

# Discussion of “Is there a zero lower bound? The real effects of negative policy rates on banks and firms” by C. Altavilla, L. Burlon, M. Giannetti and S. Holton

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The views expressed herein are those of the author. No responsibility for them should be attributed to the Bank of Canada.

# What they do

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- Empirically evaluate how ECB's NIRP has influenced the behavior of banks and firms
  - **Banks:**
    - Do banks charge negative rates on corporate deposits?
    - Which kinds of banks can charge negative rates on corporate deposits?
    - How do deposits evolve when negative rates are charged?
    - How does bank lending respond to negative rates?
  - **Firms:**
    - How do firms' liquid assets, investment and debt maturity respond to negative rates?

# Some key findings

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- Sound banks in the Euro area started to charge negative rates shortly after ECB's DFR became negative.
- A few banks even lowered the interest rate on corporate deposits below the DFR.
- Deposits did not decrease for banks offering negative rates
- Banks with negative rates increased their lending
- Firms facing negative rates responded by:
  - Decreasing short-term assets
  - Increasing fixed investment
  - Increasing debt maturity

# Outline

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1. Motivation
2. Determinants of interest rates on corporate depositors
  - a) Analysis in levels
  - b) Analysis in first differences
3. Comparison with existing literature
4. Concluding remarks

# Motivation: why negative rates as a policy tool?

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- Neutral nominal policy rate has fallen substantially
  - Example: Canada
    - Mid-2000s: 4.5 to 5.5 per cent
    - Today: 2.5 to 3.5 per cent
    - Implication: assuming an ELB= -0.5%, simulations show that unconditional probability of negative policy rates is now about 13%, instead of about 3% if the neutral rate were around mid-2000s values.

# Motivation: why rates could be negative?

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- Switching large quantities of deposits to cash does have costs, which are primarily for storage and insurance.
- Therefore the effective return on holding large quantities of cash is actually negative. How negative depends on the costs of storage and insurance.
- Witmer and Yang (2016) find that the costs of storing and insuring cash dictate the ELB in Canada, which is likely to be around -50 bps.

# Determinants of interest rate on corporate deposits

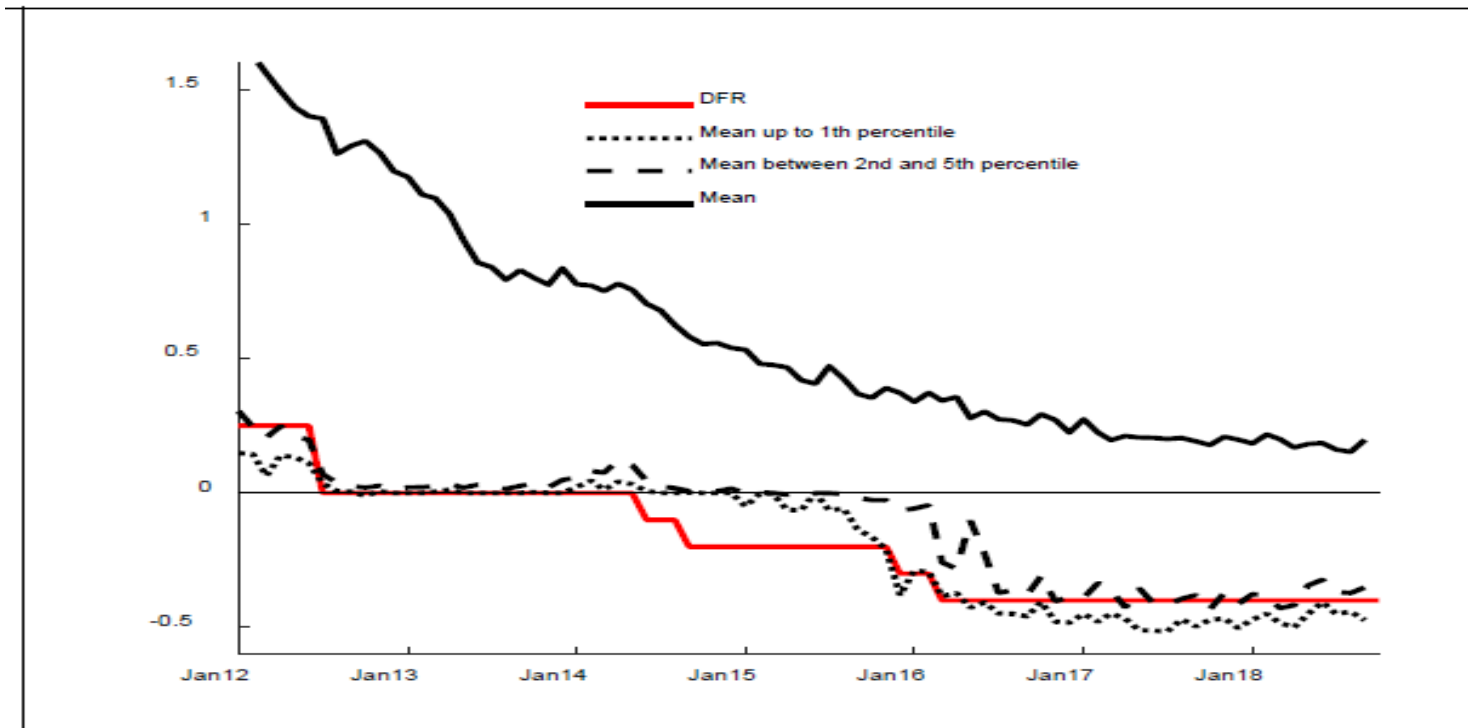
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- Two determinants:
  - Risk free rate
  - Risk premium
- Analysis in levels:
  - For sound banks, rate on corporate deposits ( $i^d$ ) is likely to be close to risk free rate ( $r^f$ ).
    - This can explain why  $i^d < 0$  when  $r^f < 0$
  - For less healthy banks, quantitatively important positive gap between  $i^d$  and  $r^f$ 
    - This can explain why  $i^d > 0$  when  $r^f < 0$

# Determinants of interest rate on corporate deposits

- Simple analysis in first differences seems to suggest that pass-through was also important for less healthy banks.

*Panel B: New Deposits*





# Comparison with existing literature

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- For Sweden, Eggertsson, Juelsrud, Summers and Wold (2019) find that deposit rates do not follow the policy rate when this is negative.
- For Switzerland, Basten and Mariathasan (2018) document that a negative policy rate has not led to negative deposit rates.
- Why are experiences in Sweden and Switzerland different than the one in the Euro area?

# Concluding remarks

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- Very interesting paper. It shows that NIRP can effectively stimulate the economy by impacting the behavior of both banks and firms.
- More work is needed on:
  - How uncertainty and economic activity matter for firms' investment
  - Exchange rate channel for firms.

