External Balance Assessment: A Successor to the CGER Methodology

A Project of the IMF's Research Department

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# "EBA" methodology as a successor to the well-known CGER

- Today: an introduction to EBA
- Ancestry: CA regression literature; CGER
- EBA is a project of the IMF Research Department, comprising:
  - a research effort to better <u>understand</u> CAs, and
  - development of an approach to <u>evaluating</u> CA s in a normative sense

EBA is also about real exchange rates...

### EBA's new goals, relative to CGER

- Focus on current accounts as much as on exchange rates
- Distinguish **normative** and **descriptive** analyses
- Add focus on impact of **policies**

#### EBA also aims at...

- taking explicit account of cyclical (higherfrequency) influences
- a more explicit treatment of uncertainties

### Recall the CGER approach:

Panel regression of <u>current account balances</u>:

CA/gdp = B(X) + e

X regressors: demographics, per capita income, relative growth rates, oil trade balance, fiscal balance, lagged CA

How to interpret the e residuals? As deviations from <u>fitted</u> <u>values interpreted as a CA norm.</u> What's a norm?

- Careful interpretation: "CA level <u>implied by fundamentals</u>"
- Temptation: "<u>equilibrium</u>" and/or <u>appropriate</u> level. An implied normative judgment?

# Why enhance CGER?

Issues of CGER <u>interpretation</u>:

- Residuals are sizable... reflect ignorance, not distortions?
- Unclear mix of descriptive analysis and normative assessment [example: fiscal]
- Assessment sounds normative, but doesn't provide a clear link to role of policies, policy implications

#### Why enhance CGER?

- And issues in CGER <u>regression specification</u>, including:
- What does lagged CA pick up ? Sustained distortions?
- Some plausible stories for S and I behavior are not captured by the CGER regressors (e.g., social insurance, shifts in capital markets)

#### Cycle in Global Risk Aversion, Cycle in EM Current Accounts

VIX and Mean Current Account of Emerging Market Economies



### What is the EBA approach?

EBA panel regression aims to better understand the CA:

 $CA/gdp = B_1 (Structural) + B_2 (Policies) + B_3 (Cyclical) + v$ 

Want a tight fit (small v residuals) to reduce uncertainty of analysis. But a small CA residual does <u>not</u> give a clean bill of health !

EBA strategy: identify policy gaps and their contributions to CA

EBA is not easy. Challenges:

- Need to quantify "policy gaps"...
- ...and some policies are difficult to measure in the first place
- Can improve fit but can't eliminate residuals, uncertainty

# EBA's CA regression specification (preliminary, work by Luis Catao and others)

- Has traditional regressors: demographics , relative income, relative growth, net oil exports, NFA
- But no lagged CA. No country dummies.
- Adds new variables, of 3 kinds:
  - cyclical and exogenous: terms of trade cycle; global capital market conditions (with differential effects)
  - *cyclical and policy-influenced*: output gap (proxy for demand shock), real interest differential
  - *policies*: fiscal balance; public health expenditure, social protection index, polity, controls on capital inflows
- Signs as expected, most significant

# How well does the CA regression work, as a descriptive tool?

Std. error = 1.8% GDP. Improved fit, even with annual data, no dummies, no lagged CA.

Yet some residuals are very large. For 2010: •Largest negative residual: Greece •Largest positive residuals: Malaysia, Sweden, Thailand



# What do panel regression results mean *for an individual country*?

#### For countries with small CA residuals, we ask:

- what are the key drivers of the CA balance?
- is the well-fitted CA driven by inappropriate policies? And is the CA sustainable?
  - Example: prelim. regression suggests that CA deficit of Turkey comes in part from a weak fiscal balance.
  - For countries with large CA surpluses, what are the estimated contributions of policies?

#### India



#### Turkey



### Spain



#### Actual and Fitted CA/GDP for Spain

# What do panel regression results mean *for an individual country*?

#### For countries with fairly large CA residuals, we ask:

- what do we think is missing from the regression's story, and is it a good or bad thing?
- For these countries as well, need to ask whether *fitted* values reflect policy distortions...
- ... and to consider sustainability

## Italy

#### Actual and Fitted CA/GDP for Italy



#### Germany



Actual and Fitted CA/GDP for Germany

# EBA Analysis has 3 legs:

#### **1.** Current Account analysis

- 2. Also: Real Exchange Rate analysis
  - Again, add cyclical and policy drivers
  - Also new: aim to assess the <u>level</u> of the RER (not just the level of an RER <u>index</u> relative to its past average)

#### 3. And: External Sustainability analysis

- Various enhancements of CGER's ES approach.
- Hope to add new approach based on intertemporal constraint (proposed by Martin Evans)

# **EBA Takeaways**

#### EBA builds on the CGER base by:

- Moving the boundary between uncertainty and what we can explain...
- ....by adding explicit role for policies, and by modeling responses to higher-frequency shocks
- Facilitating normative analysis and policy discussions...
- ....but need for informed judgment remains.