# 2013 Pilot EBA: Individual Country Estimates

## Introduction

- The tables in this package contain the estimates from the EBA analysis of current accounts and real exchange rates implemented in Spring 2013. These estimates were used as an input, together with other information and desk judgment, to the 2013 Pilot External Sector Report (Box 6 of that report explains the role of EBA estimates in external sector assessments).

- This EBA analysis is of 2012 outcomes for current accounts and year average real effective exchange rates (REERs). The external sustainability analysis refers to projections of 2018 current accounts. All analyses draws on data available to IMF staff as of Spring 2013.

- Country coverage. The tables refer to the 25 countries that are part of both the Pilot External Sector Report and the EBA analysis. For the summary results, estimates are also shown for a Euro area aggregate, which is constructed as the GDP-weighted average of the estimates for the 11 largest Euro area economies.

## Organization

The information here is organized in three sections, corresponding to distinct methodologies, with brief explanatory remarks in each:

- Section 1: Regression-based analysis of 2012 current accounts

- Section 2: Regression-based analysis of 2012 real exchange rates

- Section 3: External sustainability analysis

A final page presents charts that compare the EBA regression-based estimates (from sections 1 and 2) with the assessments of current accounts and real exchange rates contained in the 2013 Pilot External Sector Report.

## Sources of additional information on EBA

For further information on the 2013 version of the EBA methodology, including general guidance on the interpretation of its results, a comprehensive background paper is available.

A more succinct overview of the original 2012 EBA methodology is in Appendix 1 of the 2012 Pilot External Sector Report; Annex III of the 2013 Pilot External Sector Report summarizes refinements made in 2013.

# I.  Current Account Regression-based Analysis

The tables on the following pages contain results from the 2013 Pilot EBA's analysis of 2012 current account balances (CA, as percent of GDP), using information available as of Spring 2013.

The first table decomposes observed 2012 CAs into a cyclical component (related to both the business cycle and commodity price cycle) and a cyclically-adjusted component.  In turn the latter is decomposed into 3 parts:  a cyclically-adjusted "norm" level for the current account (calculated using desirable P* policy settings, see below), a gap that arises from the estimated contributions of five types of policy gaps, and a gap that is the regression residual.  Finally, the last column is the Total CA Gap, the sum of the previous two gaps.  Note that the regression residual, and its contribution to the Total Gap, requires additional interpretation, outside of the EBA methodology, as to whether the regression residual primarily reflects distortions not captured by the EBA regression (or instead reflects uncaptured fundamentals or other sources of error).

The CA numbers in the first table include small adjustments that have been applied uniformly across countries (in terms of a country's own GDP), as necessary, to ensure multilateral consistency.  Thus the cross-country sum of the CA norm levels, when measured in US$, matches the sum of the actual 2012 CA levels of all 49 EBA countries. As also required for multilateral consistency, the cross-country sums of the gap columns, and of the cyclical contributions, are zero.

The second table breaks down the policy gap contributions into the five types of policies covered by EBA's CA regression-based analysis (here again, the numbers include small adjustments for multilateral consistency).  For each policy gap contribution, one can see not only the total contribution but also the subcomponent that is "domestic" (i.e., arising from a country's own policies rather than policies elsewhere).

The subsequent tables show further detail on the derivation of the policy gap contributions, which arise from both "domestic" policy gaps and the "world" policy gap.  For example, in the table on fiscal policy, P denotes actual fiscal policy in the country in question, P* is the suggested desirable fiscal policy setting, and P-P* is the fiscal policy gap.  The abbreviation "wo" is used to denote the world average counterparts of the same concepts.  The net of these domestic and world policy gaps is in turn multiplied by the relevant regression coefficient to obtain the total contribution of policy gaps to each country's CA.  (These tables show the raw calculations, before any small adjustment for multilateral consistency is applied.)

The penultimate table of this section shows the derivation of the cyclical component of the CA, in two parts:  that due to the difference between the domestic and world business cycle (output gap), and that due to the commodity terms of trade gap (cyclical component).

As supplementary information, the final table of this section shows a translation of the EBA-estimated CA Total Gap into REER terms, using an assumed elasticity. Such translation is not part of the EBA methodology but may be of interest. Note that such translated gap estimates are subject to additional uncertainty arising from uncertainty about the relevant elasticity level. (The elasticity values shown here are indicative; they are those previously used in the CGER exercise, in most cases using a common elasticity assumption of 0.71 for exports and 0.92 for imports, adjusted by the size of exports and imports in GDP, and with an adjustment for the role of commodity trade.) Note also that closure of a current account gap generally would require a shift in saving or investment rates as well as a movement in the REER.

# EBA Regression-based Analysis of 2012 Current Accounts
## (in percent of GDP)

| | Actual 2012 Current Account (A) | Cyclical Contributions (incl. ToT) 1/ (B) | (C = A - B) Cyclically Adjusted Current Account (C) | Decomposition of Cyclically-Adjusted Current Account | | | (G = E + F) Total Gap, including Residual (G) |
|---|---|---|---|---|---|---|---|
| | | | | Current Account Norm 2/ (D) | Net Contributions of Identified Policy Gaps (E) | Regresison Residual (F) | |
| Australia | -3.7% | -0.3% | -3.4% | -1.9% | 0.0% | -1.6% | **-1.5%** |
| Belgium | -0.5% | -0.9% | 0.4% | 1.3% | -0.5% | -0.4% | **-0.9%** |
| Brazil | -2.3% | -0.5% | -1.8% | -2.6% | 0.8% | 0.0% | **0.8%** |
| Canada | -3.7% | 0.0% | -3.7% | 1.3% | -0.2% | -4.7% | **-5.0%** |
| China | 2.3% | -0.1% | 2.4% | 0.6% | 1.7% | 0.1% | **1.8%** |
| France | -2.4% | 0.3% | -2.7% | -0.2% | -0.4% | -2.1% | **-2.5%** |
| Germany | 7.0% | -1.1% | 8.1% | 1.8% | 0.8% | 5.5% | **6.3%** |
| India | -5.1% | -1.3% | -3.8% | -4.2% | 0.7% | -0.2% | **0.4%** |
| Indonesia | -2.7% | -0.5% | -2.2% | -0.8% | 1.2% | -2.6% | **-1.4%** |
| Italy | -0.5% | 0.3% | -0.9% | -0.9% | 0.8% | -0.7% | **0.1%** |
| Japan | 1.0% | -0.2% | 1.2% | 3.4% | -2.6% | 0.4% | **-2.2%** |
| Korea | 3.8% | -0.8% | 4.6% | 3.0% | 1.3% | 0.3% | **1.6%** |
| Malaysia | 6.1% | -0.2% | 6.3% | -0.5% | 1.3% | 5.4% | **6.7%** |
| Mexico | -0.8% | -0.5% | -0.3% | -1.6% | 1.3% | 0.0% | **1.3%** |
| Netherlands | 8.3% | 0.3% | 8.1% | 4.2% | -1.2% | 5.0% | **3.8%** |
| Poland | -3.5% | -0.8% | -2.7% | -1.4% | 0.2% | -1.5% | **-1.3%** |
| Russia | 4.0% | 0.3% | 3.7% | 4.5% | 1.6% | -2.4% | **-0.8%** |
| South Africa | -6.3% | -0.4% | -5.8% | -3.1% | 0.5% | -3.2% | **-2.7%** |
| Spain | -1.1% | 0.8% | -1.9% | -1.6% | -2.8% | 2.6% | **-0.3%** |
| Sweden | 7.1% | -1.0% | 8.1% | -0.1% | -0.1% | 8.3% | **8.2%** |
| Switzerland | 13.4% | -0.9% | 14.3% | 8.4% | 0.5% | 5.4% | **5.8%** |
| Thailand | 0.7% | -1.2% | 2.0% | 0.9% | 1.3% | -0.3% | **1.0%** |
| Turkey | -5.9% | -1.2% | -4.7% | -0.7% | -0.7% | -3.3% | **-4.0%** |
| United Kingdom | -3.7% | 0.3% | -4.0% | -1.7% | -0.8% | -1.5% | **-2.3%** |
| United States | -3.0% | 0.8% | -3.8% | -2.9% | -0.4% | -0.5% | **-0.9%** |
| Euro Area 3/ | 1.2% | -0.1% | 1.3% | 0.3% | -0.2% | 1.2% | **1.0%** |

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 norm level and policy gap contributions are calculated as GDP-weighted averages of values for the 11 largest Euro area economies. Actual CA is the "corrected for reporting discrepancies in intra-area transactions" and CA of the entire Euro area is about ½ % of GDP less than sum of the individual 11 countries' CA balances (for which no such correction is available).

