

# Does the Confidence Fairy Exist?

## Evidence from a New Narrative Dataset on Fiscal Austerity Announcements

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Fiscal Sustainability, XXI Century, Madrid

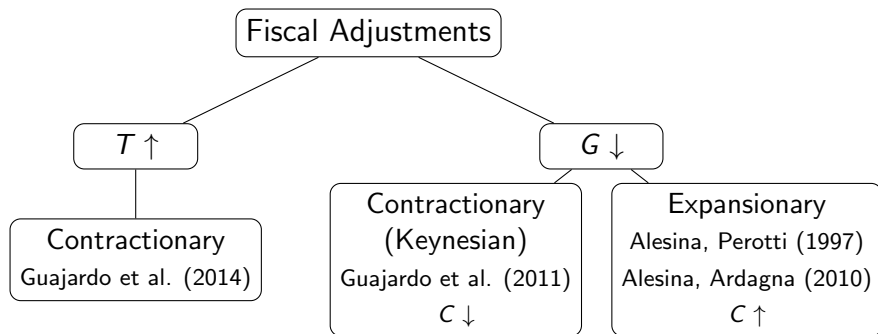
*'I firmly believe that in the current circumstances, confidence-inspiring policies will foster and not hamper economic recovery, because confidence is the key factor today.'*

*(Jean-Claude Trichet, La Repubblica, 2010 )*

*'The need for fiscal austerity rests on the belief that invisible vigilantes will punish us if we're bad and the confidence fairy will reward us if we're good.'*

*(Paul Krugman, The New York Times, 2010)*

# Effects of Fiscal Adjustments



## G ↓ versus T ↑

- Even when G ↓ are contractionary, smaller output drop than for T ↑ (Guajardo et al., 2014; Alesina et al., 2015).

Why?

- Labor market effects (Ardagna, 2004)
- More expansionary monetary policy (Guajardo et al., 2014)
- A spending-based consolidation may have positive expectation effects (Blanchard, 1990)
  - Lower need for larger future adjustments is good news
  - If the adjustment is a sign that government consumption will be permanently reduced

# Confidence Reacts to Fiscal Adjustments...

## Consumer confidence

- Bachmann and Sims (2012) - structural VAR, U.S.A.
  - Positive reaction of consumer confidence to increases in government consumption, only in a recession
- Beetsma et al. (2015) - monthly event study, panel of OECD countries
  - Negative reaction of consumer confidence to austerity

## Government bond yields

- Ardagna (2009) - annual data, panel of OECD countries
  - Yields of long-term government bonds fall when CAPB improves.
- Akitoby and Stratmann (2008) - annual data, panel of EMEs
  - Fiscal adjustment reduces sovereign bond spreads.

## ...Differently for Spending and Revenue Measures

	Tax-Based	Spending-Based	
Consumer Confidence	↓	=	Beetsma et al. (2015)
Producer Confidence	↓	↑	Alesina et al. (2015)
Gov. bond yield spreads	↓↓	↓	Akitoby, Stratmann (2008)
Government bond yields		↓	Ardagna (2009)

# This paper

Q1. Does the confidence channel contribute to the transmission of fiscal shocks onto real variables?

Q2. Do responses to announcements differ for revenues versus spending based measures?

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# This paper

- Aims to isolate the role of the confidence channel by using announcements of future fiscal policy actions.

# Outline

- 1 Data Contribution
- 2 Panel VAR
- 3 Counterfactual Analysis
- 4 Announcements of Revenue versus Spending-Based Plans
- 5 Revenue and Spending Components of All Announcements
- 6 Difference Between Revenue and Spending Plans
- 7 Conclusion

# Fiscal Consolidations: Annual Data

- Devries et al. (2011): annual dataset with implemented fiscal consolidations ( $CS_{i,t}$ )
  - 'Narrative approach'- official records: Budget Speeches, IMF Reports, OECD Economic Surveys
  - Exogenous to business cycle dynamics
  - 1978-2009, 13 European countries, 114 consolidations
- Alesina et al. (2015a): anticipated ( $CS_{i,t}^A$ ) and unanticipated ( $CS_{i,t}^U$ ) components of implemented measures
  - Alesina et al. (2015b): extend time sample to 2009-2013

# Limitations of Annual Data

- ① Recording measures when implemented ignores anticipation effects (legislative and implementation lags).
- ② Alesina et al. (2015) record as unanticipated measures announced in the fall of the year before, so this may generate anticipation.
- ③ There may be more than one announcement moment within a year.

# New Dataset of Fiscal Consolidation Announcements

- Real-time policy announcements based on official documents and OECD reports, checked against newspaper articles.
- Expand the available data by identifying the quarter when the government released information about the consolidation
- Extend coverage of Alesina et al. (2015) data to include Finland, the Netherlands, Sweden
- Compute the value of the consolidation announcement by summing its impact on the primary budget balance in all years concerned.

# Fiscal Consolidations: Announcement Data

quarter	1992:Q1	1992:Q3	1992:Q4	1993:Q2	1993:Q3
month	March	August	October	April	July
<i>spend</i>	0.80			0.10	
<i>spend</i> <sub>t+1</sub>	-0.40	0.79		0.23	0.37
<i>tax</i>	0.99			0.19	
<i>tax</i> <sub>t+1</sub>	-0.50	0.53	0.16	0.55	
Full announcement	0.89	1.32	0.16	1.07	0.37
Revenue component	0.49	0.53	0.16	0.74	0.00
Spending component	0.40	0.79	0.00	0.33	0.37
Type of announcement	TB	SB	TB	TB	SB

