0%	-2.7%	0.6%
Türkiye	-0.8%	2.8%	1.7%	-1.1%	-0.4%	-1.4%	-3.8%	35.2%	0.2%	-10.6%	-1.1%
United Kingdom	-0.3%	1.1%	-0.1%	-1.1%	-0.2%	-0.8%	-2.9%	27.6%	0.0%	0.2%	-0.6%
United States	-0.5%	1.7%	0.5%	-1.1%	0.1%	0.3%	2.4%	12.9%	0.0%	1.3%	-0.4%
Euro Area (agg)	0.3%	-1.0%	-2.2%	-1.1%	-0.2%	-0.7%	-1.6%	45.9%	0.0%	1.0%	0.1%

Table 8. EBA Analysis of the CA: Coefficients

	(1) Previous Model	(2) Refined Model
Temporary and Cyclical Factors		
Output gap	-0.356***	-0.297***
Commodity terms of trade, interacted with trade openness	0.161***	0.291***
REER annual log-change (lagged)		-0.015***
Macroeconomic Fundamentals		
Net foreign asset (NFA) position	0.023***	0.036***
NFA, interacted with high debt dummy	-0.006	
Output per worker	0.023	0.034***
Expected GDP growth	-0.302***	-0.296***
Reserve currency status (RCS)	-0.030***	
Structural Fundamentals		
Old-age dependency ratio (OAD)	-0.069	-0.096**
Population growth	-0.692*	-0.797**
Share of prime-aged savers	0.138**	0.124**
Life expectancy	-0.005***	-0.004***
Life expectancy, interacted with OAD	0.013***	0.013***
Institutional quality	-0.047**	-0.046**
Oil and gas reserves	0.310***	0.304***
Policy Variables		
Fiscal policy	0.329***	0.307***
Health spending	-0.399***	-0.298**
FXI, interacted with capital controls	0.754***	0.631***
Credit gap	-0.104***	-0.096***
Output per worker, interacted with capital openness	0.041*	
Global risk aversion, interacted with capital openness	0.020	
Global risk aversion, interacted with capital openness and RCS	0.002	
Observations	1,367	1,480
R-squared	0.550	0.525
Root MSE	0.031	0.032
Number of economies	49	52

Note: *Significant at 10 percent; **significant at 5 percent; ***significant at 1 percent based on Driscoll-Kraay standard errors (not shown).

SECTION II—REER REGRESSION-BASED ANALYSIS: INDEX REER

This section contains results from the EBA analysis of 2021 (year average) REER index values.

The summary table (Table 9) identifies a Total (Index) REER Gap as the sum of two parts: a gap that arises from the estimated contributions of policy gaps, and a gap that is the regression residual. As with the CA gaps, the REER gap estimates are adjusted for multilateral consistency.

Table 10 breaks down the policy gap contributions into the four policies covered by EBA's REER regression-based analysis (health expenditure, reserves accumulation interacted with capital controls, private credit, and the real short term interest rate interacted with capital openness). The contributions of each policy gap are calculated analogously to the procedure used for the CA analysis, and as with the CA tables, the reported estimates show both the total contribution and the subcomponent that is "domestic" for each policy gap.

Finally, Table 11 shows the estimated coefficients of the Index REER model.