## EBA-estimated Policy Gap Contributions to 2012 Current Accounts
### (in percent of GDP)

| | All (sum) | | Fiscal Balance | | Health Exp. | | Δ Reserves | | Private Credit | | K-Controls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | dom. | Total | dom. | Total | dom. | Total | dom. | Total | dom. | Total | dom. |
| Australia | 0.0% | -0.7% | -0.1% | -1.1% | 0.3% | 0.4% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Belgium | -0.5% | -1.3% | -0.3% | -1.3% | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Brazil | 0.8% | 0.1% | 0.7% | -0.3% | -0.1% | -0.1% | 0.1% | 0.1% | 0.1% | 0.0% | 0.2% | 0.3% |
| Canada | -0.2% | -1.0% | 0.6% | -0.4% | -0.7% | -0.6% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| China | 1.7% | 0.9% | 0.5% | -0.5% | 0.8% | 0.9% | 0.2% | 0.3% | -0.4% | -0.5% | 0.6% | 0.7% |
| France | -0.4% | -1.2% | 0.0% | -1.0% | -0.3% | -0.2% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Germany | 0.8% | 0.0% | 1.2% | 0.2% | -0.3% | -0.2% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| India | 0.7% | -0.1% | -0.2% | -1.2% | 0.1% | 0.2% | -0.1% | 0.0% | 0.1% | 0.0% | 0.8% | 0.9% |
| Indonesia | 1.2% | 0.4% | 0.9% | -0.1% | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.4% | 0.6% |
| Italy | 0.8% | 0.0% | 1.0% | 0.0% | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Japan | -2.6% | -3.4% | -2.2% | -3.2% | -0.3% | -0.2% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Korea | 1.3% | 0.5% | 0.9% | -0.1% | 0.5% | 0.6% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Malaysia | 1.3% | 0.5% | 0.6% | -0.4% | 0.7% | 0.7% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.2% |
| Mexico | 1.3% | 0.6% | 0.7% | -0.3% | 0.5% | 0.5% | 0.1% | 0.1% | 0.1% | 0.0% | 0.1% | 0.2% |
| Netherlands | -1.2% | -2.0% | 0.8% | -0.2% | -1.8% | -1.7% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Poland | 0.2% | -0.6% | 0.2% | -0.8% | 0.0% | 0.1% | 0.0% | 0.1% | 0.1% | 0.0% | -0.1% | 0.0% |
| Russia | 1.6% | 0.8% | 0.8% | -0.2% | 0.8% | 0.9% | 0.0% | 0.1% | 0.1% | 0.0% | -0.2% | 0.0% |
| South Africa | 0.5% | -0.3% | 0.5% | -0.5% | 0.1% | 0.2% | -0.1% | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% |
| Spain | -2.8% | -3.6% | -1.7% | -2.7% | -0.5% | -0.4% | 0.0% | 0.0% | -0.4% | -0.5% | -0.2% | 0.0% |
| Sweden | -0.1% | -0.9% | 0.3% | -0.7% | -0.1% | 0.0% | 0.0% | 0.0% | 0.0% | -0.1% | -0.2% | 0.0% |
| Switzerland | 0.5% | -0.3% | 0.8% | -0.2% | -0.1% | 0.0% | 0.0% | 0.0% | -0.1% | -0.2% | -0.2% | 0.0% |
| Thailand | 1.3% | 0.6% | 0.8% | -0.2% | -0.1% | 0.0% | 0.2% | 0.2% | -0.1% | -0.1% | 0.5% | 0.7% |
| Turkey | -0.7% | -1.5% | 0.5% | -0.5% | -0.8% | -0.7% | 0.0% | 0.0% | -0.2% | -0.3% | -0.2% | 0.0% |
| United Kingdom | -0.8% | -1.6% | -0.6% | -1.6% | -0.3% | -0.3% | 0.0% | 0.0% | 0.4% | 0.3% | -0.2% | 0.0% |
| United States | -0.4% | -1.2% | -0.2% | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% |
| Euro Area 1/ | -0.2% | -1.0% | 0.4% | -0.6% | -0.4% | -0.3% | 0.0% | 0.0% | 0.0% | -0.1% | -0.2% | 0.0% |

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

## Breakdown of 2012 Policy Gap Contribution : Fiscal Balance/GDP

| | Overall Contribution | coef. | Policy Gap 1/ | (P-P*) | P | P* | P_wo | P*_wo |
|---|---|---|---|---|---|---|---|---|
| Australia | -0.1% | 0.32 | -0.3% | -3.4% | -2.9% | 0.5% | -4.1% | -1.1% |
| Belgium | -0.3% | 0.32 | -0.9% | -4.0% | -3.8% | 0.1% | -4.1% | -1.1% |
| Brazil | 0.7% | 0.32 | 2.1% | -1.0% | -2.7% | -1.7% | -4.1% | -1.1% |
| Canada | 0.6% | 0.32 | 1.8% | -1.3% | -2.8% | -1.5% | -4.1% | -1.1% |
| China | 0.5% | 0.32 | 1.4% | -1.7% | -0.9% | 0.7% | -4.1% | -1.1% |
| France | 0.0% | 0.32 | -0.1% | -3.2% | -3.2% | 0.0% | -4.1% | -1.1% |
| Germany | 1.2% | 0.32 | 3.7% | 0.6% | 0.1% | -0.5% | -4.1% | -1.1% |
| India | -0.2% | 0.32 | -0.7% | -3.8% | -8.8% | -5.0% | -4.1% | -1.1% |
| Indonesia | 0.9% | 0.32 | 2.8% | -0.3% | -1.4% | -1.1% | -4.1% | -1.1% |
| Italy | 1.0% | 0.32 | 3.0% | 0.0% | -1.2% | -1.2% | -4.1% | -1.1% |
| Japan | -2.2% | 0.32 | -6.9% | -10.0% | -9.5% | 0.5% | -4.1% | -1.1% |
| Korea | 0.9% | 0.32 | 2.7% | -0.4% | 2.3% | 2.7% | -4.1% | -1.1% |
| Malaysia | 0.6% | 0.32 | 1.8% | -1.2% | -4.2% | -3.0% | -4.1% | -1.1% |
| Mexico | 0.7% | 0.32 | 2.1% | -1.0% | -3.7% | -2.7% | -4.1% | -1.1% |
| Netherlands | 0.8% | 0.32 | 2.3% | -0.7% | -2.7% | -2.0% | -4.1% | -1.1% |
| Poland | 0.2% | 0.32 | 0.7% | -2.4% | -3.4% | -1.0% | -4.1% | -1.1% |
| Russia | 0.8% | 0.32 | 2.6% | -0.5% | 0.5% | 1.0% | -4.1% | -1.1% |
| South Africa | 0.5% | 0.32 | 1.5% | -1.6% | -4.6% | -3.0% | -4.1% | -1.1% |
| Spain | -1.7% | 0.32 | -5.3% | -8.3% | -8.3% | 0.0% | -4.1% | -1.1% |
| Sweden | 0.3% | 0.32 | 0.8% | -2.2% | -0.4% | 1.8% | -4.1% | -1.1% |
| Switzerland | 0.8% | 0.32 | 2.5% | -0.6% | 0.3% | 0.9% | -4.1% | -1.1% |
| Thailand | 0.8% | 0.32 | 2.3% | -0.7% | -1.4% | -0.7% | -4.1% | -1.1% |
| Turkey | 0.5% | 0.32 | 1.5% | -1.6% | -1.6% | 0.0% | -4.1% | -1.1% |
| United Kingdom | -0.6% | 0.32 | -1.8% | -4.9% | -5.6% | -0.7% | -4.1% | -1.1% |
| United States | -0.2% | 0.32 | -0.6% | -3.7% | -6.7% | -3.1% | -4.1% | -1.1% |

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

**Breakdown of 2012 Policy Gap Contribution : Public Expenditure on Health/GDP 1/**

| | Overall Contribution | coef. | Policy Gap 2/ | (P-P*) | P | P* | P_wo | P*_wo | P* bench-mark from regression 3/ |
|---|---|---|---|---|---|---|---|---|---|
| Australia | 0.3% | -0.55 | -0.5% | -0.6% | 6.3% | 6.9% | 6.2% | 6.3% | 6.9% |
| Belgium | -0.1% | -0.55 | 0.1% | 0.0% | 8.1% | 8.1% | 6.2% | 6.3% | 6.9% |
| Brazil | -0.1% | -0.55 | 0.2% | 0.1% | 4.0% | 3.9% | 6.2% | 6.3% | 3.9% |
| Canada | -0.7% | -0.55 | 1.2% | 1.1% | 7.8% | 6.7% | 6.2% | 6.3% | 6.7% |
| China | 0.9% | -0.55 | -1.5% | -1.6% | 1.2% | 2.8% | 6.2% | 6.3% | 2.8% |
| France | -0.2% | -0.55 | 0.4% | 0.3% | 7.8% | 7.5% | 6.2% | 6.3% | 7.5% |
| Germany | -0.3% | -0.55 | 0.5% | 0.4% | 8.7% | 8.3% | 6.2% | 6.3% | 8.3% |
| India | 0.2% | -0.55 | -0.3% | -0.4% | 0.9% | 1.3% | 6.2% | 6.3% | 0.7% |
| Indonesia | -0.1% | -0.55 | 0.1% | 0.1% | 1.3% | 1.3% | 6.2% | 6.3% | 1.3% |
| Italy | -0.1% | -0.55 | 0.1% | 0.0% | 7.2% | 7.2% | 6.2% | 6.3% | 7.2% |
| Japan | -0.2% | -0.55 | 0.4% | 0.3% | 8.1% | 7.7% | 6.2% | 6.3% | 7.7% |
| Korea | 0.5% | -0.55 | -1.0% | -1.1% | 4.1% | 5.2% | 6.2% | 6.3% | 5.2% |
| Malaysia | 0.7% | -0.55 | -1.2% | -1.3% | 2.0% | 3.4% | 6.2% | 6.3% | 3.4% |
| Mexico | 0.5% | -0.55 | -0.9% | -1.0% | 2.9% | 3.9% | 6.2% | 6.3% | 3.9% |
| Netherlands | -1.8% | -0.55 | 3.2% | 3.1% | 10.3% | 7.1% | 6.2% | 6.3% | 7.1% |
| Poland | 0.0% | -0.55 | -0.1% | -0.2% | 5.0% | 5.2% | 6.2% | 6.3% | 5.2% |
| Russia | 0.9% | -0.55 | -1.6% | -1.7% | 3.5% | 5.2% | 6.2% | 6.3% | 5.2% |
| South Africa | 0.1% | -0.55 | -0.3% | -0.4% | 4.1% | 4.4% | 6.2% | 6.3% | 4.4% |
| Spain | -0.5% | -0.55 | 0.9% | 0.8% | 7.1% | 6.3% | 6.2% | 6.3% | 6.3% |
| Sweden | -0.1% | -0.55 | 0.2% | 0.1% | 7.8% | 7.7% | 6.2% | 6.3% | 7.7% |
| Switzerland | 0.0% | -0.55 | 0.1% | 0.0% | 7.4% | 7.4% | 6.2% | 6.3% | 7.4% |
| Thailand | -0.1% | -0.55 | 0.1% | 0.0% | 3.3% | 3.3% | 6.2% | 6.3% | 3.2% |
| Turkey | -0.8% | -0.55 | 1.4% | 1.3% | 5.1% | 3.7% | 6.2% | 6.3% | 3.7% |
| United Kingdom | -0.3% | -0.55 | 0.6% | 0.5% | 8.1% | 7.5% | 6.2% | 6.3% | 7.5% |
| United States | 0.0% | -0.55 | 0.1% | 0.0% | 8.5% | 8.6% | 6.2% | 6.3% | 7.1% |

1/ This variable is lagged in estimation, thus 2011 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 depende
   and income inequality (Gini coefficient). For reference; desk value may differ.

