



OESTERREICHISCHE NATIONALBANK

EUROSYSTEM

Discussing: “QE: implications for bank risk-taking, profitability and systemic risk” by Supriya Kapoor and Adnan Velic

Stefan Kerbl

Frankfurt, 16th Oct 2023

FINMA

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Opinions expressed by the discussant does not necessarily reflect the official viewpoint of the OeNB or the Eurosystem.

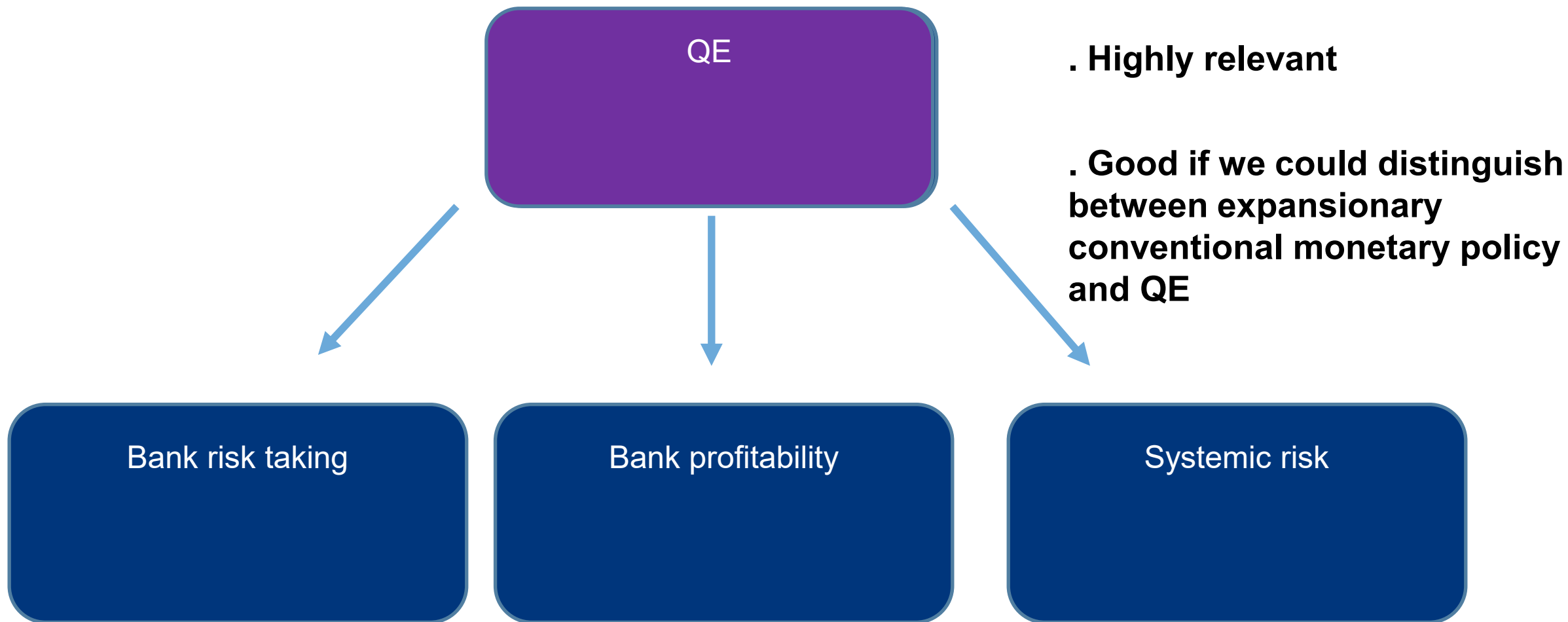


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Research Question:

What is the impact of QE on individual bank risk-taking, bank profitability, and systemic risk?



Identification Strategy via Interaction Term consisting of:

1. Time-Dummy (QE)

QE1 2008:Q4 - 2010:Q2,

QE2 2010:Q4 - 2011:Q2,

QE3 2012:Q3 - 2014:Q3.