News: Belgium 1992-1994

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# PVAR Model

$$Y_{i,t} = A(L)Y_{i,t-1} + U_{i,t}$$

$U_{i,t}$  = zero-mean, stationary reduced-form disturbance

$$Y_{i,t} = [F_{i,t}, CC_{i,t}, LTI_{i,t}, I_{i,t}, C_{i,t}, GDP_{i,t}]'$$

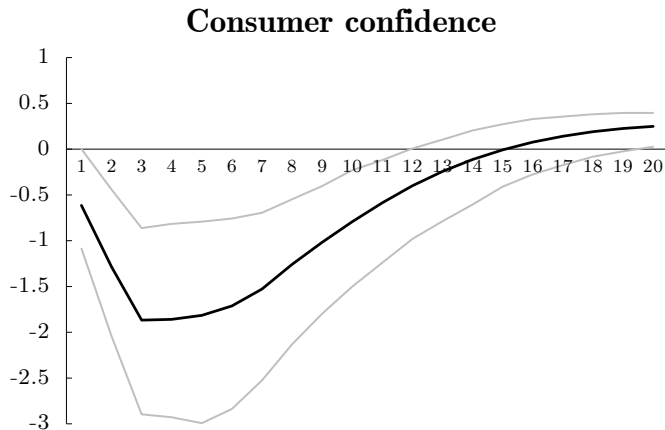
- $F$  = announcement shock (% of GDP),  $CC$  = log-consumer confidence index,  $LTI$  = long-term government bond yield,  $I$  = log-private investment,  $C$  = log-private consumption,  $GDP$  = log-real GDP.
- Baseline: VAR in levels, 4 lags, country fixed effects, country-specific trends, seasonal dummies



# Identification

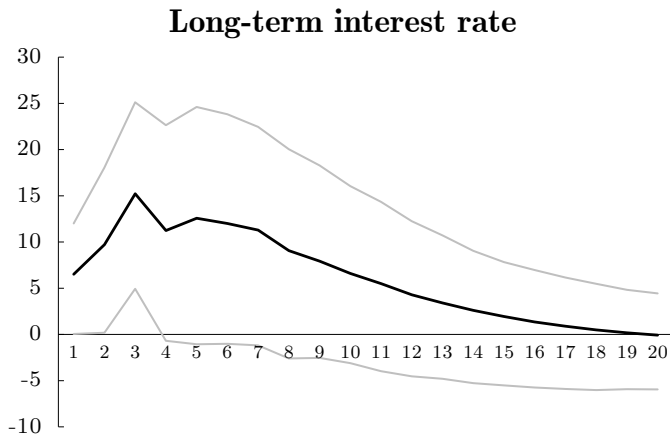
- Choleski factorization with  $F_{i,t}$  shock ordered first
- Responses invariant to ordering of variables following shock (Christiano et al., 1999)
- $F_{i,t}$  unanticipated at quarterly frequency
- $F_{i,t}$  exogenous to business cycle

# Impulse Responses (CC)



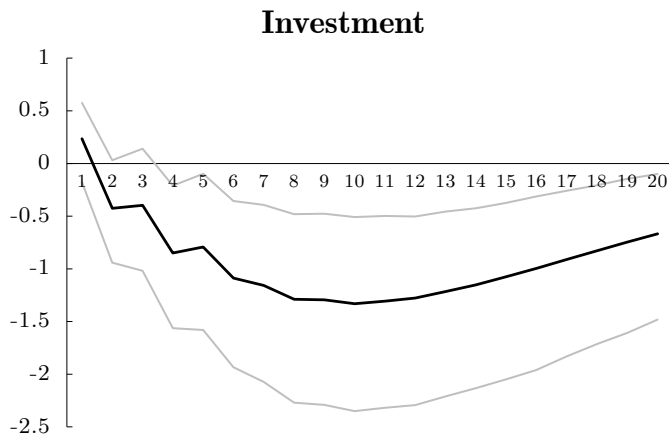
Impulse responses to an austerity announcement of 1% of GDP.  
90% confidence bands based on 1000 bootstrap replications.

# Impulse Responses (*LTI*)



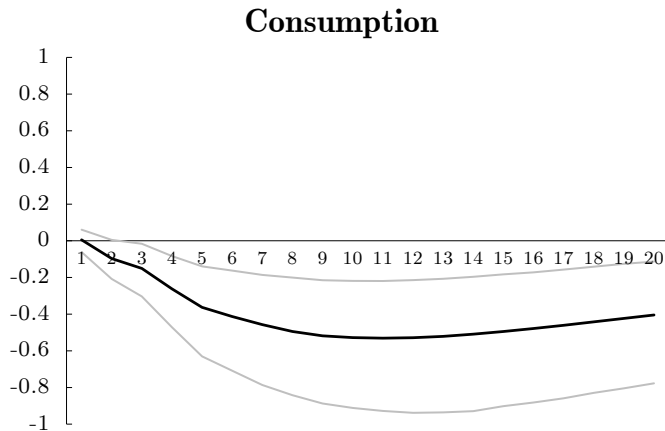
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# Impulse Responses (*I*)



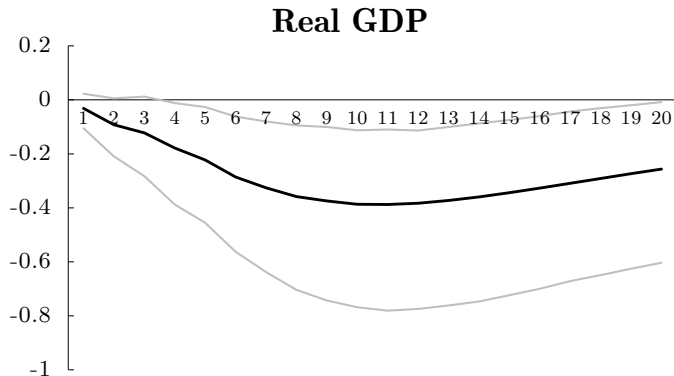
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# Impulse Responses (C)



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# Impulse Responses (*GDP*)



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# Robustness

- Different deterministic components [▶ Here](#)
- Sample choice
  - Time sample [▶ Here](#)
  - Country sample [▶ Here](#)
- Alternative specifications [▶ Here](#)
- Reduced form local projection IRFs [▶ Here](#)