## Breakdown of 2012 Policy Gap Contribution : (Change in FX Reserves)/GDP 1/

| | Overall Contri-bution | coef. | Policy Gap 2/ | (P_KC)-(P_KC)* | (P_KC) | (P_KC)* | (P_KC) _wo | (P_KC)* _wo | Components | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | P | P* | KC | KC* |
| Australia | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.13 | 0.13 |
| Belgium | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.8% | 0.8% | 0.00 | 0.00 |
| Brazil | 0.1% | 0.35 | 0.2% | 0.3% | 0.3% | 0.0% | 0.1% | 0.0% | 0.9% | 0.0% | 0.38 | 0.17 |
| Canada | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.1% | -0.1% | 0.00 | 0.00 |
| China | 0.2% | 0.35 | 0.7% | 0.8% | 0.8% | 0.0% | 0.1% | 0.0% | 1.6% | 0.0% | 0.50 | 0.17 |
| France | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.2% | 0.2% | 0.00 | 0.00 |
| Germany | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 |
| India | -0.1% | 0.35 | -0.2% | -0.1% | -0.1% | 0.0% | 0.1% | 0.0% | -0.1% | 0.0% | 0.50 | 0.17 |
| Indonesia | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.38 | 0.17 |
| Italy | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.1% | 0.1% | 0.00 | 0.00 |
| Japan | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.6% | -0.6% | 0.00 | 0.00 |
| Korea | 0.0% | 0.35 | 0.0% | 0.1% | 0.1% | 0.0% | 0.1% | 0.0% | 1.0% | 0.0% | 0.13 | 0.13 |
| Malaysia | 0.0% | 0.35 | 0.0% | 0.1% | 0.2% | 0.1% | 0.1% | 0.0% | 0.4% | 0.4% | 0.38 | 0.17 |
| Mexico | 0.1% | 0.35 | 0.2% | 0.3% | 0.6% | 0.3% | 0.1% | 0.0% | 1.5% | 1.5% | 0.38 | 0.17 |
| Netherlands | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 |
| Poland | 0.0% | 0.35 | 0.1% | 0.2% | 0.6% | 0.4% | 0.1% | 0.0% | 2.3% | 2.3% | 0.25 | 0.17 |
| Russia | 0.0% | 0.35 | 0.1% | 0.2% | 0.2% | 0.0% | 0.1% | 0.0% | 1.5% | 0.0% | 0.13 | 0.13 |
| South Africa | -0.1% | 0.35 | -0.3% | -0.2% | 0.3% | 0.5% | 0.1% | 0.0% | 1.1% | 2.9% | 0.25 | 0.17 |
| Spain | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.2% | 0.2% | 0.00 | 0.00 |
| Sweden | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.1% | -0.1% | 0.00 | 0.00 |
| Switzerland | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 32.9% | 32.9% | 0.00 | 0.00 |
| Thailand | 0.2% | 0.35 | 0.6% | 0.7% | 0.7% | 0.0% | 0.1% | 0.0% | 1.4% | 0.0% | 0.50 | 0.17 |
| Turkey | 0.0% | 0.35 | -0.1% | 0.0% | 0.3% | 0.3% | 0.1% | 0.0% | 2.7% | 2.7% | 0.13 | 0.13 |
| United Kingdo | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.4% | 0.4% | 0.00 | 0.00 |
| United States | 0.0% | 0.35 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 |

1/ Before small M.C. adjustment

2/ [(P_KC)-(P_KC)_wo] - [(P_KC)*-(P_KC)*_wo], where P = (Change in FX reserve)/GDP, KC = Capital Control, and

   P_KC = (Change in FX reserves)/GDP * Capital Control

**Breakdown of 2012 Policy Gap Contribution : Private Credit/GDP 1/**

| | Overall Contribution | coef. | Policy Gap 2/ | (P-P*) | P | P* | P_wo | P*_wo |
|---|---|---|---|---|---|---|---|---|
| Australia | 0.1% | -0.026 | -2.7% | 0.0% | 46.6% | 46.6% | 23.8% | 21.1% |
| Belgium | 0.1% | -0.026 | -2.7% | 0.0% | 19.4% | 19.4% | 23.8% | 21.1% |
| Brazil | 0.1% | -0.026 | -2.1% | 0.6% | 26.4% | 25.8% | 23.8% | 21.1% |
| Canada | 0.1% | -0.026 | -2.7% | 0.0% | 32.0% | 32.0% | 23.8% | 21.1% |
| China | -0.4% | -0.026 | 15.3% | 18.1% | 30.4% | 12.4% | 23.8% | 21.1% |
| France | 0.1% | -0.026 | -2.7% | 0.0% | 23.9% | 23.9% | 23.8% | 21.1% |
| Germany | 0.1% | -0.026 | -3.8% | -1.1% | -1.1% | 0.0% | 23.8% | 21.1% |
| India | 0.1% | -0.026 | -2.7% | 0.0% | 18.2% | 18.2% | 23.8% | 21.1% |
| Indonesia | 0.1% | -0.026 | -2.7% | 0.0% | 0.4% | 0.4% | 23.8% | 21.1% |
| Italy | 0.1% | -0.026 | -2.7% | 0.0% | 45.4% | 45.4% | 23.8% | 21.1% |
| Japan | 0.1% | -0.026 | -2.7% | 0.0% | -16.7% | -16.7% | 23.8% | 21.1% |
| Korea | 0.1% | -0.026 | -2.7% | 0.0% | 26.1% | 26.1% | 23.8% | 21.1% |
| Malaysia | 0.1% | -0.026 | -2.7% | 0.0% | 9.5% | 9.5% | 23.8% | 21.1% |
| Mexico | 0.1% | -0.026 | -2.7% | 0.0% | 7.0% | 7.0% | 23.8% | 21.1% |
| Netherlands | 0.1% | -0.026 | -2.7% | 0.0% | 92.7% | 92.7% | 23.8% | 21.1% |
| Poland | 0.1% | -0.026 | -2.7% | 0.0% | 25.0% | 25.0% | 23.8% | 21.1% |
| Russia | 0.1% | -0.026 | -3.1% | -0.3% | 25.7% | 26.0% | 23.8% | 21.1% |
| South Africa | 0.0% | -0.026 | -1.8% | 0.9% | 30.1% | 29.2% | 23.8% | 21.1% |
| Spain | -0.4% | -0.026 | 17.3% | 20.0% | 79.6% | 59.6% | 23.8% | 21.1% |
| Sweden | 0.0% | -0.026 | 1.9% | 4.6% | 28.6% | 24.0% | 23.8% | 21.1% |
| Switzerland | -0.1% | -0.026 | 4.0% | 6.7% | 23.7% | 17.0% | 23.8% | 21.1% |
| Thailand | -0.1% | -0.026 | 2.3% | 5.0% | 18.3% | 13.4% | 23.8% | 21.1% |
| Turkey | -0.2% | -0.026 | 7.9% | 10.7% | 30.7% | 20.0% | 23.8% | 21.1% |
| United Kingdom | 0.4% | -0.026 | -13.7% | -11.0% | 29.0% | 40.0% | 23.8% | 21.1% |
| United States | 0.1% | -0.026 | -2.7% | 0.0% | 27.8% | 27.8% | 23.8% | 21.1% |

1/ after removing country mean

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

**Breakdown of 2012 Policy Gap Contribution : Capital Controls 1/**

| | Overall Contri-bution | P = Lagged [ demeaned PPP GDP per working pop. relative to (US+JPN+DEU)*(1- Capital Control)] | | | | | | P= Lagged [VIX * (1-Capital Control)] | | | | | P = Lagged [VIX * (1-Capital Control) * share of own currency in world reserve] | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Contri-bution | coef. | (P-P*) | P | P* | PPP GDP 2/ | Contri-bution | coef. | (P-P*) | P | P* | Contri-bution | coef. | (P-P*) | P | P* |
| Australia | 0.0% | 0.0% | 0.07 | 0.0% | 38.2% | 38.2% | 43.7% | 0.0% | 0.07 | 0.0% | 1.7% | 1.7% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Belgium | 0.0% | 0.0% | 0.07 | 0.0% | 38.1% | 38.1% | 38.1% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.5% | 0.5% |
| Brazil | 0.3% | 0.4% | 0.07 | 5.5% | -16.9% | -22.5% | -27.1% | 0.0% | 0.07 | -0.4% | 1.2% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Canada | 0.0% | 0.0% | 0.07 | 0.0% | 42.7% | 42.7% | 42.7% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| China | 0.7% | 0.8% | 0.07 | 11.9% | -18.1% | -30.0% | -36.2% | 0.0% | 0.07 | -0.6% | 1.0% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| France | 0.0% | 0.0% | 0.07 | 0.0% | 33.2% | 33.2% | 33.2% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.5% | 0.5% |
| Germany | 0.0% | 0.0% | 0.07 | 0.0% | 38.4% | 38.4% | 38.4% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.5% | 0.5% |
| India | 0.9% | 1.0% | 0.07 | 15.1% | -22.9% | -38.0% | -45.8% | 0.0% | 0.07 | -0.6% | 1.0% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Indonesia | 0.6% | 0.6% | 0.07 | 9.0% | -27.4% | -36.3% | -43.8% | 0.0% | 0.07 | -0.4% | 1.2% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Italy | 0.0% | 0.0% | 0.07 | 0.0% | 20.4% | 20.4% | 20.4% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.5% | 0.5% |
| Japan | 0.0% | 0.0% | 0.07 | 0.0% | 34.1% | 34.1% | 34.1% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.1% | 0.1% |
| Korea | 0.0% | 0.0% | 0.07 | 0.0% | 13.0% | 13.0% | 14.8% | 0.0% | 0.07 | 0.0% | 1.7% | 1.7% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Malaysia | 0.2% | 0.2% | 0.07 | 3.1% | -9.4% | -12.5% | -15.1% | 0.0% | 0.07 | -0.4% | 1.2% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Mexico | 0.2% | 0.2% | 0.07 | 3.8% | -11.5% | -15.3% | -18.4% | 0.0% | 0.07 | -0.4% | 1.2% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Netherlands | 0.0% | 0.0% | 0.07 | 0.0% | 47.0% | 47.0% | 47.0% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.5% | 0.5% |
| Poland | 0.0% | 0.0% | 0.07 | 0.8% | -7.1% | -7.9% | -9.5% | 0.0% | 0.07 | -0.2% | 1.5% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Russia | 0.0% | 0.0% | 0.07 | 0.0% | -15.0% | -15.0% | -17.1% | 0.0% | 0.07 | 0.0% | 1.7% | 1.7% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| South Africa | 0.1% | 0.1% | 0.07 | 2.2% | -20.7% | -22.9% | -27.6% | 0.0% | 0.07 | -0.2% | 1.5% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Spain | 0.0% | 0.0% | 0.07 | 0.0% | 17.9% | 17.9% | 17.9% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.5% | 0.5% |
| Sweden | 0.0% | 0.0% | 0.07 | 0.0% | 45.7% | 45.7% | 45.7% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Switzerland | 0.0% | 0.0% | 0.07 | 0.0% | 51.2% | 51.2% | 51.2% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Thailand | 0.7% | 0.7% | 0.07 | 11.0% | -16.7% | -27.7% | -33.4% | 0.0% | 0.07 | -0.6% | 1.0% | 1.6% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| Turkey | 0.0% | 0.0% | 0.07 | 0.0% | -17.7% | -17.7% | -20.2% | 0.0% | 0.07 | 0.0% | 1.7% | 1.7% | 0.0% | -0.14 | 0.0% | 0.0% | 0.0% |
| United Kingdom | 0.0% | 0.0% | 0.07 | 0.0% | 35.0% | 35.0% | 35.0% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 0.1% | 0.1% |
| United States | 0.0% | 0.0% | 0.07 | 0.0% | 62.6% | 62.6% | 62.6% | 0.0% | 0.07 | 0.0% | 1.9% | 1.9% | 0.0% | -0.14 | 0.0% | 1.2% | 1.2% |

