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Comments on

Adapting lending policies when negative interest rates hit banks' profits

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The views expressed do not necessarily reflect those of the European Central Bank

Description

- Empirical study of the effects of negative rates on loan supply in the euro area (and Spain)
- Based on a micro-data with
  - bank-level information on lending volumes and rates
  - Individual bank replies to euro area bank lending survey (BLS)
  - loan-level information on lending volumes to firms, for a sample of Spanish banks
- Empirical model/identification:
  - did-in-diff methodology
    - "Treated" =1 if BLS reply indicates the bank's net-interest income has been adversely affected by NIR
- Outcome variables: lending growth, lending standards, lending conditions (rate, maturity, collateral, fees…)

Related literature

- Negative rates
  Demiralp Eisenschmidt Vlassoupulos, 2016; Amzallag, Calza, Georgarakos, Sousa, 2017; Heider, Saidi, Schepens, 2017; Schelling, Towbin 2017; de Sola, Kasongo 2017; Beutler, Bichsel, Bruhin, Danton 2017; Bottero, Minoiu, Peydró, Polo, Presbitero, Sette 2018; Basten, Mariathasan 2018; Bubeck, Maddaloni Peydró 2018…
- Studies based on bank survey data
  Lown, Morgan 2006; Maddaloni, Peydro 2011; Del Giovane, Eramo Nobili 2011, Bassett, Chosak, Driscoll, Zakrajšek 2014…

Main findings

Banks which reported an adverse impact of negative rates on net-interest income:

- are banks with low capital
- did not change lending supply/standards on average but
  - cut lending supply to riskier firms
  - increased lending supply to safer firms
- diminished lending rates but
  - increased fees
  - shortened the maturity of loans granted
  - diminished loan size

Main characteristic of the analysis: pros and cons

Main characteristic

Identification of treated banks based on BLS replies

Compared to existing papers

1. No assumptions about which banks are treated
2. Less affected by confounding factors related to other measures announced simultaneously
3. BLS question used narrow
4. Need to trust bankers

Point 1 (No assumptions about which banks are treated)

- Avoid discretionality in identifying treated (/more treated) banks
  - Agnostic (no assumptions to be made)
  - And allows to learn about the characteristics of affected banks (role of capital!)

Points 2 (No confounding factors)

- Banks are requested to report effects of NIR only
- Useful because NIR were announced together with a whole “credit easing package”

=> Other DID approaches cannot easily disentangle effects of NIR from those of other simultaneous measures

Point 3 (Focus on specific question on net-interest income)

- Focus on replies to specific question on effects of NIR on "net-interest income" also partial

- Even if net-interest income is adversely affected by NIR, the impact on other profit items is positive (Altavilla, Boucinha, Peydro, 2018)
  - Provisions: risk on new and seasoned loans diminishes
  - Non-interest income: valuation of bond portfolios increases

=> This paper ignores other channels affecting (positively) other P&L items

=> Treated banks are, by definition, (more) negatively affected! (as in many other DID papers…)

Why not relying directly on BLS questions about effects of NIR on loan supply (lending standards, volume, rates)?

Point 4 (Need to trust bankers)

Unlike other papers, this completely relies on qualitative and soft information from a bank survey. Can these replies be fully trusted?