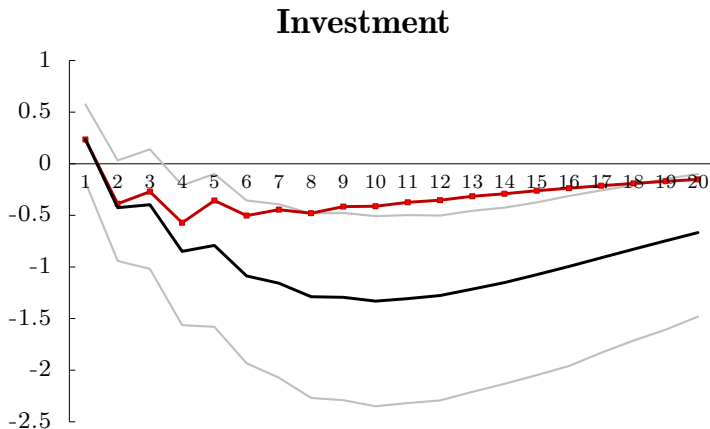
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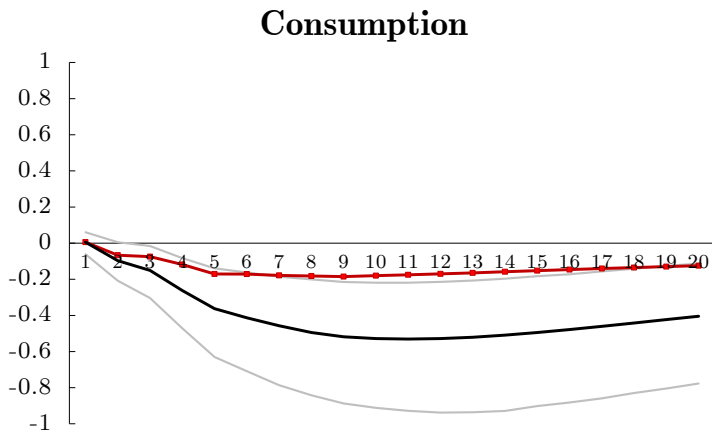
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# Joint Confidence Channel



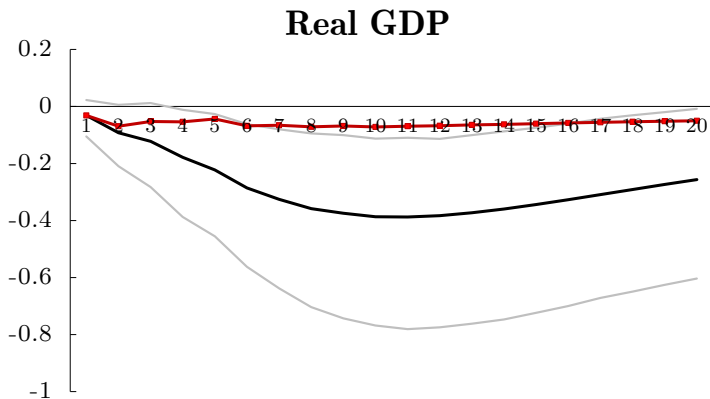
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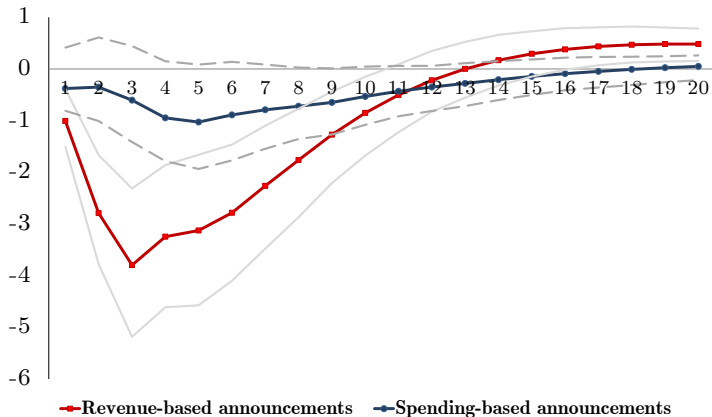
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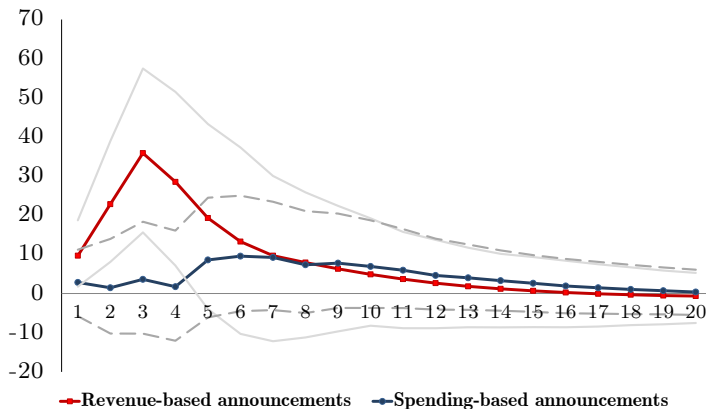
# Revenue and Spending-Based Announcements

## Consumer confidence



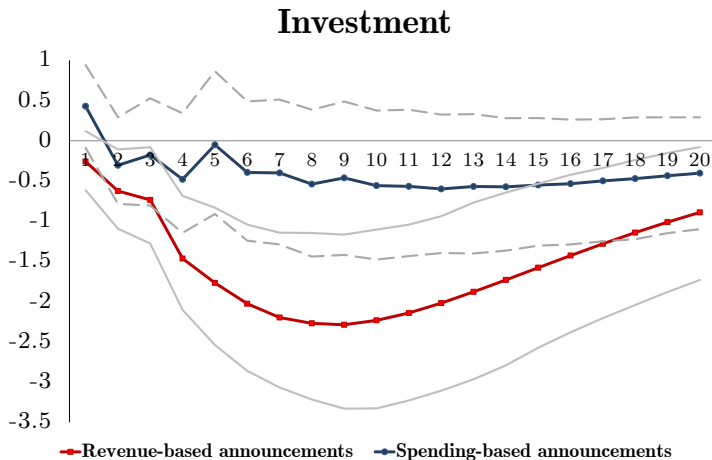
# Revenue and Spending-Based Announcements