1/ Before small M.C. adjustment

2/ Lagged PPP GDP per working population(15-64) relative to average of (US+Japan+Germany), demeaned of overall sample mean

## Estimated Contribution to Current Account of Output Gap and TOT Gap in 2012

| | Relative output gap coefficient = | | | -0.4001 | ToT Gap * Openness Coefficient = | | | 0.2302 | Contri-bution Sum | M.C. Adj. Contri-bution Sum |
|---|---|---|---|---|---|---|---|---|---|---|
| | Contribution | Data | | | Contribution | Data | | | | |
| | rel. ygap | rel. ygap | ygap | ygap_wo | tgap*open | tgap*open | tgap | open2y | | |
| Australia | -0.9% | 2.2% | 0.0% | -2.2% | 0.5% | 2.2% | 10.7% | 20.8% | -0.4% | -0.3% |
| Belgium | -0.8% | 1.9% | -0.3% | -2.2% | -0.2% | -1.0% | -1.2% | 82.8% | -1.0% | -0.9% |
| Brazil | -0.8% | 2.1% | -0.1% | -2.2% | 0.3% | 1.1% | 8.9% | 12.2% | -0.6% | -0.5% |
| Canada | -0.4% | 1.1% | -1.1% | -2.2% | 0.3% | 1.3% | 4.3% | 31.0% | -0.1% | 0.0% |
| China | 0.1% | -0.3% | -2.4% | -2.2% | -0.3% | -1.5% | -5.7% | 25.9% | -0.2% | -0.1% |
| France | 0.4% | -1.0% | -3.1% | -2.2% | -0.2% | -0.7% | -2.3% | 31.1% | 0.2% | 0.3% |
| Germany | -0.9% | 2.3% | 0.1% | -2.2% | -0.2% | -1.1% | -2.1% | 49.2% | -1.2% | -1.1% |
| India | -0.9% | 2.4% | 0.2% | -2.2% | -0.4% | -1.9% | -7.0% | 28.0% | -1.4% | -1.3% |
| Indonesia | -0.9% | 2.2% | 0.1% | -2.2% | 0.3% | 1.1% | 4.6% | 24.2% | -0.6% | -0.5% |
| Italy | 0.5% | -1.2% | -3.4% | -2.2% | -0.3% | -1.1% | -3.8% | 29.5% | 0.2% | 0.3% |
| Japan | 0.0% | 0.1% | -2.1% | -2.2% | -0.3% | -1.2% | -7.2% | 16.2% | -0.3% | -0.2% |
| Korea | -0.2% | 0.5% | -1.7% | -2.2% | -0.7% | -2.9% | -5.1% | 55.6% | -0.9% | -0.8% |
| Malaysia | -0.8% | 1.9% | -0.2% | -2.2% | 0.5% | 2.3% | 2.8% | 81.5% | -0.3% | -0.2% |
| Mexico | -0.7% | 1.7% | -0.4% | -2.2% | 0.1% | 0.5% | 1.4% | 33.4% | -0.6% | -0.5% |
| Netherlands | 0.2% | -0.6% | -2.7% | -2.2% | 0.0% | -0.1% | -0.2% | 77.8% | 0.2% | 0.3% |
| Poland | -0.8% | 1.9% | -0.3% | -2.2% | -0.1% | -0.6% | -1.3% | 46.3% | -0.9% | -0.8% |
| Russia | -0.8% | 2.0% | -0.2% | -2.2% | 1.0% | 4.3% | 17.1% | 25.1% | 0.2% | 0.3% |
| South Africa | -0.7% | 1.7% | -0.5% | -2.2% | 0.1% | 0.6% | 2.1% | 29.8% | -0.5% | -0.4% |
| Spain | 0.9% | -2.3% | -4.5% | -2.2% | -0.2% | -1.0% | -3.1% | 31.6% | 0.7% | 0.8% |
| Sweden | -1.0% | 2.5% | 0.3% | -2.2% | -0.1% | -0.3% | -0.6% | 44.5% | -1.0% | -1.0% |
| Switzerland | -0.8% | 2.1% | -0.1% | -2.2% | -0.1% | -0.5% | -1.1% | 45.2% | -0.9% | -0.9% |
| Thailand | -1.0% | 2.5% | 0.3% | -2.2% | -0.3% | -1.4% | -1.8% | 74.7% | -1.3% | -1.2% |
| Turkey | -1.0% | 2.5% | 0.3% | -2.2% | -0.3% | -1.2% | -4.2% | 28.7% | -1.3% | -1.2% |
| United Kingdom | 0.3% | -0.8% | -3.0% | -2.2% | -0.1% | -0.4% | -1.3% | 32.9% | 0.2% | 0.3% |
| United States | 0.8% | -2.1% | -4.3% | -2.2% | -0.1% | -0.5% | -3.2% | 15.7% | 0.7% | 0.8% |
| Euro Area 1/ | 0.0% | -0.1% | -2.2% | -2.2% | -0.2% | -0.9% | -2.5% | 43.3% | -0.2% | -0.1% |

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

## EBA Regression-based Analysis of 2012 Current Accounts : Translation to REER Gap
### (in percent of GDP)

| | Total CA Gap, including Residual | Assumed CA/REER Elasticity 1/ | Corresponding REER Gap 2/ |
|---|---|---|---|
| Australia | -1.5% | 0.16 | 10% |
| Belgium | -0.9% | 0.56 | 2% |
| Brazil | 0.8% | 0.12 | -7% |
| Canada | -5.0% | 0.22 | 23% |
| China | 1.8% | 0.23 | -8% |
| France | -2.5% | 0.20 | 12% |
| Germany | 6.3% | 0.36 | -17% |
| India | 0.4% | 0.15 | -3% |
| Indonesia | -1.4% | 0.17 | 8% |
| Italy | 0.1% | 0.21 | 0% |
| Japan | -2.2% | 0.13 | 18% |
| Korea | 1.6% | 0.23 | -7% |
| Malaysia | 6.7% | 0.46 | -15% |
| Mexico | 1.3% | 0.13 | -10% |
| Netherlands | 3.8% | 0.62 | -6% |
| Poland | -1.3% | 0.31 | 4% |
| Russia | -0.8% | 0.19 | 4% |
| South Africa | -2.7% | 0.21 | 13% |
| Spain | -0.3% | 0.25 | 1% |
| Sweden | 8.2% | 0.33 | -25% |
| Switzerland | 5.8% | 0.35 | -16% |
| Thailand | 1.0% | 0.28 | -4% |
| Turkey | -4.0% | 0.16 | 25% |
| United Kingdom | -2.3% | 0.21 | 11% |
| United States | -0.9% | 0.14 | 6% |
| Euro Area 3/ | 1.0% | 0.18 | -6% |

1/ 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 0.71 for exports and 0.92 for imports, adjusted by the size of exports and imports in GDP.

2/ Based on the estimated current account gap and an assumed elasticity with respect to the REER.   Note that closure of a current account gap generally would require a shift in saving or investment rates as well as a movement in the REER.

3/ Euro area norm level and policy gap contributions are calculated as GDP-weighted averages of values for the 11 largest Euro area economies. Actual CA is the "corrected for reporting discrepancies in intra-area transactions" and CA of the entire Euro area is about ½ % of GDP less than sum of the individual 11 countries' CA balances (for which no such correction is available).

# Section II — REER Regression-based Analysis

This section contains results from the 2013 pilot EBA's analysis of 2012 (year average) REERs, using data available as of Spring 2013.  (As supplementary information, the first table shows the estimated change in REERs through May 2013, relative to the 2012 year average level.)

The summary table identifies a Total 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. Note that the regression residual, and its contribution to the Total Gap, requires additional interpretation, outside of the EBA methodology, as to whether the regression residual primarily reflects distortions not captured by the EBA regression (or instead reflects uncaptured fundamentals or other sources of error).

Here the contributions of policy gaps refer to 5 types of policies, the contributions of which are also shown separately. The contributions of each policy gap are calculated analogously to the procedure used for the CA analysis, as described above.

The REER gap numbers have been checked and adjusted for multilateral consistency. Only a small uniform adjustment of about 1 percent was necessary (this adjustment is included in the numbers shown).

The second table breaks down the policy gap contributions into the 5 types of policies covered by EBA's REER regression-based analysis.  For each policy gap contribution, one can see not only the total contribution but also the subcomponent that is "domestic" (i.e., arising from a country's own policies rather than policies elsewhere).

The tables on the subsequent pages give details of each of the estimated policy gap contributions to REER.