2. "Treatment" variable:

QE affected those banks that had a high share of MBS in their portfolio.

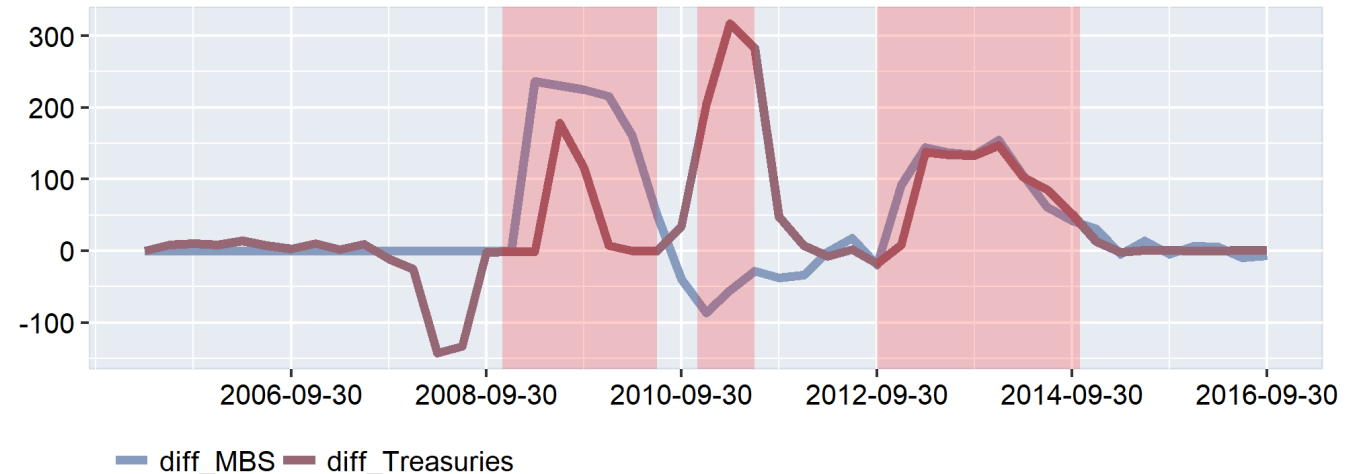
2a. Top 25% in 2007-12

2b Top 10% in 2007-12

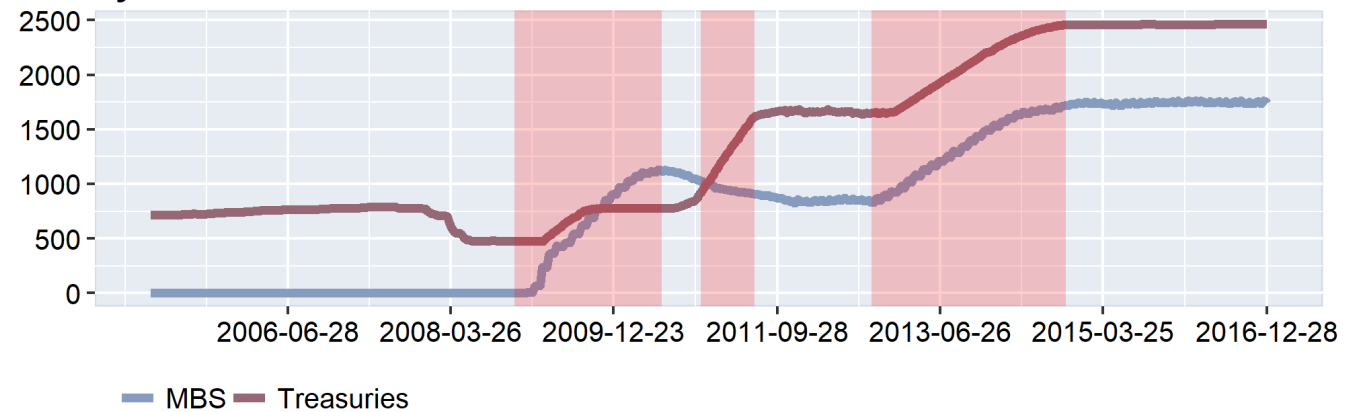
2c MBS / Total Assets in 2007-12

2d Top 50% in 2007-12

US QE purchases
quarterly purchases in bn \$



US QE: Securities Held