## Long-term interest rate



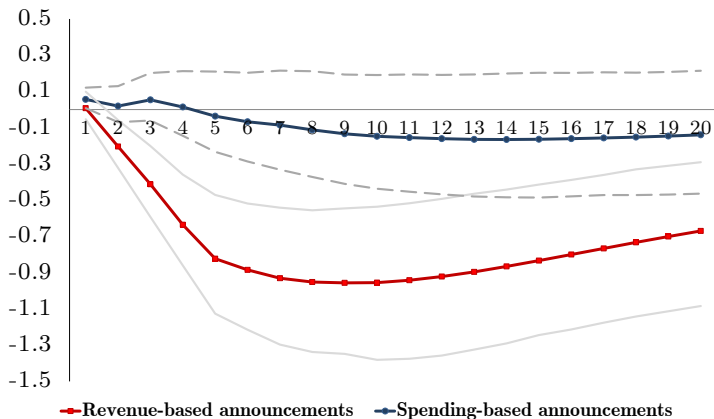


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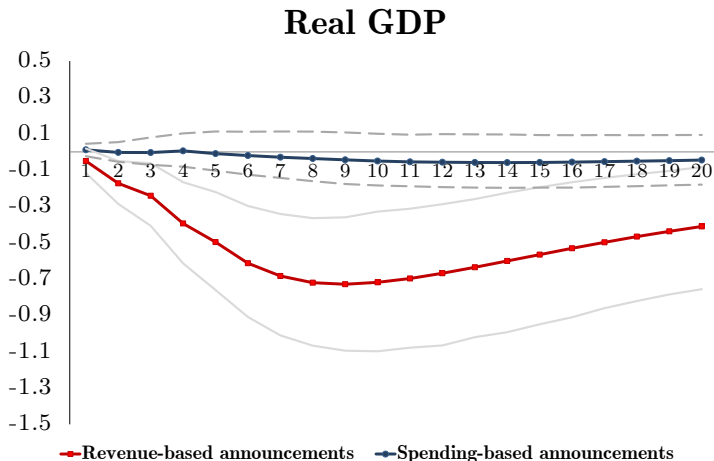


# Revenue and Spending-Based Announcements

## Consumption



# Revenue and Spending-Based Announcements

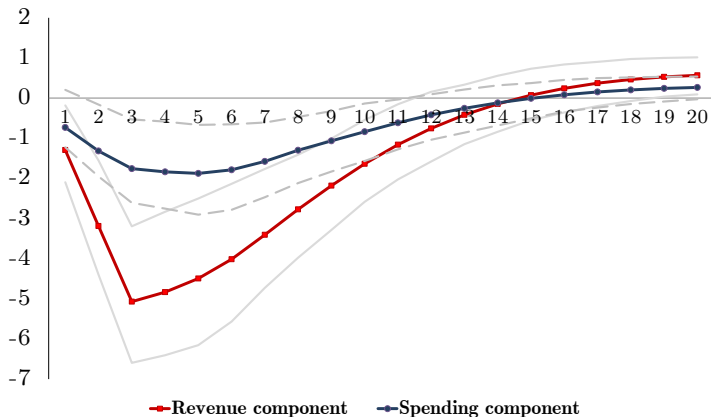


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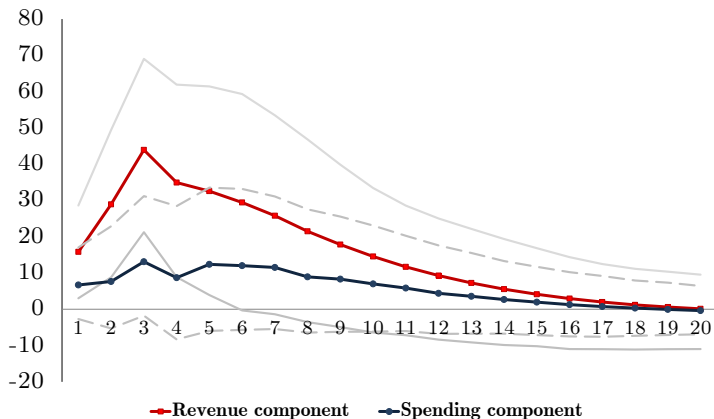
# Revenue and Spending Components of Announcement

