Assessing the discretionary fiscal effort by alternative indicators - The case of Finland

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The aim of the paper

1. To compare alternative indicators that can be used to assess the fiscal stance.

2. To better understand the pros and cons of different indicators.

[3. To evaluate the impact of ageing to different indicators.]

4. To contribute to the discussion ongoing in Finland on the appropriate fiscal stance and its measurement.

What was done?

Calculated different metrics, following the COM definitions as closely as we could, over the periods we had data for:

 1. Structural balance (SB) and its change (DSB)

 2. Expenditure benchmark (EB)

 3. Discretionary fiscal effort (DFE)

 4. Bottom-up indicator.

Always used MoF data/forecast if not indicated otherwise.

DEFINITIONS ON METRICS

Structural balance and its change

Structural balance is $sb_t = nb_t - \gamma \times og_t$

Where

- nb_t **is the nominal balance (relative to GDP)**
- og_t **is the output gap and**
- γ **is the semi-elasticity of the budget balance to the cycle.**

Then the change of structural balance, Δsb_t*, is*

$$\Delta nb_t - \gamma \times \Delta og_t = (nb_t - nb_{t-1}) - \gamma \times (og_t - og_{t-1})$$

Difference between two vintages

*We also evaluate what drives the **change** in estimated structural balance at year t over two different vintages from (t-1) to (t+1)*

$$E_{t+1}(sb_t) - E_{t-1}(sb_t) = [(nb_t) - E_{t-1}(nb_t)]$$

$$-\gamma \cdot [E_{t+1}(og_t) - E_{t-1}(og_t)],$$

As we already have notified data for year t at t+1, $[(nb_t) - E_{t-1}(nb_t)]$ is the forecast error in the headline deficit while $-\gamma \cdot [E_{t+1}(og_t) - E_{t-1}(og_t)]$ is the impact of output gap revision.

Expenditure benchmark, EB

The idea is to compare the growth of real net expenditure to the growth of potential output adjusted for the need to respect the MTO, i.e.

$$g_t = \frac{E_t - \Delta R_t - E_{t-1}}{E_{t-1}} \lessgtr pot_t - Res_t^{MTO} \cdot \frac{adj_t}{0.5} \cdot \frac{50}{P/_{gdp}},$$

Where

$$Res_t^{MTO} \in \{0,1\}.$$

Discretionary Fiscal Effort, DFE

Combines bottom-up and top-down:

1. Revenue effort is calculated bottom-up adding up effects of new tax measures.

2. Expenditure effort is calculated top-down as in expenditure benchmark, i.e. comparing the growth of adjusted expenditures to the medium term growth of potential output.

Bottom-up

By collecting data from general government fiscal plan one can aggregate the effects of individual policies from both expenditure and revenue side. **Does not include data from municipalities.**

In domestic fora, this is the indicator that is used to measure government's "success" when discussing government's implementation record.

RESULTS

Huge uncertainty on output gap estimates...

Output gap estimates for 2007 to 2021 in different forecast vintages

... but sometimes we have also large forecast errors in headline deficit

% of GDP	2015	2016
Headline deficit, spring 2015	-3.4	-3.2
Headline deficit, spring 2017	-2.7	-1.9
Structural balance, spring 2015	-1.8	-2.3
Structural balance, spring 2017	-1.2	-0.9
Output gap, spring 2015	-2.8	-1.6
Output gap, spring 2017	-2.6	-1.7
Spring 15 --> Spring 17		
Change in headline deficit	0.7	1.3
Change in output gap	0.1	-0.1
Change in structural balance	**0.6**	**1.3**

Forecast error in headline deficit of 2016: is partially explained by the fact that spring 2015 forecast contains no policy measures as 2015 was an election year.

