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Effects of Selected Economic Policy Measures on the German Current Account Balance

NiGEM simulation results

Kiel Institute for the World Economy

16 November 2017

Member of Leibniz Association

Overview

- Effects of 8 economic policy measures selected by the German Ministry of Finance
- Focus
  - » Effects of a standard shock on the current account balance until 2021
  - » Quantification of a shock sufficient to reduce the current account surplus by 2 percent (below 6 percent, respectively).
- Framework
  - » International structural macro model NiGEM
- Checks
  - » Different assumptions about expectations and monetary policy response
  - » Comparison to relevant literature
  - » Theoretical plausibility checks

Measures

- M1: Increase of public investment share
- M2: Increase of public consumption
- M3: Tax cuts in Germany
- M4: Higher wage growth in Germany
- M5: Completion of a EU-US-Free Trade Treaty
- M6: Monetary tightening by the ECB
- M7: Structural reforms in EU-countries (EU-COM, CSR)
- M8: Liberalisation of services within WTO

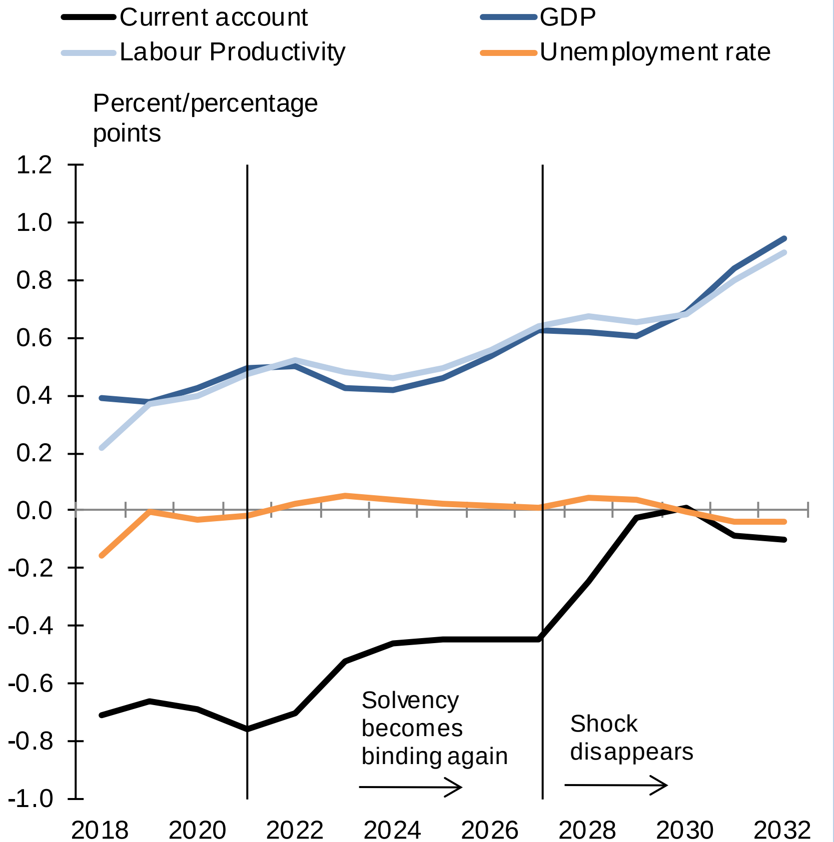
Scenarios for robustness checks

NiGEM-Settings⇨ Scenario⇩	**Expectations**	**Monetary Policy** (**M**onetary **R**esponse)	**Fiscal Rule** (**S**olvency **R**ule)
(A) ExpR_MRon_SRon	rational	reaction	binding
(B) ExpA_MRon_SRon	adaptive	reaction	binding
(C) ExpR_MRon_SRoff	rational	reaction	non-binding
(D) ExpA_MRon_SRoff	adaptive	reaction	non-binding
(E) ExpR_MRoff_SRon	rational	no reaction	binding
(F) ExpA_MRoff_SRon	adaptive	no reaction	binding
(G) ExpR_MRoff_SRoff	rational	no reaction	non-binding
(H) ExpA_MRoff_SRoff	adaptive	no reaction	non-binding

MRoff: No MP response before 2019-Q3; **SRoff**: Fiscal rule not binding before 2022