Table 9. EBA Regression Analysis of the 2021 REER using the REER-Index Model

| | Total REER Gap[a] | Net Contributions of Policy Gaps | | | | | Residual[a] | Memo: Dec'21 REER, % dev. from 2020 avg. REER (GDS) |
		Sum	Health Exp.	Reserves	Private Credit	Real Interest Rate		
Argentina	7.6%	-0.5%	-0.1%	-0.3%	-0.1%	-0.1%	8.2%	16.1%
Australia	-2.3%	2.1%	0.4%	0.3%	-0.2%	1.6%	-4.4%	3.3%
Belgium	12.0%	2.1%	-0.3%	0.1%	0.3%	2.0%	10.0%	0.0%
Brazil	-36.4%	0.1%	-1.3%	0.9%	0.6%	-0.1%	-36.5%	-3.9%
Canada	6.7%	4.9%	6.0%	0.2%	0.1%	-1.4%	1.8%	3.2%
China	10.5%	-2.1%	-0.8%	-1.1%	-1.2%	1.0%	12.7%	5.6%
France	-2.1%	2.7%	0.4%	0.4%	-0.1%	2.1%	-4.8%	-2.6%
Germany	7.7%	4.7%	1.6%	0.1%	1.1%	1.9%	3.0%	-0.5%
India	10.1%	-0.5%	-0.8%	0.2%	-0.9%	1.0%	10.6%	0.5%
Indonesia	1.9%	-0.6%	-2.8%	1.1%	0.0%	1.1%	2.5%	-0.1%
Italy	8.6%	0.5%	-0.8%	0.4%	-1.1%	1.9%	8.0%	-1.3%
Japan	-20.1%	2.7%	0.0%	0.5%	1.0%	1.2%	-22.8%	-11.9%
Korea	-0.8%	1.7%	-1.3%	0.6%	1.4%	1.0%	-2.5%	-1.9%
Malaysia	-22.4%	-4.5%	-4.1%	-2.1%	0.4%	1.4%	-18.0%	-2.2%
Mexico	-9.1%	-1.9%	-1.0%	-0.3%	-0.1%	-0.4%	-7.3%	3.6%
Netherlands	21.9%	1.0%	0.1%	0.4%	-1.5%	1.9%	21.0%	0.5%
Poland	-1.0%	-2.6%	-2.5%	-1.7%	-1.0%	2.7%	1.5%	-0.3%
Russia	-11.2%	-3.3%	-2.3%	-2.3%	-0.7%	1.9%	-7.9%	2.8%
South Africa	1.2%	2.6%	0.2%	0.9%	-0.5%	2.0%	-1.4%	4.7%
Spain	8.8%	1.8%	-0.9%	0.1%	0.4%	2.2%	7.0%	1.4%
Sweden	-11.1%	2.5%	-0.3%	0.2%	0.6%	2.0%	-13.6%	0.4%
Switzerland	10.5%	2.3%	-0.2%	-1.8%	1.8%	2.6%	8.2%	-1.6%
Thailand	6.0%	2.7%	-0.6%	1.2%	0.9%	1.3%	3.2%	-8.6%
Türkiye	-41.1%	-1.7%	2.1%	-0.5%	-0.6%	-2.8%	-39.4%	-29.6%
United Kingdom	-7.5%	3.7%	4.0%	0.3%	-0.9%	0.3%	-11.2%	3.8%
United States	1.6%	-0.7%	-0.9%	0.3%	0.1%	-0.2%	2.3%	1.7%
Euro Area	6.8%	2.5%	0.2%	0.2%	0.1%	2.0%	4.2%	-1.3%

[a]For multilateral consistency, adjusted by the weighted average of the 2021 regression residuals (subtracting -4.8%).