## Consumer confidence

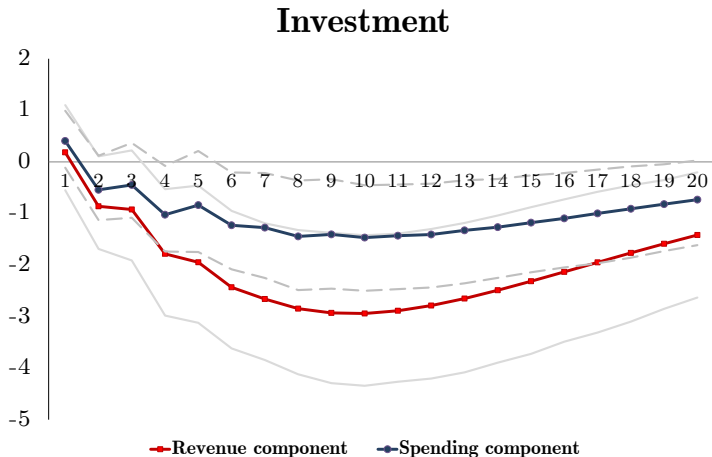


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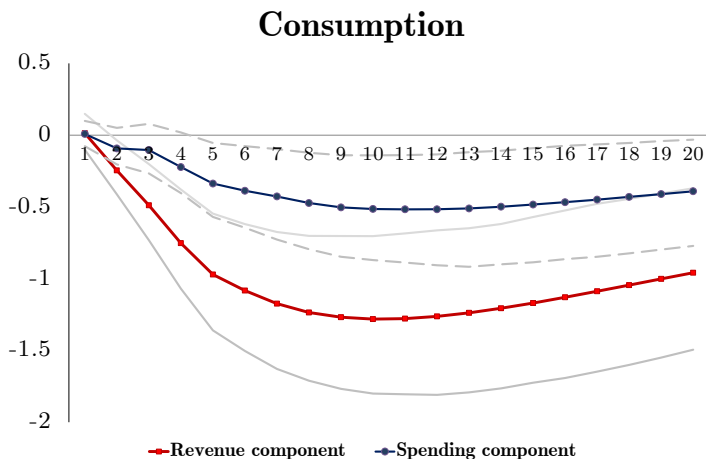
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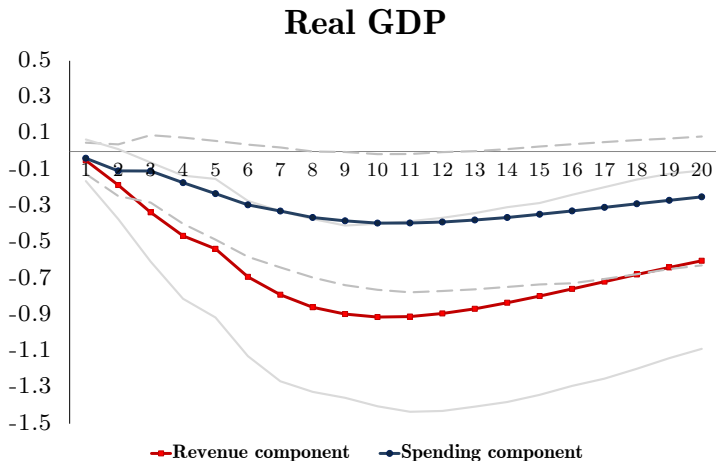


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# What Explains The Difference Between Revenue and Spending?

- **Inflation expectations?**
  - We control for ex-post CPI and ex-ante one-year ahead inflation expectations. No significant difference in responses.
  - Monetary policy (Guajardo et al., 2014)?
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- Credibility? The extent of follow-up of the plan.
- Deviations of implementations from plans: larger for spending than for tax components of plans.

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- Consumer confidence drops and long-term bond yields increase (=“expectations”) in response to announcement shock.
- Output, investment and consumption react to announcements with a lag
- The joint “expectations channel” explains most of the movement in real variables.
- Stronger effect of revenue- than spending-based announcements.

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## Further work

- Difference between revenue and expenditure measures: credibility
- Difference between revenue and expenditure measures: disaggregate further (VAT, income tax, etc.)
- Trade-off short-term and medium-term effects
- Effects dependent on business cycle (projection method)

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Two Fairies. Confidence is not one.



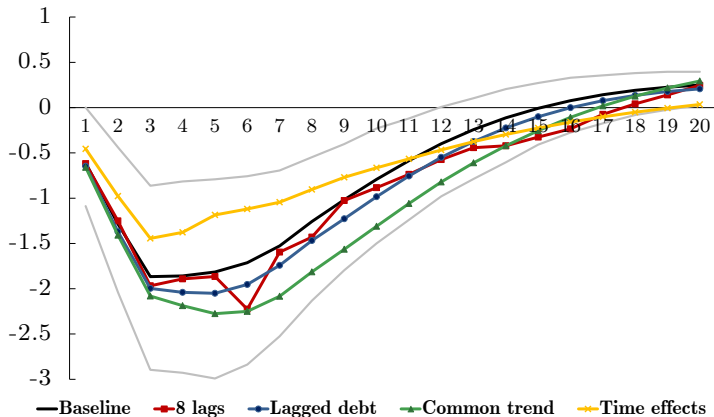
*'The sad truth is that we economists don't know very much about what drives the animal spirits of economic participants. Until we figure it out, it is best to be suspicious of any policy whose benefits are supposed to work through the amorphous channel of confidence.'*

*(Gregory Mankiw, 2009)*

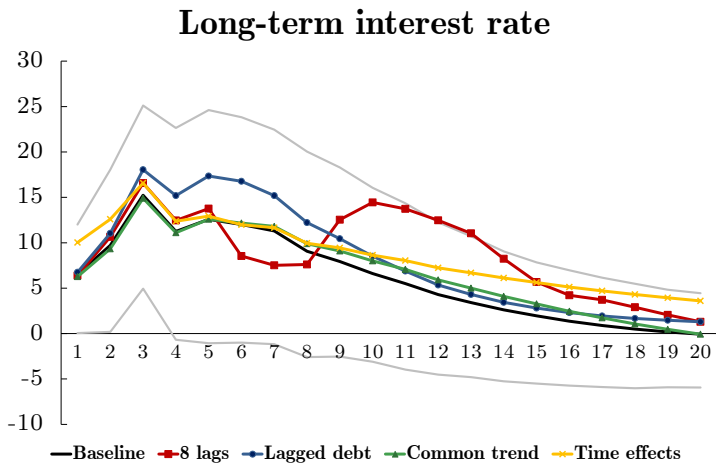
Questions, Comments, Suggestions:  
O.Furtuna@uva.nl