# EBA Analysis of 2012 Real Effective Exchange Rates

| Country | Net Contributions of Policy Gaps | | | | | | Residual /a (B) | Total REER Gap /a (C = A + B) | Memo: Change in REER from 2012 to May 2013 |
|---|---|---|---|---|---|---|---|---|---|
| | Sum (A) | Health Exp. | Capital Control | Reserves | Private Credit | Real Interest Rate | | | |
| Australia | -1% | -1.2% | 0.0% | 0.2% | -0.4% | 0.1% | 22% | **20%** | -1.4% |
| Belgium | -1% | -0.4% | 0.0% | 0.1% | -0.1% | 0.0% | 6% | **5%** | 0.9% |
| Brazil | -6% | 0.1% | -3.1% | -0.4% | -0.2% | -2.1% | 15% | **9%** | 2.2% |
| Canada | 2% | 2.1% | 0.0% | 0.1% | -0.2% | 0.1% | 14% | **16%** | -1.4% |
| China | -9% | -3.0% | -6.8% | -1.1% | 2.3% | -0.4% | -8% | **-17%** | 6.5% |
| France | 0% | 0.0% | 0.0% | 0.1% | -0.3% | 0.2% | 0% | **0%** | 1.0% |
| Germany | 0% | 0.3% | 0.0% | 0.1% | -0.4% | 0.1% | 8% | **8%** | 1.4% |
| India | -9% | -0.5% | -8.6% | 0.3% | -0.3% | -0.4% | 12% | **3%** | 6.5% |
| Indonesia | -5% | 0.4% | -5.1% | 0.2% | -0.4% | -0.4% | 6% | **1%** | 3.3% |
| Italy | -1% | -0.5% | 0.0% | 0.1% | -0.3% | 0.2% | 2% | **1%** | 1.3% |
| Japan | 1% | 1.4% | 0.0% | 0.4% | -0.6% | 0.1% | 7% | **8%** | -22.7% |
| Korea, Rep. | -2% | -1.4% | 0.0% | 0.2% | -0.6% | 0.1% | -9% | **-11%** | 4.7% |
| Malaysia | -4% | -2.0% | -1.7% | 0.1% | -0.4% | -0.3% | -15% | **-19%** | 5.0% |
| Mexico | -5% | -1.8% | -2.1% | -0.4% | -0.2% | -0.4% | -6% | **-11%** | 10.8% |
| Netherlands | 5% | 5.3% | 0.0% | 0.1% | -0.1% | -0.1% | -13% | **-8%** | 2.7% |
| Poland | -1% | -0.9% | -0.4% | -0.2% | -0.1% | 0.3% | -1% | **-3%** | 0.9% |
| Russia | -3% | -3.2% | 0.0% | -0.1% | -0.4% | 0.4% | -3% | **-7%** | 4.4% |
| South Africa | -2% | -0.8% | -1.2% | 0.5% | -0.1% | 0.0% | -5% | **-7%** | -7.0% |
| Spain | 3% | 0.8% | 0.0% | 0.0% | 2.4% | 0.1% | 7% | **11%** | 1.3% |
| Sweden | 0% | -0.4% | 0.0% | 0.1% | 0.3% | -0.5% | -4% | **-5%** | 1.6% |
| Switzerland | 0% | -0.7% | 0.0% | 0.1% | 0.7% | -0.3% | 8% | **8%** | -2.9% |
| Thailand | -7% | 0.3% | -6.2% | -0.8% | 0.3% | -0.2% | 6% | **0%** | 9.6% |
| Turkey | 2% | 2.0% | 0.0% | 0.1% | 1.1% | -1.7% | 17% | **19%** | 5.9% |
| United Kingdom | -1% | 0.2% | 0.0% | 0.1% | -1.7% | 0.0% | -1% | **-3%** | -1.8% |
| United States | 0% | 0.0% | 0.0% | 0.3% | -0.3% | -0.2% | -9% | **-9%** | 1.3% |
| Euro Area | 1% | 0.6% | 0.0% | 0.1% | 0.0% | 0.1% | 3% | **4%** | 1.4% |

/a For multilateral consistency, adjusted by the weighted average of the 2012 regression residuals (subtracting -1.2%).

## EBA - Estimated Policy Gap Contributions to 2012 REER

| Country | All (sum) | | Health Exp. | | Capital Controls | | Δ in Reserves | | Private Credit | | Interest Rate | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Dom. | Total | Dom. | Total | Dom. | Total | Dom. | Total | Dom. | Total | Dom. |
| Australia | -1.4% | -1.1% | -1.2% | -1.1% | 0.0% | 0.0% | 0.2% | 0.0% | -0.4% | 0.0% | 0.1% | 0.0% |
| Belgium | -0.5% | 0.1% | -0.4% | 0.1% | 0.0% | 0.0% | 0.1% | 0.0% | -0.1% | 0.0% | 0.0% | 0.0% |
| Brazil | -5.6% | -5.1% | 0.1% | 0.2% | -3.1% | -3.1% | -0.4% | -0.5% | -0.2% | 0.1% | -2.1% | -1.7% |
| Canada | 2.2% | 2.0% | 2.1% | 2.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.2% | 0.0% | 0.1% | 0.0% |
| China | -8.9% | -8.6% | -3.0% | -2.9% | -6.8% | -6.8% | -1.1% | -1.1% | 2.3% | 2.3% | -0.4% | -0.1% |
| France | 0.0% | 0.8% | 0.0% | 0.6% | 0.0% | 0.0% | 0.1% | 0.0% | -0.3% | 0.0% | 0.2% | 0.2% |
| Germany | 0.2% | 0.8% | 0.3% | 0.8% | 0.0% | 0.0% | 0.1% | 0.0% | -0.4% | -0.1% | 0.1% | 0.2% |
| India | -9.5% | -9.3% | -0.5% | -0.7% | -8.6% | -8.6% | 0.3% | 0.1% | -0.3% | 0.0% | -0.4% | -0.1% |
| Indonesia | -5.2% | -5.3% | 0.4% | 0.1% | -5.1% | -5.1% | 0.2% | 0.0% | -0.4% | 0.0% | -0.4% | -0.3% |
| Italy | -0.5% | 0.2% | -0.5% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.3% | 0.0% | 0.2% | 0.2% |
| Japan | 1.2% | 0.6% | 1.4% | 0.6% | 0.0% | 0.0% | 0.4% | 0.0% | -0.6% | 0.0% | 0.1% | 0.0% |
| Korea, Rep. | -1.8% | -2.1% | -1.4% | -1.9% | 0.0% | 0.0% | 0.2% | -0.2% | -0.6% | 0.0% | 0.1% | 0.0% |
| Malaysia | -4.3% | -4.4% | -2.0% | -2.4% | -1.7% | -1.7% | 0.1% | -0.1% | -0.4% | 0.0% | -0.3% | -0.2% |
| Mexico | -4.8% | -4.4% | -1.8% | -1.8% | -2.1% | -2.1% | -0.4% | -0.4% | -0.2% | 0.0% | -0.4% | -0.1% |
| Netherlands | 5.2% | 5.6% | 5.3% | 5.6% | 0.0% | 0.0% | 0.1% | 0.0% | -0.1% | 0.0% | -0.1% | 0.0% |
| Poland | -1.3% | -0.5% | -0.9% | -0.3% | -0.4% | -0.4% | -0.2% | -0.3% | -0.1% | 0.0% | 0.3% | 0.5% |
| Russia | -3.3% | -2.9% | -3.2% | -3.0% | 0.0% | 0.0% | -0.1% | -0.3% | -0.4% | 0.0% | 0.4% | 0.4% |
| South Africa | -1.7% | -1.4% | -0.8% | -0.6% | -1.2% | -1.2% | 0.5% | 0.3% | -0.1% | 0.1% | 0.0% | 0.0% |
| Spain | 3.4% | 4.1% | 0.8% | 1.4% | 0.0% | 0.0% | 0.0% | 0.0% | 2.4% | 2.6% | 0.1% | 0.2% |
| Sweden | -0.5% | 0.3% | -0.4% | 0.2% | 0.0% | 0.0% | 0.1% | 0.0% | 0.3% | 0.6% | -0.5% | -0.5% |
| Switzerland | -0.1% | 0.6% | -0.7% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.7% | 0.9% | -0.3% | -0.2% |
| Thailand | -6.6% | -6.6% | 0.3% | 0.0% | -6.2% | -6.2% | -0.8% | -1.0% | 0.3% | 0.6% | -0.2% | 0.0% |
| Turkey | 1.6% | 2.1% | 2.0% | 2.4% | 0.0% | 0.0% | 0.1% | 0.0% | 1.1% | 1.4% | -1.7% | -1.7% |
| United Kingdom | -1.5% | -0.5% | 0.2% | 0.9% | 0.0% | 0.0% | 0.1% | 0.0% | -1.7% | -1.4% | 0.0% | 0.0% |
| United States | -0.3% | -0.3% | 0.0% | -0.1% | 0.0% | 0.0% | 0.3% | 0.0% | -0.3% | 0.0% | -0.2% | -0.2% |