Government investment increase over 10 years

Increase in government investment by 1% of GDP

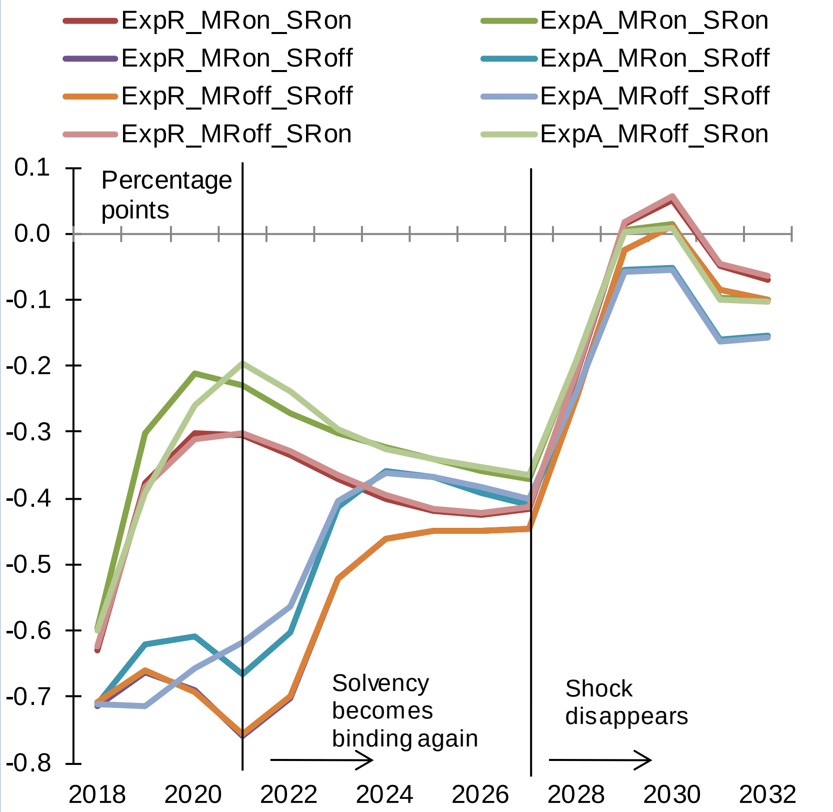


Deviation from baseline solution; current account in % of GDP;Scenario: ExpR_MRon_SRoff

- Reduction of C/A surplus by 0.7 pp
- From 2022 effect is reduced to 0.4 pp as the fiscal rule kicks in
- No permanent effect on C/A balance after shock disappears
- GDP and labour productivity rise permanently

Robustness checks

Increase in government investment by 1% of GDP

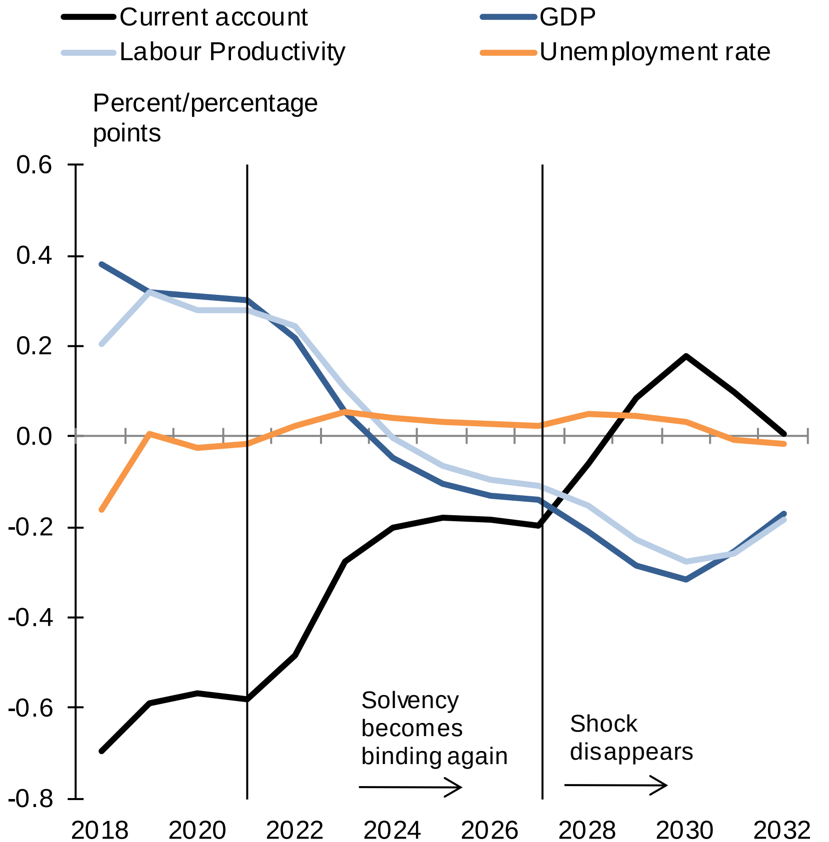


Deviation from baseline solution; current account in % of GDP.