Table 10. Estimated Policy Gap Contributions in the 2021 REER-Index Model

	All (sum)		Health Exp.		Δ in Reserves		Private Credit		Interest Rate	
	Total	Dom.	Total	Dom.	Total	Dom.	Total	Dom.	Total	Dom.
Argentina	-0.5%	-2.4%	-0.1%	0.0%	-0.3%	-0.6%	-0.1%	0.0%	-0.1%	-1.8%
Australia	2.1%	0.3%	0.4%	0.8%	0.3%	-0.2%	-0.2%	-0.2%	1.6%	0.0%
Belgium	2.1%	0.4%	-0.3%	0.6%	0.1%	-0.4%	0.3%	0.2%	2.0%	-0.1%
Brazil	0.1%	-1.7%	-1.3%	-1.0%	0.9%	0.4%	0.6%	0.6%	-0.1%	-1.7%
Canada	4.9%	3.1%	6.0%	6.1%	0.2%	-0.2%	0.1%	0.1%	-1.4%	-2.9%
China	-2.1%	-3.4%	-0.8%	-0.6%	-1.1%	-1.5%	-1.2%	-0.9%	1.0%	-0.5%
France	2.7%	0.9%	0.4%	1.1%	0.4%	-0.1%	-0.1%	-0.1%	2.1%	0.0%
Germany	4.7%	2.4%	1.6%	2.1%	0.1%	-0.4%	1.1%	0.9%	1.9%	-0.1%
India	-0.5%	-2.3%	-0.8%	-0.5%	0.2%	-0.3%	-0.9%	-0.9%	1.0%	-0.6%
Indonesia	-0.6%	-2.3%	-2.8%	-2.6%	1.1%	0.5%	0.0%	0.1%	1.1%	-0.2%
Italy	0.5%	-1.1%	-0.8%	0.0%	0.4%	-0.1%	-1.1%	-1.0%	1.9%	-0.1%
Japan	2.7%	0.8%	0.0%	0.0%	0.5%	-0.2%	1.0%	1.0%	1.2%	0.0%
Korea	1.7%	0.0%	-1.3%	-1.2%	0.6%	-0.1%	1.4%	1.3%	1.0%	0.0%
Malaysia	-4.5%	-5.9%	-4.1%	-4.0%	-2.1%	-2.6%	0.4%	0.5%	1.4%	0.1%
Mexico	-1.9%	-3.4%	-1.0%	-0.7%	-0.3%	-0.7%	-0.1%	0.0%	-0.4%	-2.0%
Netherlands	1.0%	-0.6%	0.1%	1.0%	0.4%	-0.1%	-1.5%	-1.4%	1.9%	-0.1%
Poland	-2.6%	-4.3%	-2.5%	-1.6%	-1.7%	-2.2%	-1.0%	-1.0%	2.7%	0.4%
Russia	-3.3%	-5.1%	-2.3%	-1.7%	-2.3%	-2.8%	-0.7%	-0.7%	1.9%	0.1%
South Africa	2.6%	1.0%	0.2%	0.8%	0.9%	0.5%	-0.5%	-0.5%	2.0%	0.3%
Spain	1.8%	-0.1%	-0.9%	0.0%	0.1%	-0.3%	0.4%	0.3%	2.2%	-0.1%
Sweden	2.5%	0.8%	-0.3%	0.6%	0.2%	-0.3%	0.6%	0.5%	2.0%	0.0%
Switzerland	2.3%	0.6%	-0.2%	0.6%	-1.8%	-2.2%	1.8%	1.8%	2.6%	0.4%
Thailand	2.7%	1.1%	-0.6%	-0.6%	1.2%	0.6%	0.9%	1.0%	1.3%	0.1%
Türkiye	-1.7%	-3.8%	2.1%	2.7%	-0.5%	-1.0%	-0.6%	-0.6%	-2.8%	-4.9%
United Kingdom	3.7%	1.6%	4.0%	4.4%	0.3%	-0.2%	-0.9%	-0.8%	0.3%	-1.8%
United States	-0.7%	-1.8%	-0.9%	0.0%	0.3%	-0.2%	0.1%	0.2%	-0.2%	-1.7%

Table 11. EBA Analysis of the Index REER: Coefficients

	(1) Previous Model	(2) Refined Model
Cyclical Factors		
Output Gap	0.392**	0.516**
Commodity terms of trade (log, index)	0.184***	0.160***
Macroeconomic Fundamentals		
Net foreign asset (NFA) position	-0.109***	-0.105***
Output per worker	0.217***	0.241***
Expected GDP growth	2.012***	3.112***
Financial Home bias (lagged)	0.193***	0.258***
Reserve currency status (RCS)	-0.068	
Structural Fundamentals		
Population growth	2.003	
Trade Openness	-0.208***	-0.153
Share of administered prices in CPI	-1.713***	
Policy Variables		
Real interest rates, interacted with capital openess	0.697***	0.875***
Health spending	2.040***	1.886**
Credit gap	0.093***	0.099**
Global risk aversion, interacted with capital openne	-0.164***	
Global risk aversion, interacted with capital openne	0.483**	
FXI, interacted with capital controls	-2.479**	-1.901*
Observations	1,004	1,105
Adjusted R-squared	0.553	0.557
RMSE	0.086	0.090
Cragg-Donald Wald F statistic		36.509
Number of Economies	40	41

Note: *Significant at 10 percent; **significant at 5 percent; ***significant at 1 percent based on heteroskedastic and autocorrelation-consistent standard errors (not shown).