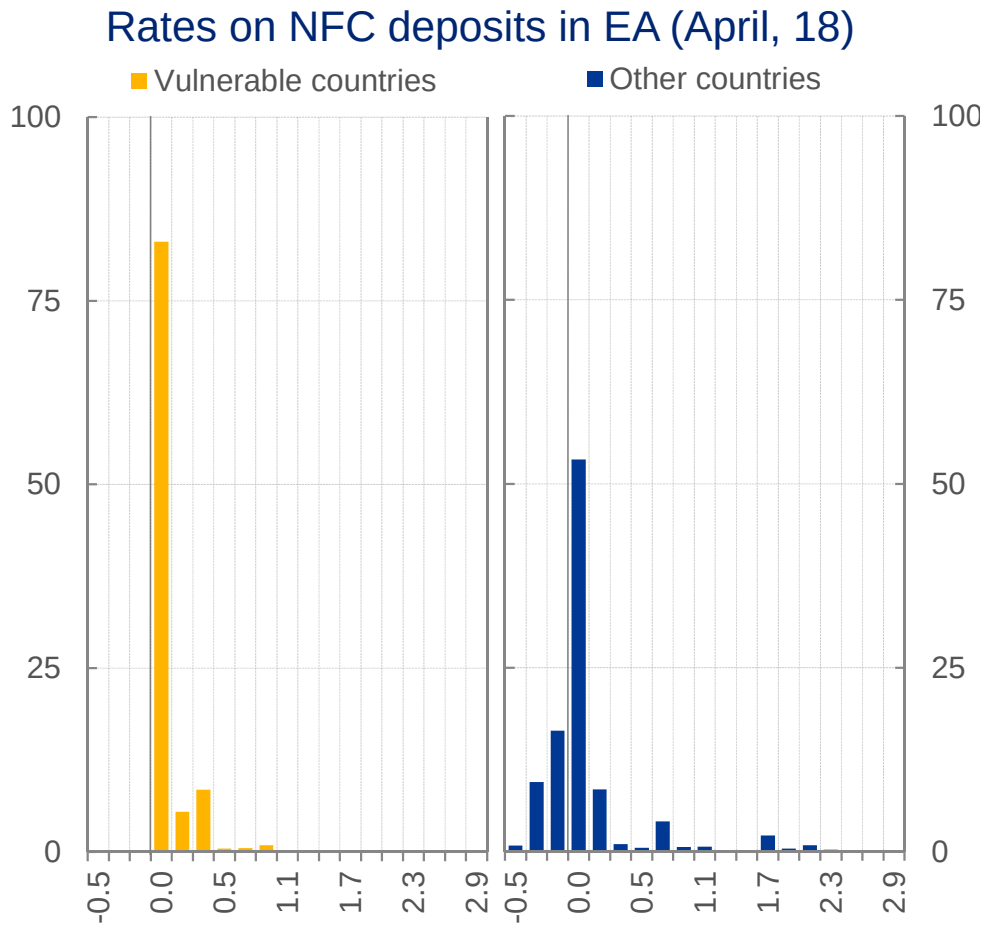
- No obvious reporting bias
- Several papers already analysed BLS data or other surveys

Are NIR really special?

ZLB for deposit rates do exist!...

Are banks reluctant to pass through negative rates to deposits? (due to fear of runs)

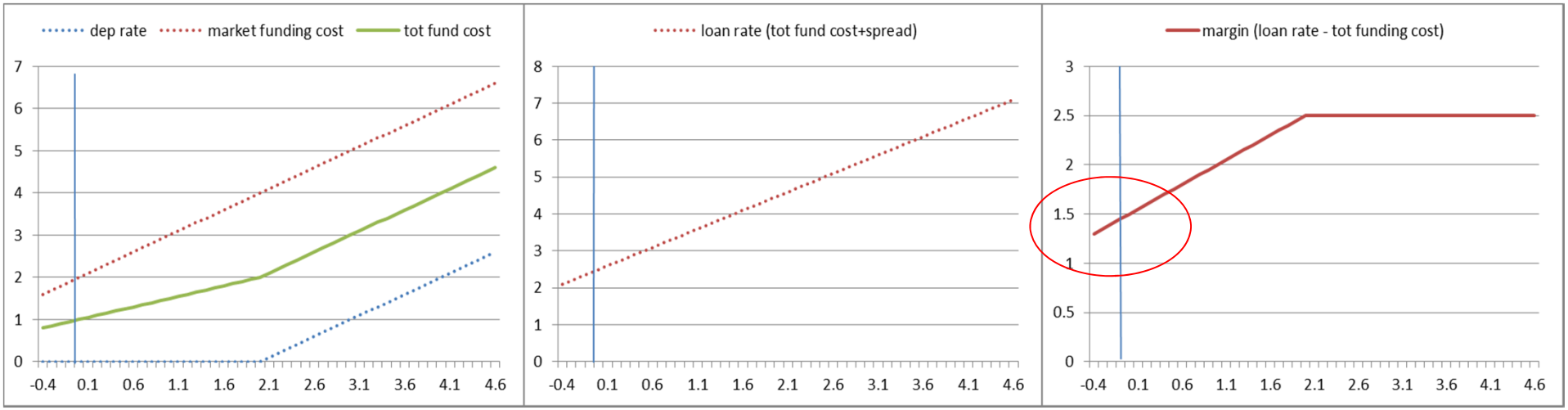
YES. Some exceptions exist which anyway took long to be seen…