- Debt financing is essential for the effect on the C/A
- Little impact of different assumptions about monetary policy and expectation building
- Monetary policy reaction is important for transmission on GDP in other (euro area) countries, not on the German current account
- Results are more or less in line with literature also when different models (DSGE) are used
- 2 percent reduction of C/A would need 3 pp increase of investment; 1pp-increase means 50 percent rise in volume

Increase of government consumption

Increase in government consumption by 1% of GDP



Deviation from baseline solution; current account in % of GDP;Scenario: ExpR_MRon_SRoff

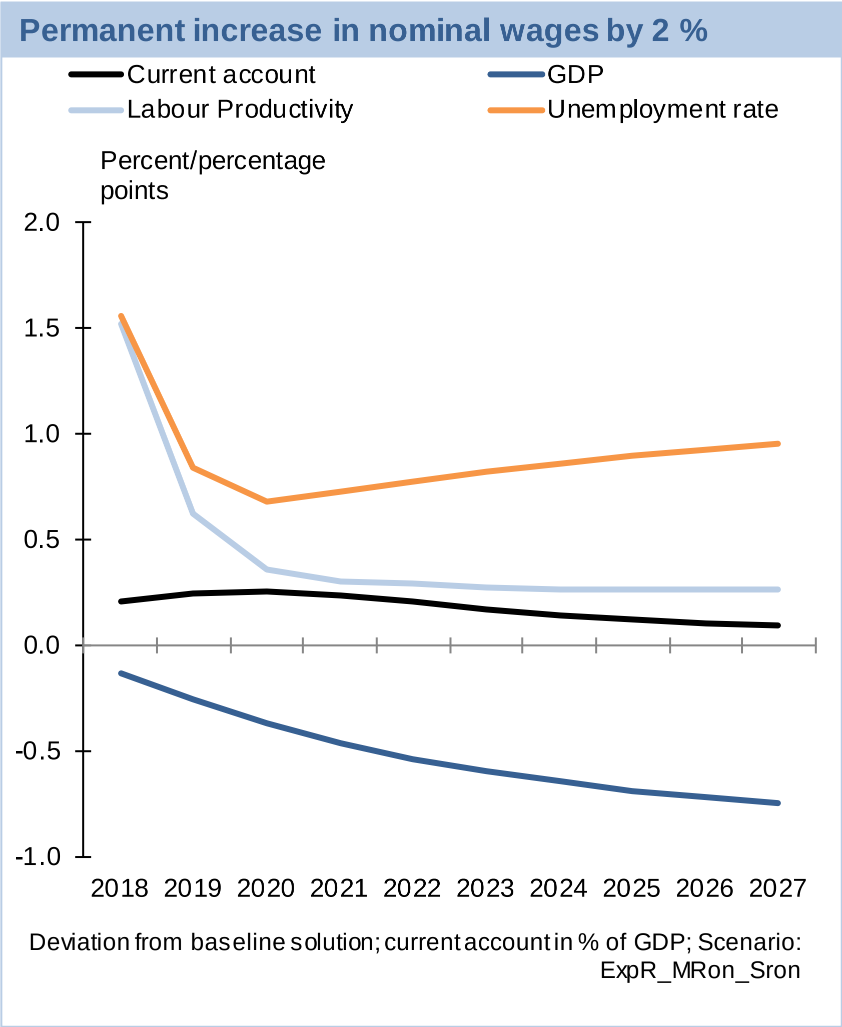
- Similar effects on the C/A
- GDP and productivity rise initially but fall below baseline after fiscal rule kicks in and shock disappears

Tax cuts

- **Income tax reduction (1 pc of GDP, 1.2 pc effective tax rate from 30 pc)**
  - C/A deteriorates by 0.4 pp until fiscal rule kicks in
  - Temporary increase of GDP and productivity
  - Little impact of expectations building and MP on results
  - Smaller impact in the literature when DSGE models are used (IMF EU COM)