## Robustness 1

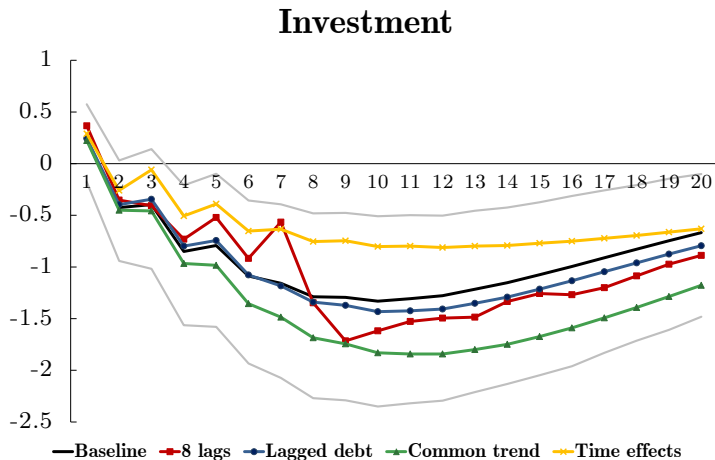
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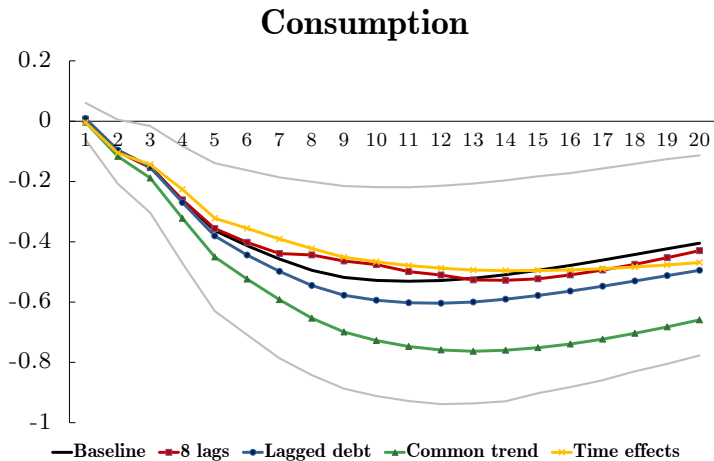
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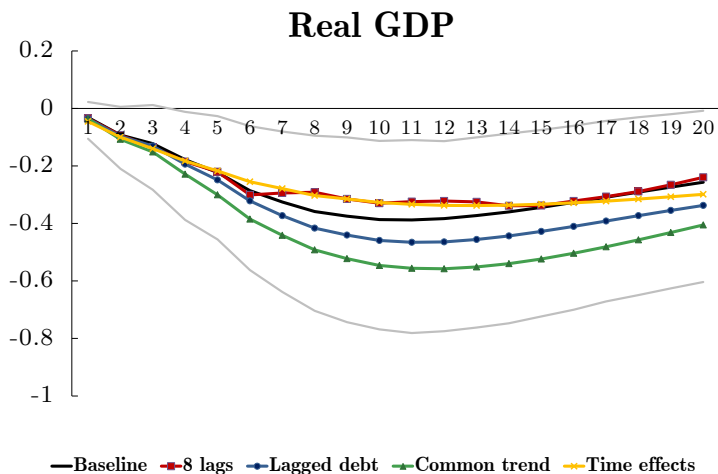
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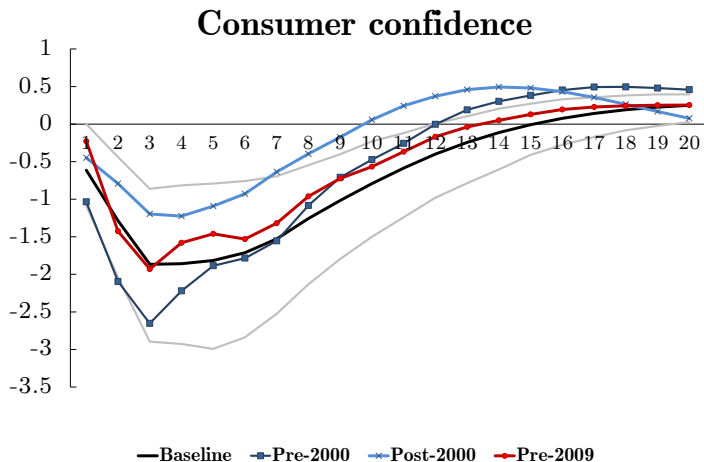
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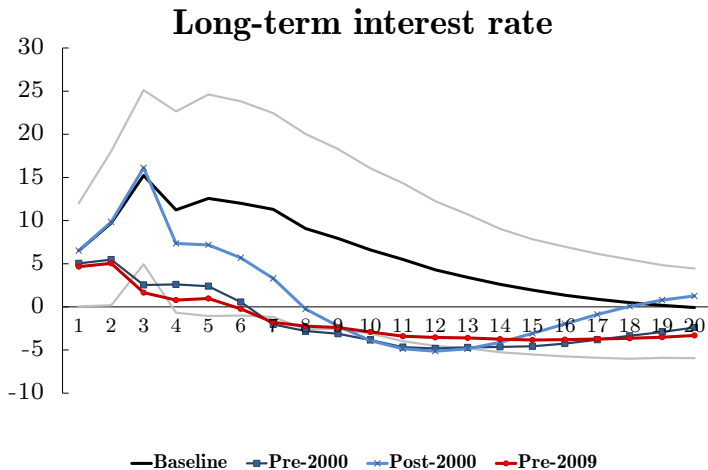