…still, «0» not necessarily a relevant threshold for margins…

An illustrative example with ZLB on deposit rate

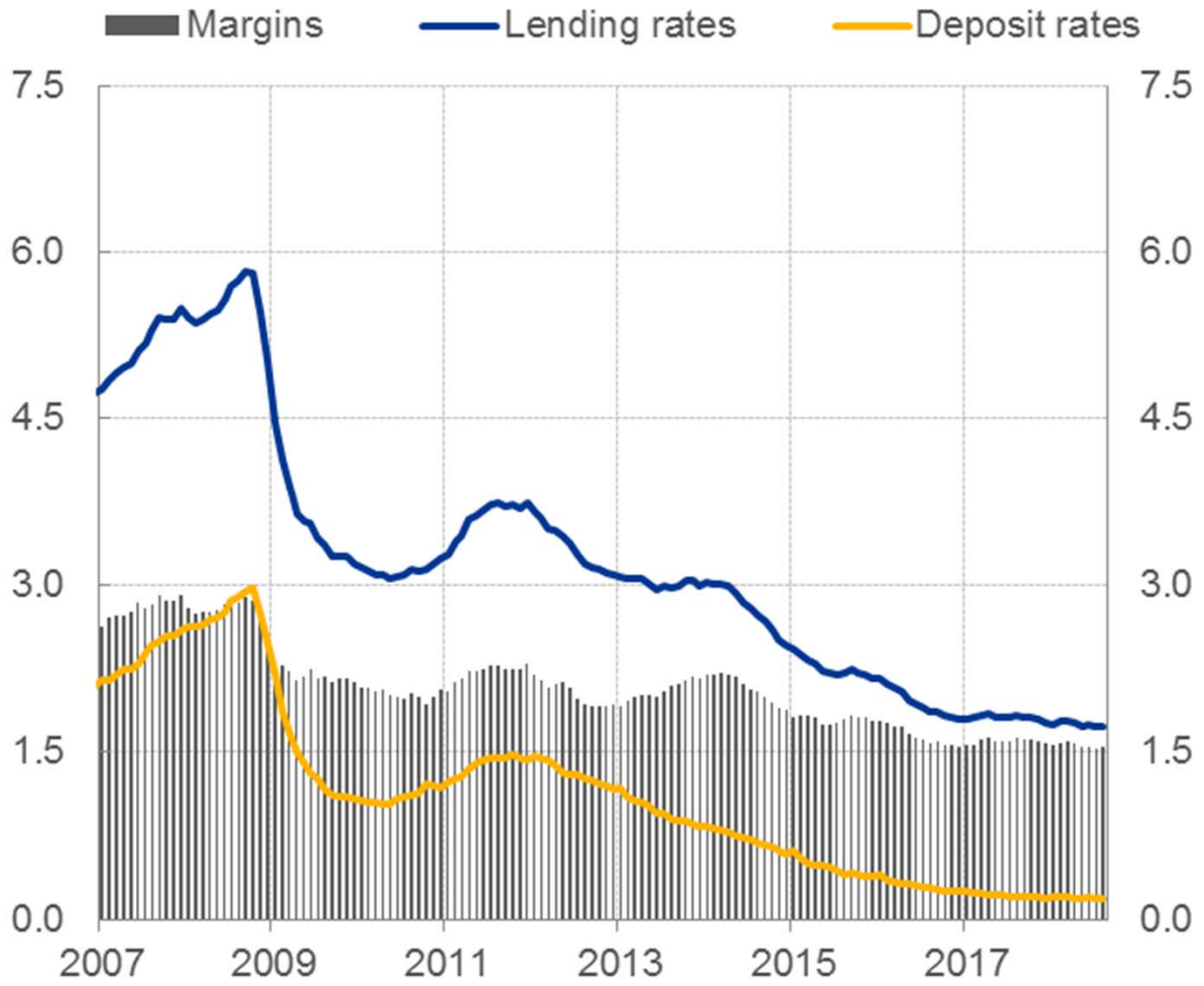
- *50% deposits 50% bank bonds*
- *Deposits rate: policy rate – mark down (2pecent)*
- *Bank bond yield: policy rate + spread on bank bonds (2pecent)*
- *loan rate: policy rate + mark up (2pecent)*



⇒ *Nothing special happens to margins at 0..*

⇒ *<u>Low rates</u> more relevant Margins start diminishing much earlier than policy rates enter the negative territory!*

…indeed margins started declining much before NIR were introduced



- *Placebo test provided confirms a special role of NIR (not of low rate)*
- *But if the underlying mechanism is the same (compression of margin) what is behind the stronger results for NIR?*

Comparing these results with those of other analyses of NIR

BLS Report 2016 Q1 (first with ad hoc question on NIR)