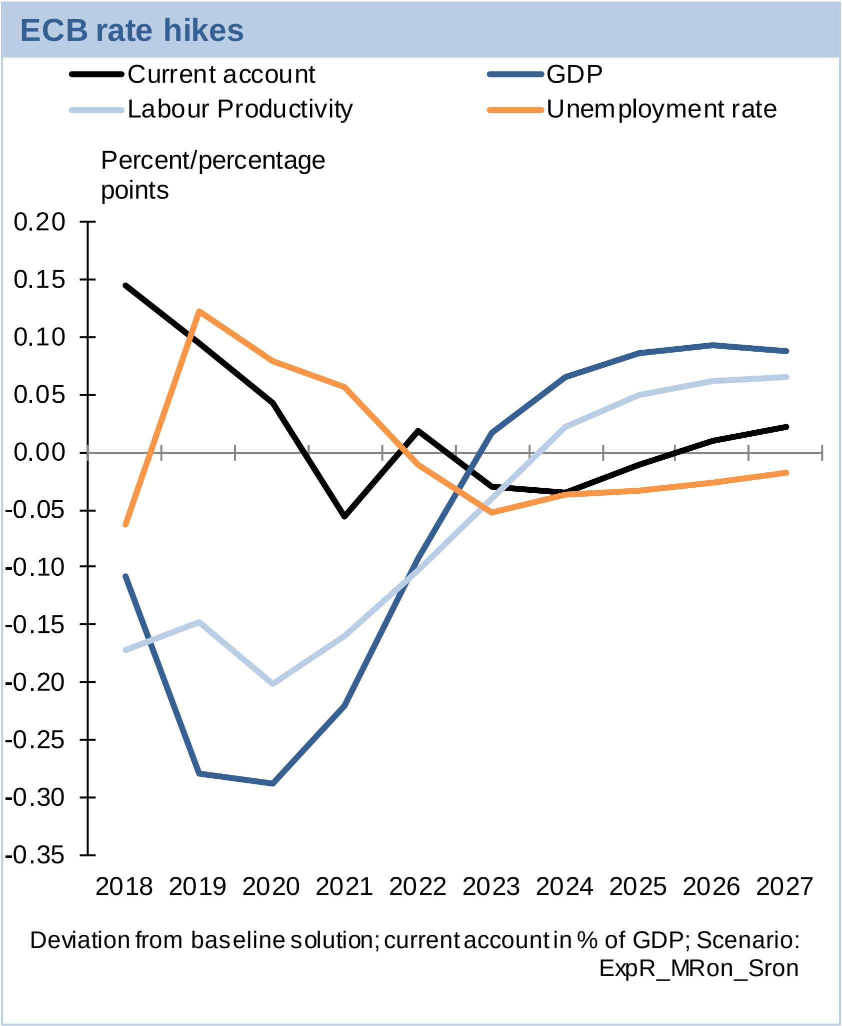
- **Corporate tax reduction (1 pc of GDP, 6 pp effective tax rate,from 19 pc):**
  - C/A deteriorates by more than 1 pc until fiscal rule kicks in (endogenous adjustment of income tax)
  - Permanent effect of around 0.5 pc, GDP rises by 0.5 pc
  - Little impact of expectations building and MP on results
  - DSGE model (IMF) has smaller effect

Wage increases



- C/A rises
- GDP falls, Unemployment and productivity rise
- Effect is stronger with adaptive expectations
- Exports fall, but domestic demand falls too and ToT improve
- Similar results in the literature with similar models, other studies find negative but small relation between wages an C/A

Monetary policy tightening



- ECB increases rates starting in 2018Q2 (1 year earlier than in the baseline)
- GDP and productivity fall
- Small temporary rise in C/A
- With adaptive expectations the effect is delayed but larger
- NiGEM result is in contrast with typical assumption that low interest rates depress the x-rate and push up the C/A

Other policies

- **Structural reforms along the lines of EU COM**
  - Exogenous, permanent extra increase of rate of technical progress (1pc per year over 5 years) in FR, SP, IT, GR, PT
  - C/A tends to rise as growth in reform countries improves
  - Expectations matter for monetary policy reaction
  - Effect is theoretically unclear, ambiguous findings in the literature
- **US-EU tradeagreement**
  - 7 pc reduction of export prices in US and EU simulated with NiGEM extension featuring bilateral export prices
  - Deterioration of German C/A by 0.2 pc
  - Impact too small to achieve 2-percent reduction even with complete liberalization (incl. non-tariff barriers)
- Services trade liberalization (WTO)
  - Prices for services exports fall by 10 pc in G5 countries + China
  - Small deterioration of C/A in Germany (0.1-0.2 pp)

Summary/conclusions

- Significant impact only when debt financing is involved
- Largest impact for increase in public investment and corporate tax cuts
- Size of the impact even then is too small to expect a substantial reduction of the current account (> 2 pp) at politically or economically feasible dimensions of the shock → combination of measures necessary
- Higher wage growth may not help bringing C/A surplus down
- Limited scope for (traditional) government policies to affect the current account (there may be other forces driving the saving/investment balance)
- There may be good reasons to pursue some of the policies, but the size the C/A balance should not be a policy target

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Thank you!

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