**Breakdown of 2012 Policy Gap Contribution: Public Expenditure on Health / GDP**

| Country | Overall Contribution | Coef. | Pol. Gap (1)-(3) - {(2)-(4)} | P - P* (1) - (2) | P (1) | P* (2) | P (Trading partners) (3) | P* (Trading partners) (4) | P* benchmark from cross-country regression [a] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lagged [Health Expenditure to GDP (rel to TRD PRT)] | | | | | |
| Australia | -1.2% | 1.78 | -0.7% | -0.6% | 6.3% | 6.9% | 6.4% | 6.4% | 6.9% |
| Belgium | -0.4% | 1.78 | -0.2% | 0.0% | 8.1% | 8.1% | 7.3% | 7.1% | 6.9% |
| Brazil | 0.1% | 1.78 | 0.1% | 0.1% | 4.0% | 3.9% | 6.8% | 6.7% | 3.9% |
| Canada | 2.1% | 1.78 | 1.2% | 1.1% | 7.8% | 6.7% | 7.6% | 7.7% | 6.7% |
| China | -3.0% | 1.78 | -1.7% | -1.6% | 1.2% | 2.8% | 7.2% | 7.1% | 2.8% |
| France | 0.0% | 1.78 | 0.0% | 0.3% | 7.8% | 7.5% | 7.5% | 7.2% | 7.5% |
| Germany | 0.3% | 1.78 | 0.2% | 0.4% | 8.7% | 8.3% | 7.1% | 6.8% | 8.3% |
| India | -0.5% | 1.78 | -0.3% | -0.4% | 0.9% | 1.3% | 6.5% | 6.6% | 0.7% |
| Indonesia | 0.4% | 1.78 | 0.2% | 0.1% | 1.3% | 1.3% | 6.1% | 6.3% | 1.3% |
| Italy | -0.5% | 1.78 | -0.3% | 0.0% | 7.2% | 7.2% | 7.4% | 7.1% | 7.2% |
| Japan | 1.4% | 1.78 | 0.8% | 0.3% | 8.1% | 7.7% | 5.3% | 5.8% | 7.7% |
| Korea, Rep. | -1.4% | 1.78 | -0.8% | -1.1% | 4.1% | 5.2% | 5.7% | 6.0% | 5.2% |
| Malaysia | -2.0% | 1.78 | -1.1% | -1.3% | 2.0% | 3.4% | 6.1% | 6.3% | 3.4% |
| Mexico | -1.8% | 1.78 | -1.0% | -1.0% | 2.9% | 3.9% | 7.8% | 7.8% | 3.9% |
| Netherlands | 5.3% | 1.78 | 3.0% | 3.1% | 10.3% | 7.1% | 7.4% | 7.2% | 7.1% |
| Poland | -0.9% | 1.78 | -0.5% | -0.2% | 5.0% | 5.2% | 7.5% | 7.2% | 5.2% |
| Russia | -3.2% | 1.78 | -1.8% | -1.7% | 3.5% | 5.2% | 6.8% | 6.6% | 5.2% |
| South Africa | -0.8% | 1.78 | -0.4% | -0.4% | 4.1% | 4.4% | 6.9% | 6.8% | 4.4% |
| Spain | 0.8% | 1.78 | 0.5% | 0.8% | 7.1% | 6.3% | 7.5% | 7.2% | 6.3% |
| Sweden | -0.4% | 1.78 | -0.2% | 0.1% | 7.8% | 7.7% | 7.6% | 7.3% | 7.7% |
| Switzerland | -0.7% | 1.78 | -0.4% | 0.0% | 7.4% | 7.4% | 7.8% | 7.4% | 7.4% |
| Thailand | 0.3% | 1.78 | 0.2% | 0.0% | 3.3% | 3.3% | 6.1% | 6.3% | 3.2% |
| Turkey | 2.0% | 1.78 | 1.1% | 1.3% | 5.1% | 3.7% | 7.2% | 7.0% | 3.7% |
| United Kingdom | 0.2% | 1.78 | 0.1% | 0.5% | 8.1% | 7.5% | 7.6% | 7.2% | 7.5% |
| United States | 0.0% | 1.78 | 0.0% | 0.0% | 8.5% | 8.6% | 5.9% | 5.9% | 7.1% |

[a] Fitted value from a 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.

**Breakdown of 2012 Policy Gap Contribution: Capital Controls**

| Country | Overall Contribution | P= Lagged [ demeaned PPP GDP per working pop. relative to (US+JPN+DEU)*(Capital Account Openness)] 1\ | | | | | | P= Lagged [VIX * (Capital account openness)] 1\ | | | | | P= Lagged [VIX * Capital Account Openness * Share of own currency in world reserve] 1\ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Contribution | Coef. | Policy Gap (5)-(6) | P (5) | P* (6) | Demeaned Lagged GDPpw 2\ | Contribution | Coef. | Policy Gap (7)-(8) | P (7) | P* (8) | Contribution | Coef. | Policy Gap (9)-(10) | P (9) | P* (10) |
| Australia | 0.0% | 0.0% | -0.58 | 0.0% | 38.2% | 38.2% | 0.44 | 0.0% | -0.24 | 0.0% | 1.7% | 1.7% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Belgium | 0.0% | 0.0% | -0.58 | 0.0% | 38.1% | 38.1% | 0.38 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.5% | 0.5% |
| Brazil | -3.1% | -3.2% | -0.58 | 5.5% | -16.9% | -22.5% | -0.27 | 0.1% | -0.24 | -0.4% | 1.2% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Canada | 0.0% | 0.0% | -0.58 | 0.0% | 42.7% | 42.7% | 0.43 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| China | -6.8% | -6.9% | -0.58 | 11.9% | -18.1% | -30.0% | -0.36 | 0.2% | -0.24 | -0.6% | 1.0% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| France | 0.0% | 0.0% | -0.58 | 0.0% | 33.2% | 33.2% | 0.33 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.5% | 0.5% |
| Germany | 0.0% | 0.0% | -0.58 | 0.0% | 38.4% | 38.4% | 0.38 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.5% | 0.5% |
| India | -8.6% | -8.8% | -0.58 | 15.1% | -22.9% | -38.0% | -0.46 | 0.2% | -0.24 | -0.6% | 1.0% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Indonesia | -5.1% | -5.2% | -0.58 | 9.0% | -27.4% | -36.3% | -0.44 | 0.1% | -0.24 | -0.4% | 1.2% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Italy | 0.0% | 0.0% | -0.58 | 0.0% | 20.4% | 20.4% | 0.20 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.5% | 0.5% |
| Japan | 0.0% | 0.0% | -0.58 | 0.0% | 34.1% | 34.1% | 0.34 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.1% | 0.1% |
| Korea, Rep. | 0.0% | 0.0% | -0.58 | 0.0% | 13.0% | 13.0% | 0.15 | 0.0% | -0.24 | 0.0% | 1.7% | 1.7% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Malaysia | -1.7% | -1.8% | -0.58 | 3.1% | -9.4% | -12.5% | -0.15 | 0.1% | -0.24 | -0.4% | 1.2% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Mexico | -2.1% | -2.2% | -0.58 | 3.8% | -11.5% | -15.3% | -0.18 | 0.1% | -0.24 | -0.4% | 1.2% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Netherlands | 0.0% | 0.0% | -0.58 | 0.0% | 47.0% | 47.0% | 0.47 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.5% | 0.5% |
| Poland | -0.4% | -0.4% | -0.58 | 0.8% | -7.1% | -7.9% | -0.10 | 0.0% | -0.24 | -0.2% | 1.5% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Russia | 0.0% | 0.0% | -0.58 | 0.0% | -15.0% | -15.0% | -0.17 | 0.0% | -0.24 | 0.0% | 1.7% | 1.7% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| South Africa | -1.2% | -1.3% | -0.58 | 2.2% | -20.7% | -22.9% | -0.28 | 0.0% | -0.24 | -0.2% | 1.5% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Spain | 0.0% | 0.0% | -0.58 | 0.0% | 17.9% | 17.9% | 0.18 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.5% | 0.5% |
| Sweden | 0.0% | 0.0% | -0.58 | 0.0% | 45.7% | 45.7% | 0.46 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Switzerland | 0.0% | 0.0% | -0.58 | 0.0% | 51.2% | 51.2% | 0.51 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Thailand | -6.2% | -6.4% | -0.58 | 11.0% | -16.7% | -27.7% | -0.33 | 0.2% | -0.24 | -0.6% | 1.0% | 1.6% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| Turkey | 0.0% | 0.0% | -0.58 | 0.0% | -17.7% | -17.7% | -0.20 | 0.0% | -0.24 | 0.0% | 1.7% | 1.7% | 0.0% | 0.84 | 0.0% | 0.0% | 0.0% |
| United Kingdom | 0.0% | 0.0% | -0.58 | 0.0% | 35.0% | 35.0% | 0.35 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 0.1% | 0.1% |
| United States | 0.0% | 0.0% | -0.58 | 0.0% | 62.6% | 62.6% | 0.63 | 0.0% | -0.24 | 0.0% | 1.9% | 1.9% | 0.0% | 0.84 | 0.0% | 1.2% | 1.2% |

1/ Capital Account Openness defined as (1- Capital Account Controls)

2/ Lagged PPP GDP per working population(15-64) relative to average of (US+Japan+Germany), demeaned of overall sample mean

**Breakdown of 2012 Policy Gap Contribution: Change in FX Reserves / GDP**

| Country | Change in Reserves to GDP * Capital controls (rel to TRD PRT) | | | | | | | | Components | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall Contributions | Coef. | Pol. Gap (1)-(3)-{(2)-(4)} | P - P* (1) - (2) | P /a (1) | P* (2) | P (Trading partners) (3) | P* (Trading partners) (4) | Reserves to GDP | (Reserves to GDP)* | Capital Controls | (Capital Controls)* |
| Australia | 0.2% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 12.5% | 12.5% |
| Belgium | 0.1% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.8% | 0.8% | 0.0% | 0.0% |
| Brazil | -0.4% | -1.43 | 0.3% | 0.3% | 0.3% | 0.0% | 0.1% | 0.0% | 0.9% | 0.0% | 37.5% | 17.0% |
| Canada | 0.1% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.1% | -0.1% | 0.0% | 0.0% |
| China | -1.1% | -1.43 | 0.7% | 0.8% | 0.8% | 0.0% | 0.1% | 0.0% | 1.6% | 0.0% | 50.0% | 17.0% |
| France | 0.1% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.2% | 0.2% | 0.0% | 0.0% |
| Germany | 0.1% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| India | 0.3% | -1.43 | -0.2% | -0.1% | -0.1% | 0.0% | 0.1% | 0.0% | -0.1% | 0.0% | 50.0% | 17.0% |
| Indonesia | 0.2% | -1.43 | -0.2% | 0.0% | 0.0% | 0.0% | 0.2% | 0.0% | 0.0% | 0.0% | 37.5% | 17.0% |
| Italy | 0.1% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% |
| Japan | 0.4% | -1.43 | -0.3% | 0.0% | 0.0% | 0.0% | 0.3% | 0.0% | -0.6% | -0.6% | 0.0% | 0.0% |
| Korea, Rep. | 0.2% | -1.43 | -0.1% | 0.1% | 0.1% | 0.0% | 0.2% | 0.0% | 1.0% | 0.0% | 12.5% | 12.5% |
| Malaysia | 0.1% | -1.43 | -0.1% | 0.1% | 0.2% | 0.1% | 0.2% | 0.0% | 0.4% | 0.4% | 37.5% | 17.0% |
| Mexico | -0.4% | -1.43 | 0.3% | 0.3% | 0.6% | 0.3% | 0.1% | 0.0% | 1.5% | 1.5% | 37.5% | 17.0% |
| Netherlands | 0.1% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Poland | -0.2% | -1.43 | 0.1% | 0.2% | 0.6% | 0.4% | 0.1% | 0.0% | 2.3% | 2.3% | 25.0% | 17.0% |
| Russia | -0.1% | -1.43 | 0.1% | 0.2% | 0.2% | 0.0% | 0.1% | 0.0% | 1.5% | 0.0% | 12.5% | 12.5% |
| South Africa | 0.5% | -1.43 | -0.3% | -0.2% | 0.3% | 0.5% | 0.1% | 0.0% | 1.1% | 2.9% | 25.0% | 17.0% |
| Spain | 0.0% | -1.43 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.2% | 0.0% | 0.0% |
| Sweden | 0.1% | -1.43 | -0.1% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | -0.1% | -0.1% | 0.0% | 0.0% |
| Switzerland | 0.1% | -1.43 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 32.9% | 32.9% | 0.0% | 0.0% |
| Thailand | -0.8% | -1.43 | 0.6% | 0.7% | 0.7% | 0.0% | 0.1% | 0.0% | 1.4% | 0.0% | 50.0% | 17.0% |
| Turkey | 0.1% | -1.43 | -0.1% | 0.0% | 0.3% | 0.3% | 0.1% | 0.0% | 2.7% | 2.7% | 12.5% | 12.5% |
| United Kingdom | 0.1% | -1.43 | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.4% | 0.4% | 0.0% | 0.0% |
| United States | 0.3% | -1.43 | -0.2% | 0.0% | 0.0% | 0.0% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

