“Growth beyond imbalances, sustainable growth rates and output gap reassessment”

by Enrique Alberola, Ángel Estrada & Daniel Santabárbara

(Banco De España)

Discussant: David Turner (OECD)

3rd WB-BE Academic Conference “Financing growth: Levers, Boosters and Brakes”
Paper addresses important conceptual, technical & policy issues

- **Conceptual**: No pre-crisis warning signal from inflation, but build-up of other imbalances.

- **Technical**: Can other information be used to anchor real-time estimates of potential?

- **Policy**: Just as output gaps most shaky, EU has incorporated them in fiscal frameworks.
Perspective of comments

• Is there a recipe which can be followed across many countries?

• How sensitive to various judgements?

• How does current paper differ from similar approaches, eg by Borio et al (2013)?
Estimating “finance-neutral” gaps

1) \( y_t = y_t^* + \beta(y_{t-1} - y_{t-1}^*) + \sum_{j=1}^{J} a_j(x_{jt} - \bar{x}_j) + \epsilon_t \)

2) \( \Delta y_t^* = \Delta y_{t-1}^* + \nu_t \)

\( y = \log \text{ real GDP}, \; y^* = \log \text{ potential} \)

\( x_j = \text{financial imbalance indicators (real house price growth, real credit growth, real interest rates ... + ?)} \)

Can method of Borio et al. (2013) be applied generally across many countries?
(2) Financial variables do anchor output gap estimates for some countries

United States

Spain

![Graph showing financial variables for the United States and Spain.](image-url)
(2) But doesn’t work so well for other countries ....
(1)… And for some countries generates questionable results: e.g. Canada

Canada

- Real short-term interest rates and house price growth as significant financial variables
- => Continuous overheating for last 10 yrs apart from a couple of Qs in 2009 ??
(2)... And for some countries generates questionable results: e.g. Japan

- Results very dependent on whether Real credit and house price growth average over long-sample (incl 70s) or shorter sample (form mid-80s)
Summary of results: mixed

<table>
<thead>
<tr>
<th></th>
<th>USA, UK, IRL, ESP</th>
<th>GRC, PRT, ITA, JPN, (CAN) + ....</th>
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<tbody>
<tr>
<td>Significance of credit, interest rates &amp; housing imbalance indicators</td>
<td>Yes</td>
<td>Less so, Marginal</td>
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<tr>
<td>Plausible narrative (pre-crisis over-heating ..)</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Reduces Real-time revisions</td>
<td>Yes</td>
<td>Not much</td>
</tr>
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Current paper different results from Borio et al, e.g. Spain

- Borio et al. (2012)
- Alberola et al. (2013)
Tentative conclusion: no simple recipe for anchoring trend output

• For countries where financial variables do help anchor $y^*$ is it in the right place? Danger of focussing on the last crisis not the next one?

• Same imbalance indicators don’t work for all countries

• Dependent on choice & period over which averaged, especially at end-point.

• Best approach?: calculate alternative gap measures in parallel & worry when they diverge from conventional measures
What are the gains from a more disaggregated approach?

• Additional complication or better for story-telling?

• ...but then would it be better to customise choice of anchor variables depending on factor of production, eg in labour market:
  - Net migration & trend participation
  - Long-term unemp & eqbm unemployment
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Additional slides
Selected References


OECD published estimates of the output gap (%)

United States

Spain