SECTION III— REER REGRESSION-BASED ANALYSIS: LEVEL REER

This section contains results from the EBA analysis of 2021 (year average) levels of the REER. The key difference with respect to the results presented in Section II is that the regression analysis uses a measure of the level of the economy's real exchange rate as the dependent variable (rather than a REER index, which contains no information about the relative prices across economies). In addition, the Level REER regression only identifies the contributions of three policy variables to the REER gap (health expenditure, reserves accumulation interacted with capital controls, and the real short term interest rate interacted with capital openness).

The structure and presentation of the tables are similar to that of Section II.

Table 12. EBA Regression Analysis of the 2021 REER using the REER-Level Model

	Total REER Gap[a]	Net Contributions of Policy Gaps				Residual[a]
		Sum	Health Exp.	Reserves	Real Interest Rate	
Argentina	-8.7%	-1.6%	-0.1%	-1.2%	-0.2%	-7.0%
Australia	24.6%	4.8%	0.7%	1.3%	2.8%	19.7%
Belgium	26.1%	3.3%	-0.5%	0.3%	3.5%	22.7%
Brazil	-19.6%	1.8%	-2.5%	4.5%	-0.1%	-21.4%
Canada	-7.2%	10.2%	11.4%	1.1%	-2.3%	-17.4%
China	10.5%	-5.3%	-1.6%	-5.4%	1.7%	15.7%
France	8.2%	6.1%	0.7%	1.7%	3.6%	2.1%
Germany	-7.9%	6.9%	3.0%	0.5%	3.3%	-14.7%
India	8.5%	1.0%	-1.5%	0.8%	1.7%	7.5%
Indonesia	-18.1%	1.9%	-5.2%	5.3%	1.9%	-20.0%
Italy	10.8%	4.0%	-1.5%	2.1%	3.4%	6.8%
Japan	-18.4%	4.3%	0.1%	2.2%	2.0%	-22.8%
Korea	4.2%	2.2%	-2.5%	2.9%	1.8%	2.0%
Malaysia	-29.1%	-15.7%	-7.8%	-10.3%	2.4%	-13.4%
Mexico	7.7%	-4.2%	-1.9%	-1.6%	-0.7%	11.9%
Netherlands	6.0%	5.5%	0.1%	2.0%	3.4%	0.6%
Poland	-20.2%	-8.4%	-4.7%	-8.3%	4.6%	-11.8%
Russia	-33.8%	-12.4%	-4.3%	-11.4%	3.3%	-21.4%
South Africa	15.9%	8.4%	0.3%	4.6%	3.5%	7.5%
Spain	26.4%	2.6%	-1.7%	0.5%	3.7%	23.8%
Sweden	-14.8%	3.9%	-0.6%	1.0%	3.5%	-18.7%
Switzerland	16.8%	-4.9%	-0.5%	-8.9%	4.4%	21.7%
Thailand	-2.8%	6.8%	-1.1%	5.7%	2.2%	-9.5%
Türkiye	-50.5%	-3.1%	4.0%	-2.3%	-4.8%	-47.4%
United Kingdom	5.6%	9.4%	7.6%	1.4%	0.5%	-3.9%
United States	8.9%	-0.5%	-1.7%	1.6%	-0.4%	9.4%
Euro Area	7.1%	5.0%	0.4%	1.2%	3.4%	2.0%

[a] For multilateral consistency, adjusted by the weighted average of the 2021 regression residuals (subtracting -9.4%).