/a P is: Change in reserves to GDP * Capital Controls.

**Breakdown of 2012 Policy Gap Contribution: Private Credit / GDP (after removing country mean)**

| Country | Overall Contributions | Coef. | Pol. Gap (1)-(3) - {(2)-(4)} | P - P* (1) - (2) | P (1) | P* (2) | P (Trading partners) (3) | P* (Trading partners) (4) |
|---|---|---|---|---|---|---|---|---|
| | | | | Private Credit to GDP (rel. to TRD PRT) | | | | |
| Australia | -0.4% | 0.13 | -2.9% | 0.0% | 46.6% | 46.6% | 24.9% | 22.0% |
| Belgium | -0.1% | 0.13 | -1.1% | 0.0% | 19.4% | 19.4% | 27.3% | 26.2% |
| Brazil | -0.2% | 0.13 | -1.2% | 0.6% | 26.4% | 25.8% | 24.2% | 22.3% |
| Canada | -0.2% | 0.13 | -1.2% | 0.0% | 32.0% | 32.0% | 25.7% | 24.6% |
| China | 2.3% | 0.13 | 18.1% | 18.1% | 30.4% | 12.4% | 17.5% | 17.6% |
| France | -0.3% | 0.13 | -2.6% | 0.0% | 23.9% | 23.9% | 31.0% | 28.4% |
| Germany | -0.4% | 0.13 | -3.1% | -1.1% | -1.1% | 0.0% | 33.6% | 31.5% |
| India | -0.3% | 0.13 | -2.6% | 0.0% | 18.2% | 18.2% | 24.8% | 22.2% |
| Indonesia | -0.4% | 0.13 | -2.8% | 0.0% | 0.4% | 0.4% | 21.1% | 18.3% |
| Italy | -0.3% | 0.13 | -2.1% | 0.0% | 45.4% | 45.4% | 26.2% | 24.2% |
| Japan | -0.6% | 0.13 | -4.7% | 0.0% | -16.7% | -16.7% | 26.4% | 21.7% |
| Korea, Rep. | -0.6% | 0.13 | -4.8% | 0.0% | 26.1% | 26.1% | 19.1% | 14.4% |
| Malaysia | -0.4% | 0.13 | -2.8% | 0.0% | 9.5% | 9.5% | 21.0% | 18.2% |
| Mexico | -0.2% | 0.13 | -1.2% | 0.0% | 7.0% | 7.0% | 26.4% | 25.1% |
| Netherlands | -0.1% | 0.13 | -1.0% | 0.0% | 92.7% | 92.7% | 24.5% | 23.5% |
| Poland | -0.1% | 0.13 | -0.9% | 0.0% | 25.0% | 25.0% | 23.6% | 22.7% |
| Russia | -0.4% | 0.13 | -3.2% | -0.3% | 25.7% | 26.0% | 25.2% | 22.3% |
| South Africa | -0.1% | 0.13 | -0.8% | 0.9% | 30.1% | 29.2% | 25.1% | 23.4% |
| Spain | 2.4% | 0.13 | 18.8% | 20.0% | 79.6% | 59.6% | 28.3% | 27.1% |
| Sweden | 0.3% | 0.13 | 2.5% | 4.6% | 28.6% | 24.0% | 28.6% | 26.6% |
| Switzerland | 0.7% | 0.13 | 5.6% | 6.7% | 23.7% | 17.0% | 24.8% | 23.7% |
| Thailand | 0.3% | 0.13 | 2.3% | 5.0% | 18.3% | 13.4% | 18.5% | 15.8% |
| Turkey | 1.1% | 0.13 | 9.0% | 10.7% | 30.7% | 20.0% | 28.4% | 26.6% |
| United Kingdom | -1.7% | 0.13 | -13.5% | -11.0% | 29.0% | 40.0% | 31.7% | 29.2% |
| United States | -0.3% | 0.13 | -2.6% | 0.0% | 27.8% | 27.8% | 22.3% | 19.6% |

**Breakdown of 2012 Policy Gap Contribution: Real Short Term Interest Rates**

| Country | Overall Contribution | Coef. | Pol. Gap (1)-(3) - {(2)-(4)} | P - P* (1) - (2) | P (1) | P* (2) | P (Trading partners) (3) | P* (Trading partners) (4) | Real Interest Rate | (Real Interest Rate)* | Capital Controls | (Capital Controls)* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Real Short Term Interest Rate interacted with Capital Openness (rel to TRD PRT) | | | | | Components | | | |
| Australia | 0.1% | 0.71 | 0.1% | 0.0% | 1.9% | 1.9% | -1.0% | -1.0% | 2.2% | 2.2% | 12.5% | 12.5% |
| Belgium | 0.0% | 0.71 | 0.0% | 0.0% | -2.4% | -2.4% | -1.8% | -1.8% | -2.4% | -2.4% | 0.0% | 0.0% |
| Brazil | -2.1% | 0.71 | -2.9% | -2.5% | 2.1% | 4.6% | -1.0% | -1.4% | 3.4% | 5.5% | 37.5% | 17.0% |
| Canada | 0.1% | 0.71 | 0.2% | 0.0% | -1.0% | -1.0% | -3.1% | -2.9% | -1.0% | -1.0% | 0.0% | 0.0% |
| China | -0.4% | 0.71 | -0.6% | -0.1% | 0.2% | 0.3% | -0.8% | -1.2% | 0.4% | 0.4% | 50.0% | 17.0% |
| France | 0.2% | 0.71 | 0.3% | 0.3% | -1.7% | -2.0% | -1.9% | -2.0% | -1.7% | -2.0% | 0.0% | 0.0% |
| Germany | 0.1% | 0.71 | 0.2% | 0.2% | -1.9% | -2.1% | -1.7% | -1.7% | -1.9% | -2.1% | 0.0% | 0.0% |
| India | -0.4% | 0.71 | -0.5% | -0.1% | 0.2% | 0.4% | -0.7% | -1.1% | 0.4% | 0.4% | 50.0% | 17.0% |
| Indonesia | -0.4% | 0.71 | -0.5% | -0.4% | 1.1% | 1.5% | -0.6% | -0.8% | 1.8% | 1.8% | 37.5% | 17.0% |
| Italy | 0.2% | 0.71 | 0.2% | 0.3% | -3.0% | -3.3% | -1.6% | -1.6% | -3.0% | -3.3% | 0.0% | 0.0% |
| Japan | 0.1% | 0.71 | 0.1% | 0.0% | -0.3% | -0.3% | -1.3% | -1.2% | -0.3% | -0.3% | 0.0% | 0.0% |
| Korea, Rep. | 0.1% | 0.71 | 0.1% | 0.0% | 1.3% | 1.3% | -1.0% | -0.9% | 1.5% | 1.5% | 12.5% | 12.5% |
| Malaysia | -0.3% | 0.71 | -0.5% | -0.3% | 0.8% | 1.1% | -0.8% | -1.0% | 1.3% | 1.3% | 37.5% | 17.0% |
| Mexico | -0.4% | 0.71 | -0.6% | -0.2% | 0.5% | 0.6% | -2.0% | -2.4% | 0.8% | 0.8% | 37.5% | 17.0% |
| Netherlands | -0.1% | 0.71 | -0.1% | 0.0% | 0.0% | 0.0% | -1.9% | -2.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Poland | 0.3% | 0.71 | 0.4% | 0.7% | 1.1% | 0.4% | -1.3% | -1.5% | 1.4% | 0.5% | 25.0% | 17.0% |
| Russia | 0.4% | 0.71 | 0.6% | 0.5% | 0.5% | 0.0% | -1.2% | -1.1% | 0.6% | 0.0% | 12.5% | 12.5% |
| South Africa | 0.0% | 0.71 | 0.0% | 0.1% | -0.5% | -0.5% | -1.1% | -1.1% | -0.7% | -0.7% | 25.0% | 17.0% |
| Spain | 0.1% | 0.71 | 0.1% | 0.2% | -2.2% | -2.4% | -1.8% | -1.9% | -2.2% | -2.4% | 0.0% | 0.0% |
| Sweden | -0.5% | 0.71 | -0.7% | -0.6% | -0.1% | 0.5% | -1.7% | -1.8% | -0.1% | 0.5% | 0.0% | 0.0% |
| Switzerland | -0.3% | 0.71 | -0.4% | -0.3% | -0.3% | 0.0% | -2.0% | -2.1% | -0.3% | 0.0% | 0.0% | 0.0% |
| Thailand | -0.2% | 0.71 | -0.2% | 0.1% | -0.1% | -0.1% | -0.5% | -0.8% | -0.2% | -0.2% | 50.0% | 17.0% |
| Turkey | -1.7% | 0.71 | -2.4% | -2.3% | 0.3% | 2.6% | -1.5% | -1.5% | 0.3% | 3.0% | 12.5% | 12.5% |
| United Kingdom | 0.0% | 0.71 | 0.0% | 0.0% | -3.1% | -3.1% | -1.7% | -1.8% | -3.1% | -3.1% | 0.0% | 0.0% |
| United States | -0.2% | 0.71 | -0.2% | -0.3% | -4.4% | -4.1% | -0.6% | -0.6% | -4.4% | -4.1% | 0.0% | 0.0% |

(1) P = domestic interest rate x domestic capital account openness
(2) P* = domestic interest rate* x domestic capital account openness*
(3) P (trading partners) = (trading partner interest rate x trading partner capital account openness ) x domestic capital account openness
(4) P* (trading partners) = (trading partner interest rate* x trading partner capital account openness* ) x domestic capital account openness*
The real interest rate accounts for the estimated effect of Q.E. for Japan, U.S. and U.K.