## Robustness 2: Time

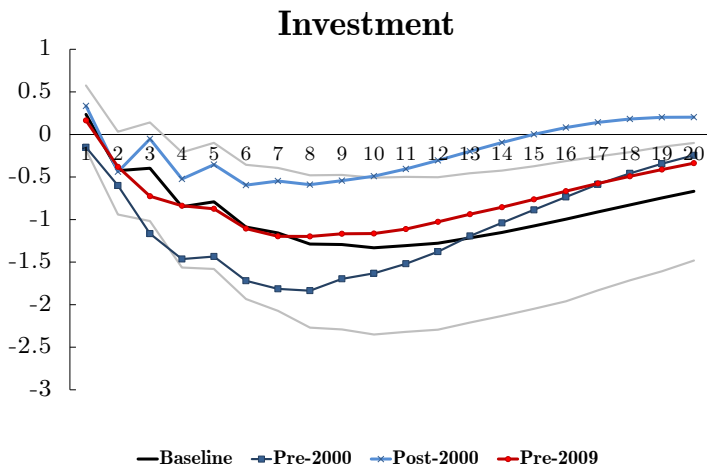




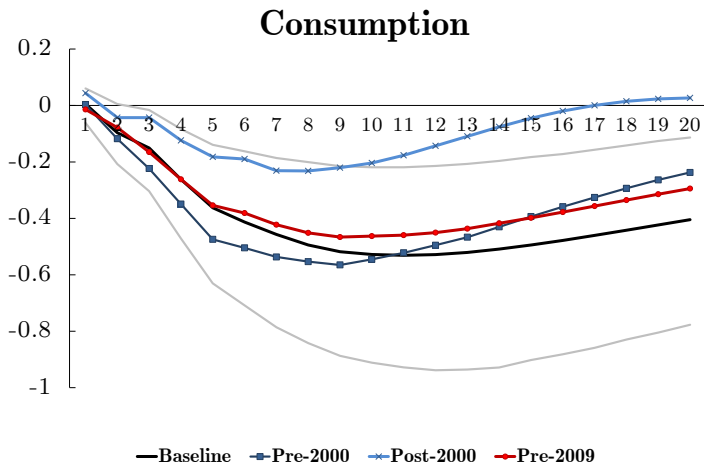
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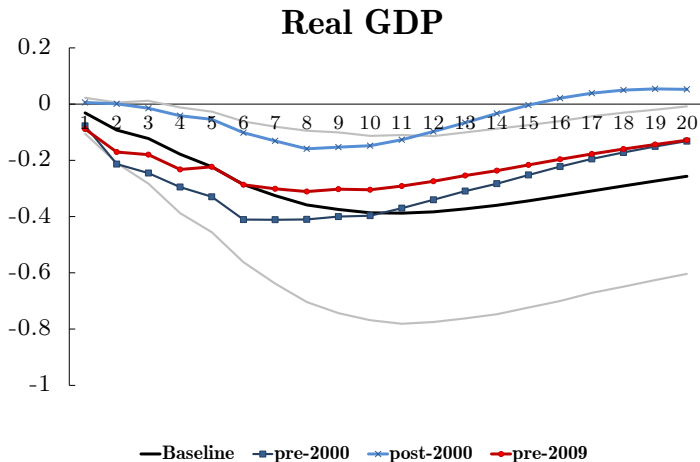
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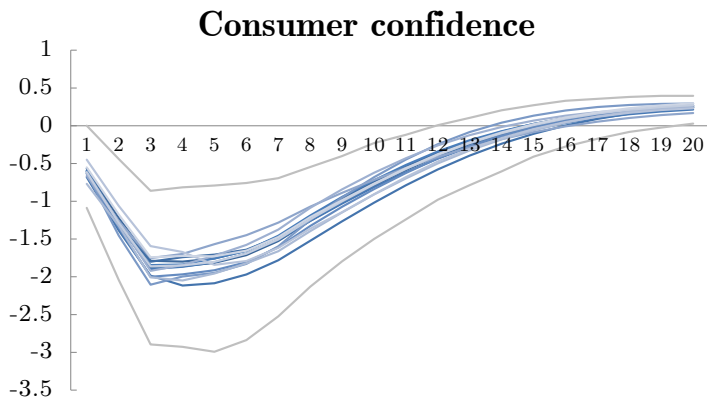
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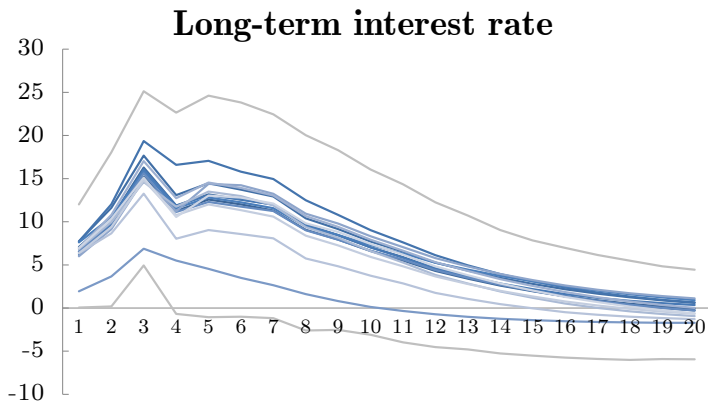
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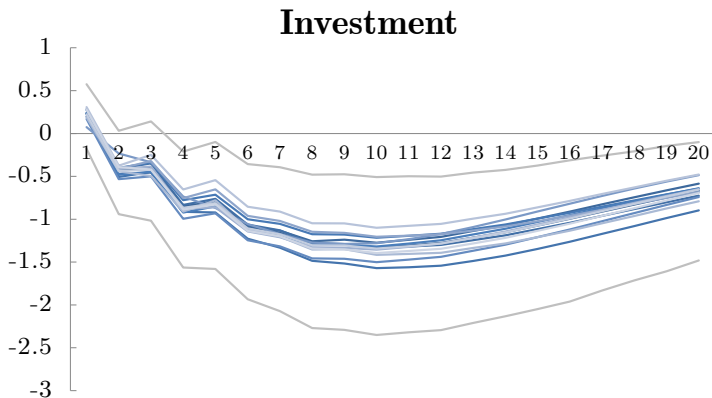
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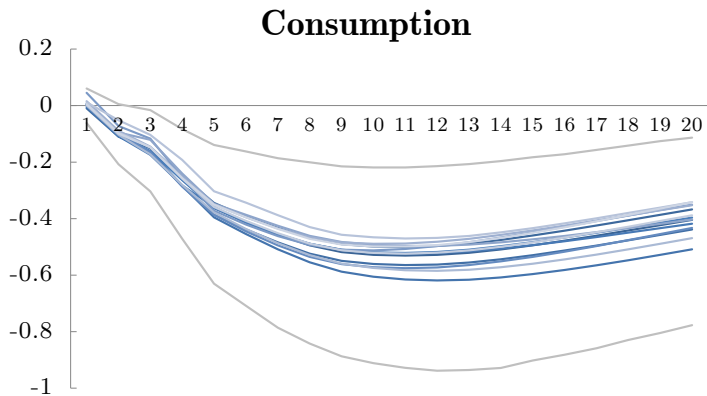
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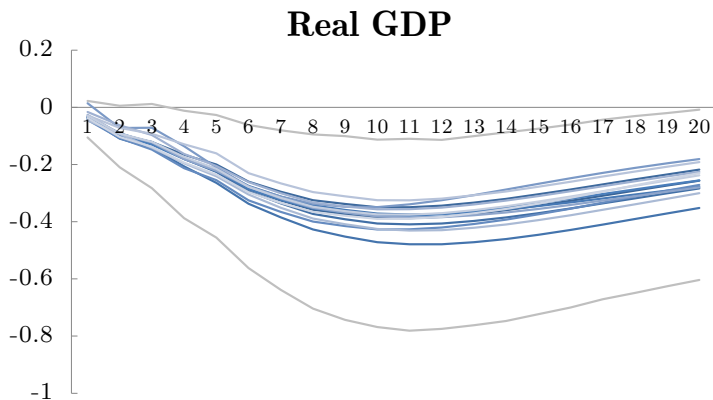