Table 13. Estimated Policy Gap Contributions in the 2021 REER-Level Model

	All (sum)		Health Exp.		Δ in Reserves		Interest Rate	
	Total	Dom.	Total	Dom.	Total	Dom.	Total	Dom.
Argentina	-1.6%	-6.1%	-0.1%	0.0%	-1.2%	-3.0%	-0.2%	-3.1%
Australia	4.8%	0.3%	0.7%	1.4%	1.3%	-1.1%	2.8%	-0.1%
Belgium	3.3%	-0.8%	-0.5%	1.2%	0.3%	-1.8%	3.5%	-0.1%
Brazil	1.8%	-2.8%	-2.5%	-1.9%	4.5%	2.0%	-0.1%	-3.0%
Canada	10.2%	5.7%	11.4%	11.5%	1.1%	-0.8%	-2.3%	-5.0%
China	-5.3%	-9.1%	-1.6%	-1.1%	-5.4%	-7.1%	1.7%	-0.8%
France	6.1%	1.5%	0.7%	2.1%	1.7%	-0.6%	3.6%	-0.1%
Germany	6.9%	1.7%	3.0%	3.9%	0.5%	-2.1%	3.3%	-0.1%
India	1.0%	-3.6%	-1.5%	-0.9%	0.8%	-1.7%	1.7%	-1.0%
Indonesia	1.9%	-2.8%	-5.2%	-5.0%	5.3%	2.7%	1.9%	-0.4%
Italy	4.0%	-0.5%	-1.5%	0.0%	2.1%	-0.4%	3.4%	-0.1%
Japan	4.3%	-0.8%	0.1%	0.0%	2.2%	-0.8%	2.0%	0.0%
Korea	2.2%	-2.7%	-2.5%	-2.3%	2.9%	-0.3%	1.8%	0.0%
Malaysia	-15.7%	-19.8%	-7.8%	-7.5%	-10.3%	-12.5%	2.4%	0.2%
Mexico	-4.2%	-8.0%	-1.9%	-1.4%	-1.6%	-3.2%	-0.7%	-3.4%
Netherlands	5.5%	1.3%	0.1%	1.8%	2.0%	-0.4%	3.4%	-0.1%
Poland	-8.4%	-13.0%	-4.7%	-2.9%	-8.3%	-10.7%	4.6%	0.7%
Russia	-12.4%	-17.0%	-4.3%	-3.2%	-11.4%	-13.9%	3.3%	0.1%
South Africa	8.4%	4.2%	0.3%	1.4%	4.6%	2.3%	3.5%	0.5%
Spain	2.6%	-1.7%	-1.7%	0.0%	0.5%	-1.5%	3.7%	-0.1%
Sweden	3.9%	-0.3%	-0.6%	1.1%	1.0%	-1.3%	3.5%	-0.1%
Switzerland	-4.9%	-9.1%	-0.5%	1.1%	-8.9%	-10.9%	4.4%	0.7%
Thailand	6.8%	1.9%	-1.1%	-1.1%	5.7%	2.8%	2.2%	0.2%
Türkiye	-3.1%	-8.2%	4.0%	5.1%	-2.3%	-4.8%	-4.8%	-8.5%
United Kingdom	9.4%	4.4%	7.6%	8.3%	1.4%	-0.8%	0.5%	-3.1%
United States	-0.5%	-4.0%	-1.7%	0.0%	1.6%	-1.1%	-0.4%	-2.9%

Table 14. EBA Analysis of the Level REER: Coefficients

	(1) Previous Model	(2) Refined Model
Cyclical Factors		
Commodity terms of trade, interacted with trade o	0.064***	0.054
Macroeconomic Fundamentals		
Net foreign asset (NFA) position	0.056***	0.112***
Output per worker	0.171***	0.247***
Expected GDP growth	1.961**	3.308***
Reserve currency status (RCS)	-0.357***	-0.174**
Capital stock per employed person (lagged)	0.110***	
Traded/Non Traded productivity (log, lagged)	0.184***	0.180***
Structural Fundamentals		
Old-age dependency ratio (OAD)	0.362*	0.894***
Population growth	2.570	9.081***
Institutional quality	0.653***	0.587***
Trade Openness	-0.336***	-0.400***
VAT revenue, percent of GDP	0.662	1.209**
Share of administered prices in CPI	-2.809***	
Policy Variables		
Real interest rates, interacted with capital openess	0.585*	1.511***
FXI, interacted with capital controls	-3.561*	-9.290***
Health spending	4.196***	3.580***
Credit gap	0.032	
Global risk aversion, interacted with capital openne	-0.150	
Global risk aversion, interacted with capital openne	0.829	
Observations	990	1,078
Adjusted R-squared	0.893	0.801
RMSE	0.146	0.194
Cragg-Donald Wald F statistic	66.224	40.831
Number of Economies	39	40

Note: *Significant at 10 percent; **significant at 5 percent; ***significant at 1 percent based on heteroskedastic and autocorrelation-consistent standard errors (not shown).

SECTION IV— EXTERNAL SUSTAINABILITY ANALYSIS

The table on the following page presents the results from the application of the External Sustainability (ES) approach, which was originally developed based on the CGER methodology.