# Section III — External Sustainability Analysis

The table on the following page details results from the application of the ES (External Sustainability) approach, as originally developed for the CGER methodology.

The ES approach calculates the CA/GDP adjustment consistent with stabilizing NFA/GDP at a benchmark level (second column). For the majority of countries analyzed, the NFA/GDP benchmark is set at the recent (2011) actual level (first column). For a select group of economies with extremely high net external liabilities, low net external liabilities, or that are exporters of non-renewable resources, the benchmark is modified on the basis of regional averages or other criteria.

The ES method first calculates the CA/GDP level that would stabilize the NFA/GDP at the particular benchmark level shown (analysis of other benchmarks might also be of interest).

The second step compares the WEO-projected (2018) CA/GDP (assuming real exchange rates that are constant at their early 2013 levels, current policies, including those due to take effect between 2013 and 2018, and adjusted for closed output gaps) with the NFA benchmark-stabilizing CA/GDP.

The highlighted column gives the CA gap according to the ES method; that is, the difference between the adjusted CA projected for 2018 and the CA that would stabilize the NFA/GDP ratio at the benchmark level.

Recall that the ES gap is not directly comparable to the gaps calculated in the CA and REER regression-based approaches; the ES method aims at the question of sustainability rather than whether current account balances are optimal or influenced by policy distortions.

As supplementary information, a final table shows a translation of the ES method CA gap into REER terms, using an assumed elasticity. Note that such translated gap estimates are subject to additional uncertainty arising from uncertainty about the relevant elasticity level. (The elasticity values shown here are indicative; they are those previously used in the CGER exercise, in most cases using a common elasticity assumption of 0.71 for exports and 0.92 for imports, adjusted by the size of exports and imports in GDP, and with an adjustment for the role of commodity trade.) Note that closure of a CA gap generally would require a shift in saving or investment rates as well as a movement in the REER.

## External Sustainability Approach: NFA-stabilizing Current Accounts 1/

| | 2011 NFA/GDP | Bench-mark NFA/GDP | memo 2012 CA/GDP | Unadjusted 2018 CA/GDP | Adjusted 2018 CA/GDP | CA/GDP Stabilizing NFA at Benchmark | CA/GDP Gap |
|---|---|---|---|---|---|---|---|
| | (A) | (B) | (C) | (D) | (E) | (F) | (E )-(F) |
| Australia | -58.1% | -58.1% | -3.7% | -5.6% | -5.6% | -3.0% | **-2.6%** |
| Belgium | 61.8% | 61.8% | -0.5% | 0.9% | -1.0% | 1.5% | **-2.5%** |
| Brazil | -31.4% | -31.4% | -2.3% | -3.4% | -3.8% | -0.8% | **-3.0%** |
| Canada | -15.7% | -15.7% | -3.7% | -2.5% | -2.5% | -0.9% | **-1.6%** |
| China | 20.1% | 20.1% | 2.3% | 4.3% | 4.3% | 2.3% | **2.0%** |
| France | -24.2% | -24.2% | -2.4% | 0.1% | -0.4% | -0.7% | **0.3%** |
| Germany | 26.9% | 26.9% | 7.0% | 4.7% | 4.0% | 0.8% | **3.2%** |
| India | -20.2% | -20.2% | -5.1% | -3.4% | -3.3% | -1.4% | **-1.9%** |
| Indonesia | -37.4% | -37.4% | -2.7% | -3.3% | -3.3% | -2.7% | **-0.6%** |
| Italy | -27.2% | -27.2% | -0.5% | 0.1% | -0.6% | -1.1% | **0.5%** |
| Japan | 53.2% | 53.2% | 1.0% | 1.7% | 1.7% | 2.3% | **-0.6%** |
| Korea | -8.6% | -8.6% | 3.8% | 1.1% | 1.1% | 0.1% | **1.1%** |
| Malaysia | 3.8% | 3.8% | 6.1% | 4.5% | 4.5% | 0.7% | **3.9%** |
| Mexico | -35.5% | -35.5% | -0.8% | -1.2% | -1.2% | -1.6% | **0.4%** |
| Netherlands | 31.2% | 31.2% | 8.3% | 8.4% | 5.9% | 0.6% | **5.4%** |
| Poland | -64.6% | -64.6% | -3.5% | -1.7% | -1.5% | -3.4% | **1.9%** |
| Russia | 5.4% | 5.4% | 4.0% | 0.1% | 2.2% | 2.7% | **-0.6%** |
| South Africa | -9.3% | -30.6% | -6.3% | -6.0% | -5.9% | -1.7% | **-4.1%** |
| Spain | -92.6% | -46.3% | -1.1% | 4.2% | 3.8% | 0.7% | **3.2%** |
| Sweden | -8.9% | 18.7% | 7.1% | 8.8% | 9.0% | 1.0% | **8.0%** |
| Switzerland | 131.7% | 131.7% | 13.4% | 10.3% | 10.5% | 11.3% | **-0.9%** |
| Thailand | -11.9% | -11.9% | 0.7% | -0.1% | 0.0% | -0.2% | **0.2%** |
| Turkey | -48.2% | -48.2% | -5.9% | -8.3% | -7.2% | -2.8% | **-4.5%** |
| United Kingdom | -18.0% | -18.0% | -3.7% | -2.4% | -3.0% | -0.4% | **-2.6%** |
| United States | -29.4% | -29.4% | -3.0% | -3.5% | -3.4% | -1.9% | **-1.5%** |

1/ Based on the CGER "ES" methodology.

**External Sustainability (ES) Approach: Translation of CA Gap to REER Gap**

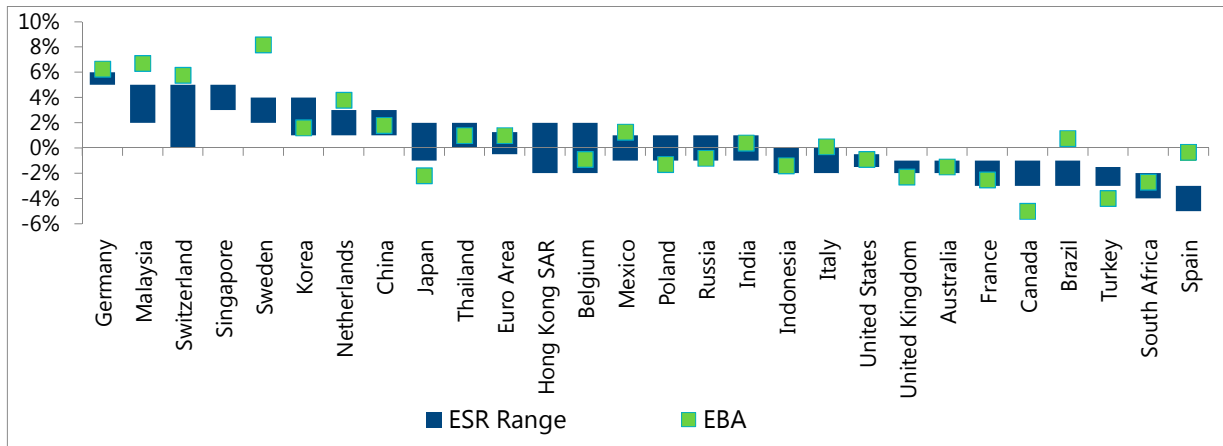| | ES CA/GDP<br>Gap 1/ | Assumed CA/REER<br>Elasticity 2/ | Corresponding<br>REER Gap 3/ |
|---|---|---|---|
| Australia | -2.6% | 0.16 | 16% |
| Belgium | -2.5% | 0.56 | 4% |
| Brazil | -3.0% | 0.12 | 25% |
| Canada | -1.6% | 0.22 | 7% |
| China | 2.0% | 0.23 | -9% |
| France | 0.3% | 0.20 | -2% |
| Germany | 3.2% | 0.36 | -9% |
| India | -1.9% | 0.15 | 13% |
| Indonesia | -0.6% | 0.17 | 3% |
| Italy | 0.5% | 0.21 | -3% |
| Japan | -0.6% | 0.13 | 5% |
| Korea | 1.1% | 0.23 | -5% |
| Malaysia | 3.9% | 0.46 | -8% |
| Mexico | 0.4% | 0.13 | -3% |
| Netherlands | 5.4% | 0.62 | -9% |
| Poland | 1.9% | 0.31 | -6% |
| Russia | -0.6% | 0.19 | 3% |
| South Africa | -4.1% | 0.21 | 20% |
| Spain | 3.2% | 0.25 | -13% |
| Sweden | 8.0% | 0.33 | -24% |
| Switzerland | -0.9% | 0.35 | 2% |
| Thailand | 0.2% | 0.28 | -1% |
| Turkey | -4.5% | 0.16 | 28% |
| United Kingdom | -2.6% | 0.21 | 12% |
| United States | -1.5% | 0.14 | 11% |

1/ Based on the CGER "ES" methodology.

2/ 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 0.71 for exports and 0.92 for imports, adjusted by the size of exports and imports in GDP.

3/ Based on the estimated current account gap and an assumed elasticity with respect to the REER.   Note that closure of a current account gap generally would require a shift in saving or investment rates as well as a movement in the REER.

## Comparison of External Sector Report Assessments and EBA Estimates

### Estimated Current Account Gaps (Percent of GDP)



### Estimated REER Gaps (Percent)