# ... cause large revisions to the change of structural balance

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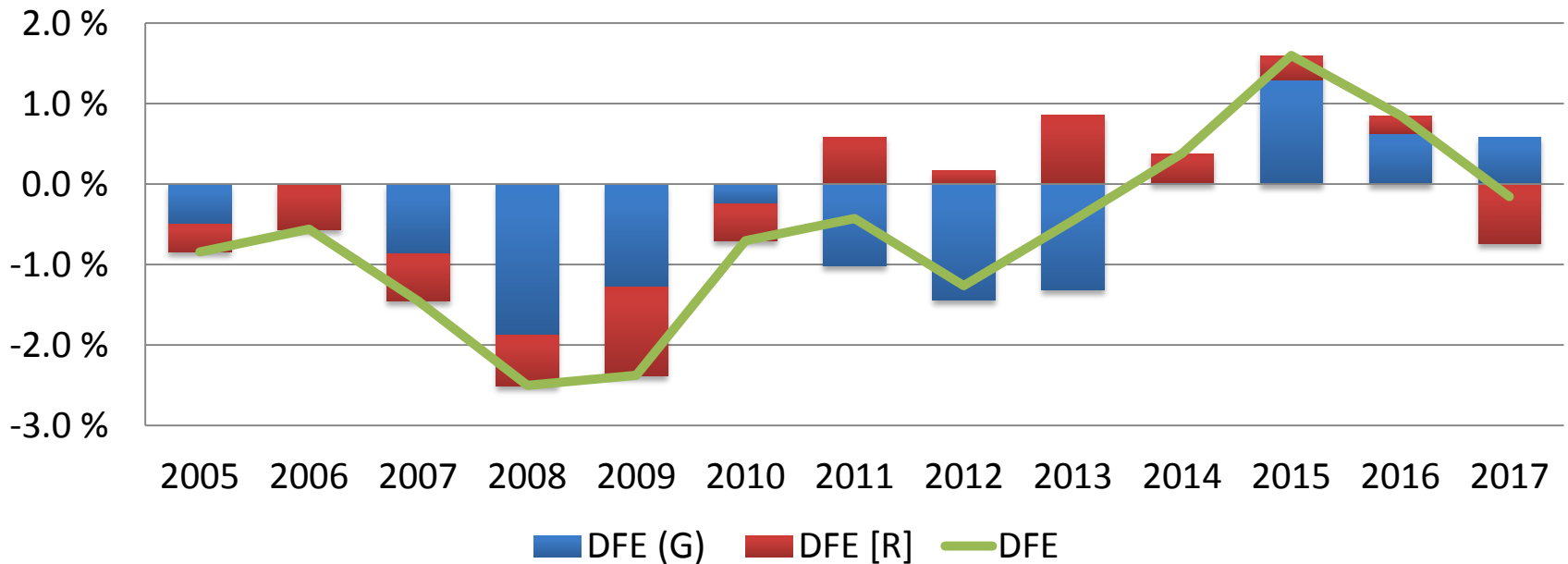$\Delta sb_t = -0.5$