The ES approach calculates the CA/GDP adjustment consistent with stabilizing the Net Foreign Asset position (NFA as percent of GDP) at a benchmark level set at the 2021 observed NFA/GDP ratio (first column). More precisely, this approach calculates the CA/GDP level that would stabilize the NFA/GDP at the benchmark level and compares it to the 2021 cyclically-adjusted CA/GDP. The resulting CA gap, given by the difference between the two values, is shown in the fifth column. The sixth column shows the estimated medium-term, country-specific semi-elasticities between the CA and the REER, and the last column shows the corresponding REER gap, calculated using these elasticities.

Table 15. External Sustainability Approach: 2021 NFA-stabilizing Current Accounts[1]

	NFA/GDP	Actual CA/GDP[2]	Cyclically Adjusted CA/GDP	CA/GDP Stabilizing NFA at Level	CA/GDP Gap	Assumed CA/REER Elasticity[3]	Corresponding REER Gap[3]
	(A)	(B)	(C)	(D)	(C) - (D)	(F)	(G)
Argentina	24.9%	1.4%	0.5%	1.3%	**-0.8%**	0.13	6.1%
Australia	-35.4%	3.5%	1.7%	-2.0%	**3.7%**	0.18	-20.8%
Belgium	41.6%	-0.4%	0.0%	1.8%	**-1.8%**	0.68	2.6%
Brazil	-29.8%	-1.7%	-2.8%	-1.5%	**-1.3%**	0.12	11.2%
Canada	67.5%	0.0%	-0.4%	3.2%	**-3.6%**	0.25	14.1%
China	11.2%	1.8%	2.2%	0.8%	**1.4%**	0.14	-9.7%
France	-28.3%	0.4%	0.2%	-1.3%	**1.6%**	0.26	-6.0%
Germany	65.3%	7.4%	7.6%	2.9%	**4.7%**	0.34	-13.6%
India	-11.1%	-1.2%	-1.6%	-1.0%	**-0.6%**	0.16	3.8%
Indonesia	-23.5%	0.3%	-1.5%	-1.9%	**0.4%**	0.14	-2.7%
Italy	7.1%	2.4%	2.2%	0.3%	**1.9%**	0.26	-7.3%
Japan	73.3%	2.9%	2.9%	2.7%	**0.3%**	0.15	-1.7%
Korea	36.4%	4.9%	5.6%	2.0%	**3.6%**	0.31	-11.9%
Malaysia	9.2%	3.8%	2.6%	0.7%	**1.9%**	0.46	-4.2%
Mexico	-42.0%	-0.4%	-1.5%	-2.2%	**0.7%**	0.33	-2.1%
Netherlands	89.6%	9.0%	9.2%	4.1%	**5.1%**	0.60	-8.4%
Poland	-37.9%	-0.6%	-0.3%	-2.3%	**2.0%**	0.41	-4.9%
Russia	27.2%	6.9%	7.1%	1.1%	**6.0%**	0.19	-30.8%
South Africa	24.8%	3.6%	1.3%	1.1%	**0.2%**	0.23	-1.0%
Spain	-66.9%	0.9%	-0.1%	-3.4%	**3.3%**	0.26	-12.5%
Sweden	16.8%	5.5%	5.3%	0.9%	**4.5%**	0.34	-13.1%
Switzerland	89.1%	9.3%	9.9%	4.3%	**5.5%**	0.47	-11.7%
Thailand	9.7%	-2.2%	-2.8%	0.6%	**-3.4%**	0.44	7.6%
Türkiye	-28.4%	-1.7%	-0.6%	-1.8%	**1.2%**	0.26	-4.5%
United Kingdom	-32.0%	-2.6%	-2.0%	-1.6%	**-0.5%**	0.24	1.9%
United States	-78.7%	-3.6%	-3.2%	-4.0%	**0.9%**	0.12	-6.9%

[1]Based on the CGER "ES" methodology.

[2]Based on June 2022 WEO *Update*

[3]Assumed elasticity linking a change in the current account (as percent of GDP) to a change in the REER (in percent). Figures shown are those previously used in the CGER exercise, in most cases using a common elasticity assumption of -0.152 for exports and 0.645 for imports, adjusted by the size of exports and imports in GDP.