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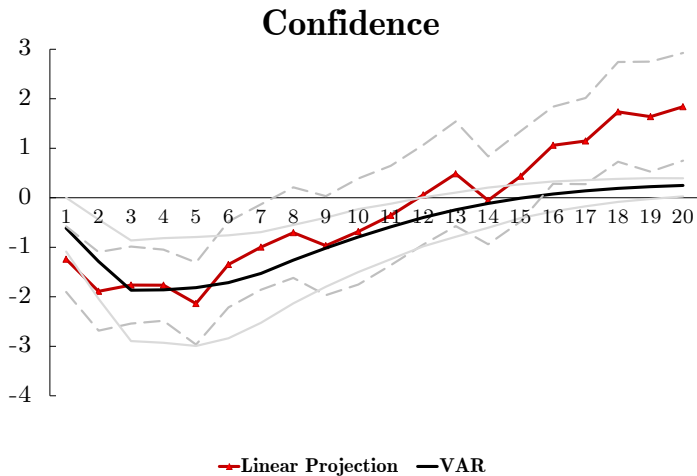




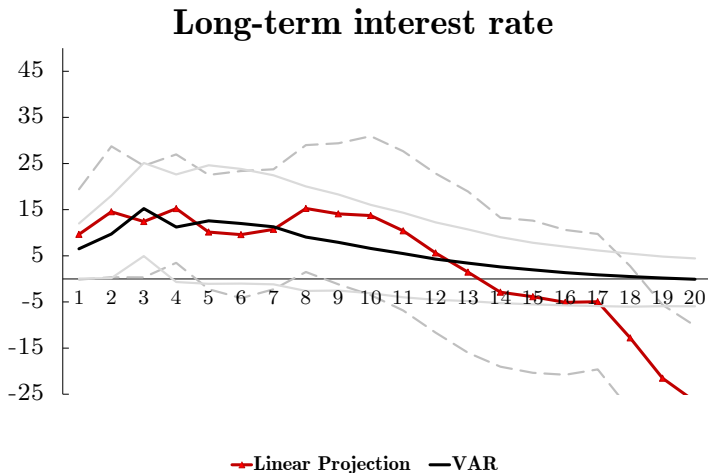
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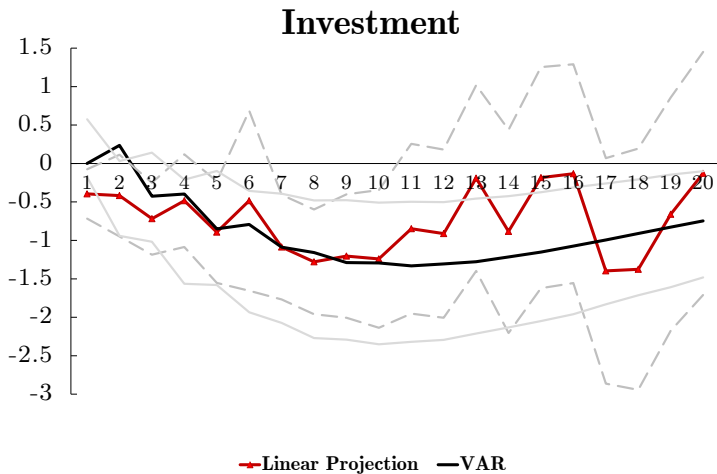
## Robustness 3: Local Projection IRFs



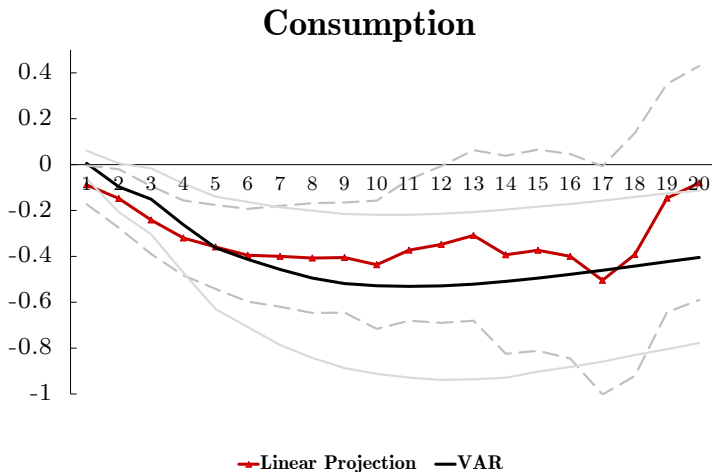
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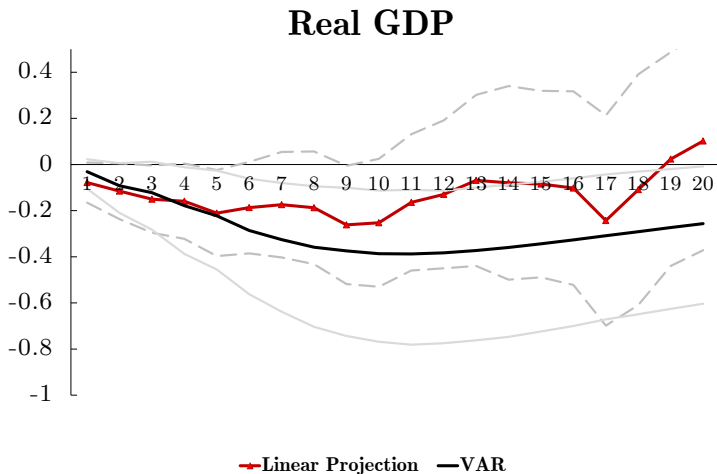
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## Implementation - Announcement Deviations

Higher deviation	Lower deviation
Italy	Germany
Spain	France
Ireland	Austria
Finland	Sweden
Belgium	Denmark
Portugal	United Kingdom
Netherlands	

Country groups based on ranking of average deviations

## Robustness 4: Alternative specifications

- Including government expenditure and tax revenue
- Including unemployment rate
- Including exports and imports
- Including stock price index
- Including short-term interest rate

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