$\Delta sb_t = 0.3$

Growth of net expenditure on 2011-2016
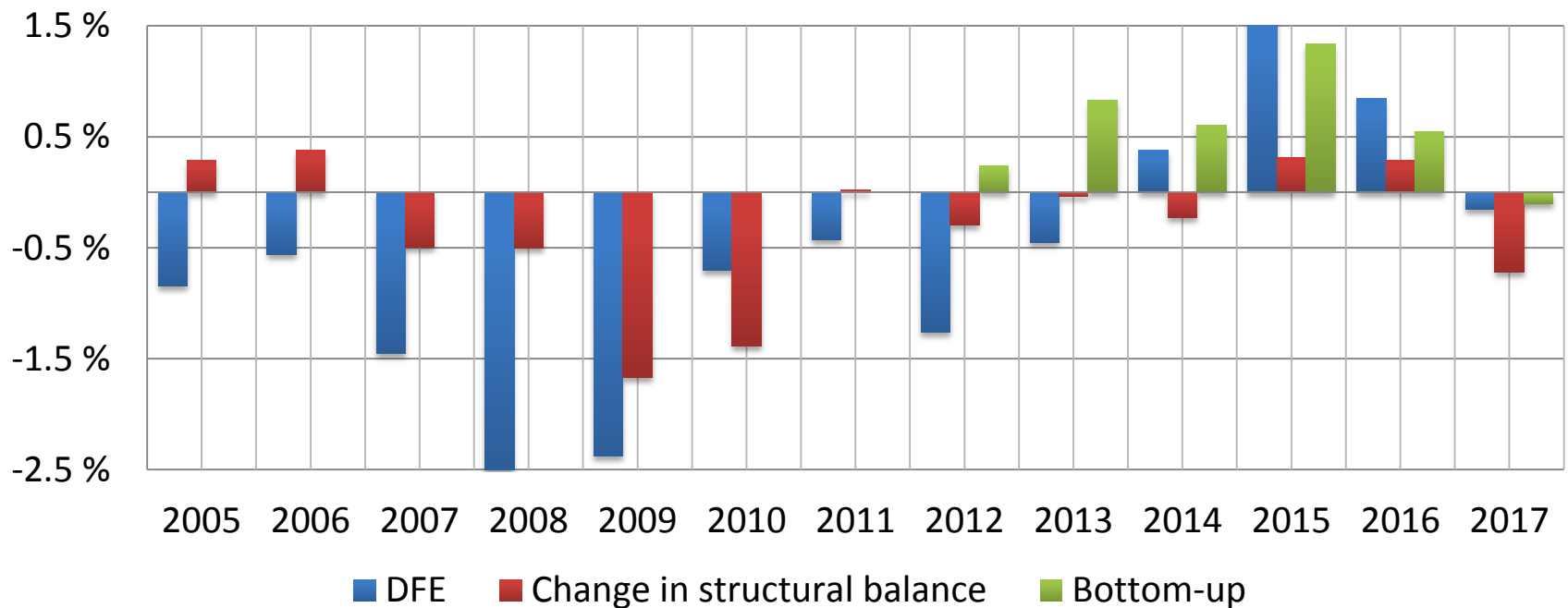
Fiscal stance according to Expenditure benchmark
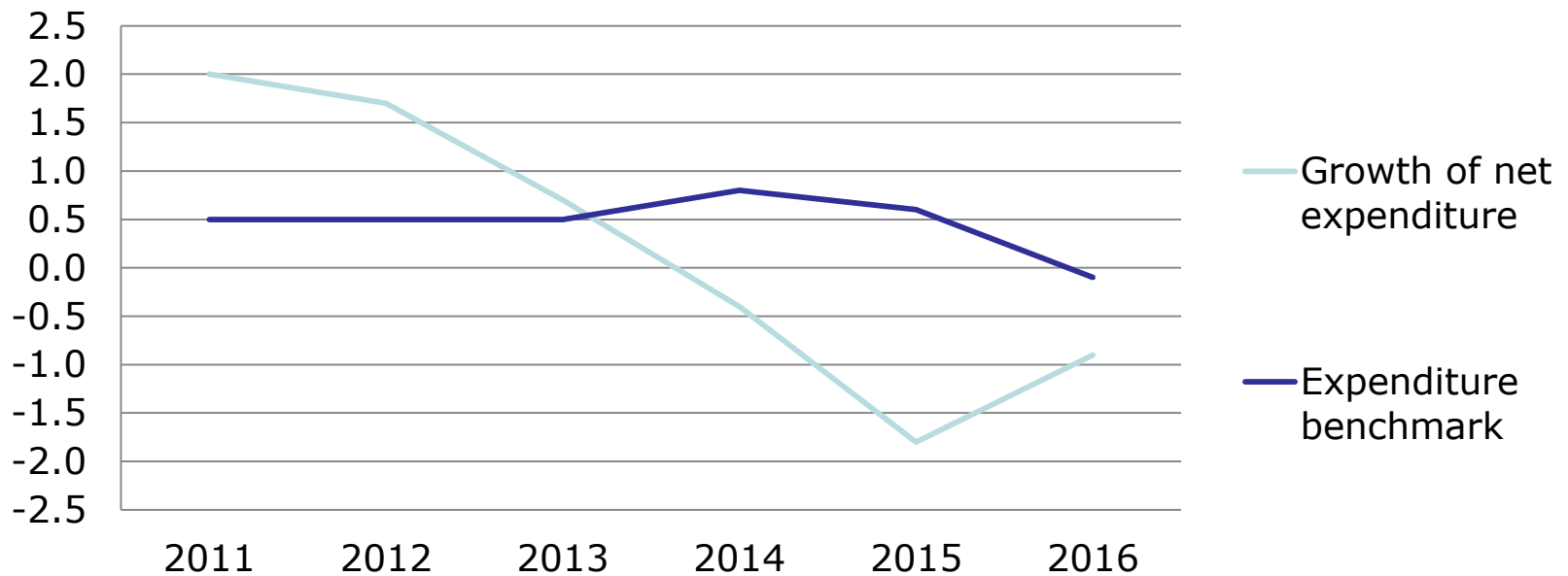
Discretionary fiscal effort, 2005-2017

DFE with its revenue (R) and expenditure (G) components

Legend: DFE (G), DFE [R], DFE

Comparison of the indicators

Fiscal stance according to 3 different indicators

Conclusions

1. The indicators are surrounded by a large uncertainty and revisions can be large too.

2. Most of the times different indicators are in agreement on the sign of the effect. However, the estimated size of the effect may vary considerably.

3. To get a balanced view on fiscal stance, one should use alternative indicators.

For reference

Valtiovarainministeriön julkaisu 40/2017: Finanssipolitiikan päätösperäisyyden arvioiminen – vaihtoehtoisten mittareiden esittely

(Ahola, Pääkkönen, Tamminen)

http://vm.fi/julkaisu?pubid=22601