Results on effects of NIR

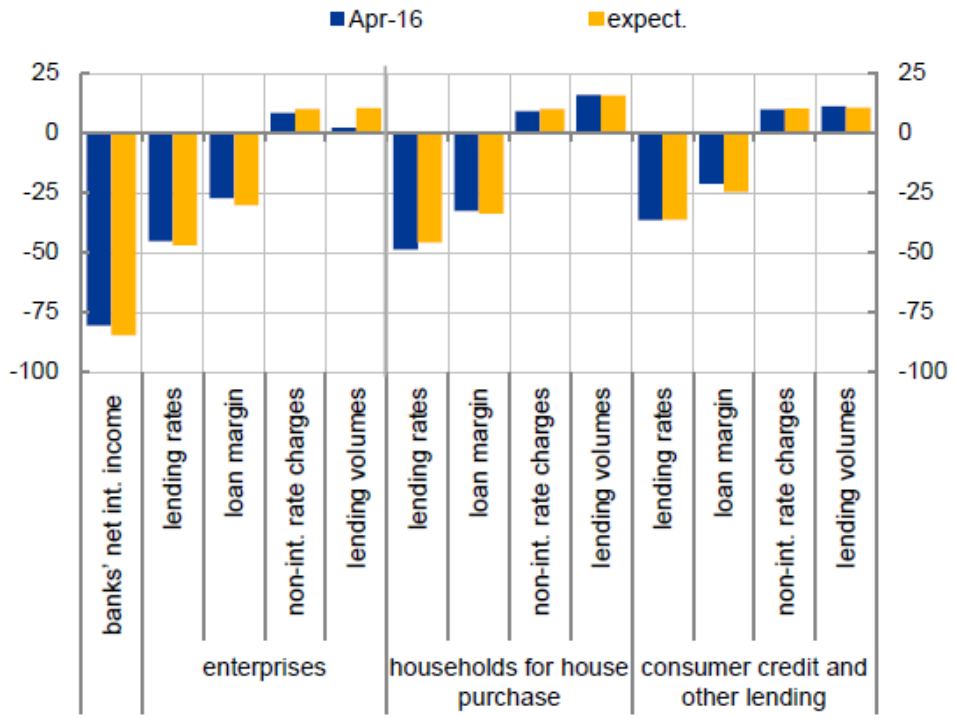
- 80% reported a compression of net interest income
- 40% reduction of (NFC) lending rates
- 20% reduction of loan margin
- 8% increase in non-interest rate charges
- Small *expansionary* effect on lending volumes

⇒ BLS replies indicate an adverse impact on net-interest income (not clear on overall profit) but an expansionary effect on loan supply

Chart 21

Impact of the negative DFR on banks' net interest margin and bank lending

(net percentage of respondents; over the past and next six months)



Note: The net percentages are defined as the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". The results shown are calculated as a percentage of the number of banks which did not reply "not applicable". The timescale in the legend refers to the respective BLS survey round. "expect." stands for expectations that banks provided in the current round.

Comparison of findings with existing papers

Impact of NIR policy from studies exploiting heterogeneity in deposit ratio (*)

Banks that display a share of deposit funding that is a 1 standard deviation above the average will:

↓	Loan volume	by	13 percent
↑	Loan pricing	by	0.26 p. p.
↑	Risk-taking in loans	by	16 percent
↑	Risk-taking in securities	by	2 percent

(*) Based on: Amzallag, Calza, Georgarakos, Sousa (2017); Heider, Schepens, Saidi (2017); Bubeck, Maddaloni, Peydro (2018).

This paper is less gloomy about NIR, more in line with the view of bankers!

Other papers less gloomy (e.g. Eisenschmidt, Demilrap, Vlassopoulos 2016)

Some more detailed comments

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- Does result on rebalancing towards safer borrowers dispute findings of many other papers' on NIR and risk taking?
- Results on bank capital are intriguing but not much explained always easy to interpret
  - Non-linear effects of capital? (among treated banks, on average less capitalised, "very low capital" tighten more…). Why?
- Analysis of credit-register data could receive more prominence
- Analysis of credit standards
  - Not clear why ordered Probit estimated does not consider the meaning of the qualitative replies and instead estimates thresholds over/below which the qualitative replies would indicate tightening or an easing

Conclusions

Conclusions

- Extremely topical
- Nice data
- Identification based on BLS credible
- I really enjoyed reading it!

My suggestions

a. Could spell out more clearly the pros and the (few) cons of this approach

b. Sharpen interpretation of some findings (specialness of NIR, capital…)

c. Try also other BLS questions on NIR

Thank you