by FED in bn \$

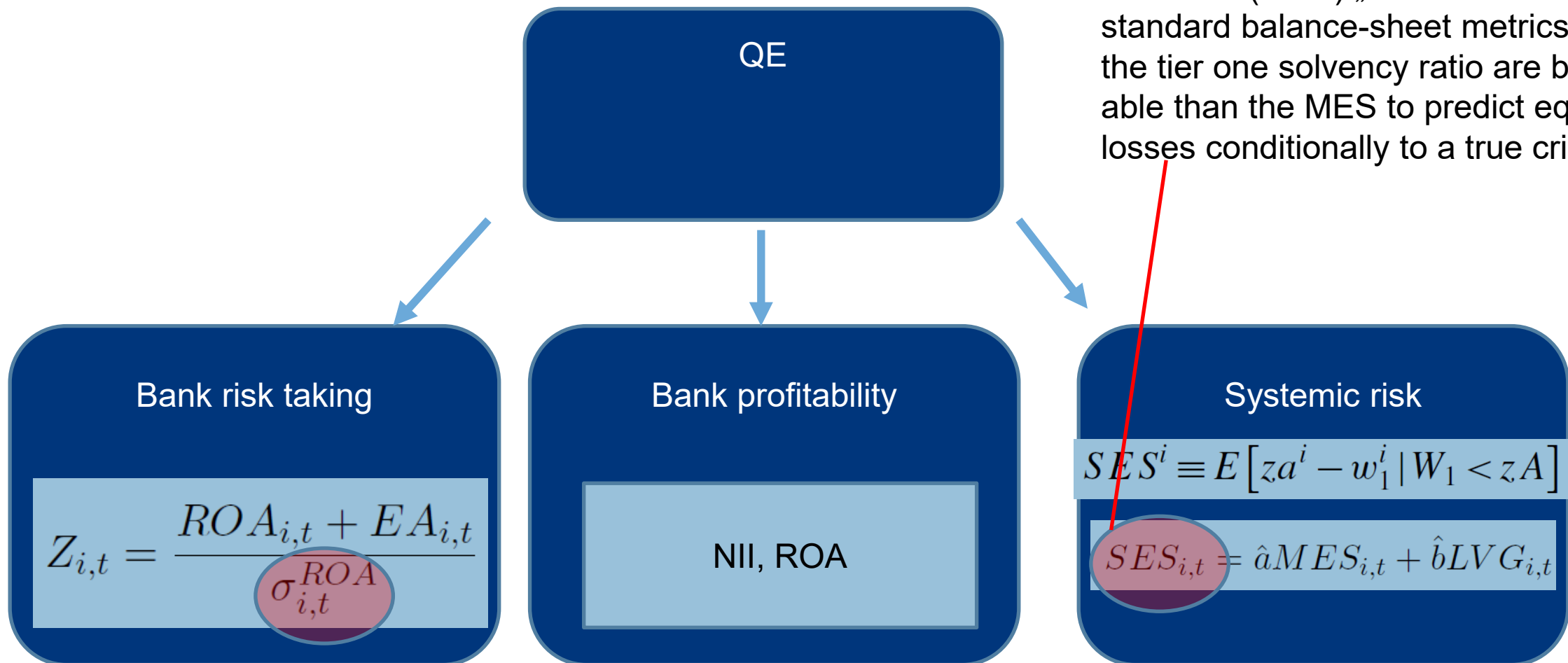


Source: FRED

Data from Board of Governors of the Federal Reserve System (US), Assets: Securities Held Outright: U.S. Treasury Securities: Wednesday Level [WSHOTSL], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/WSHOTSL>, October 9, 2023.

Measurements:

How are the variables of interest measured?

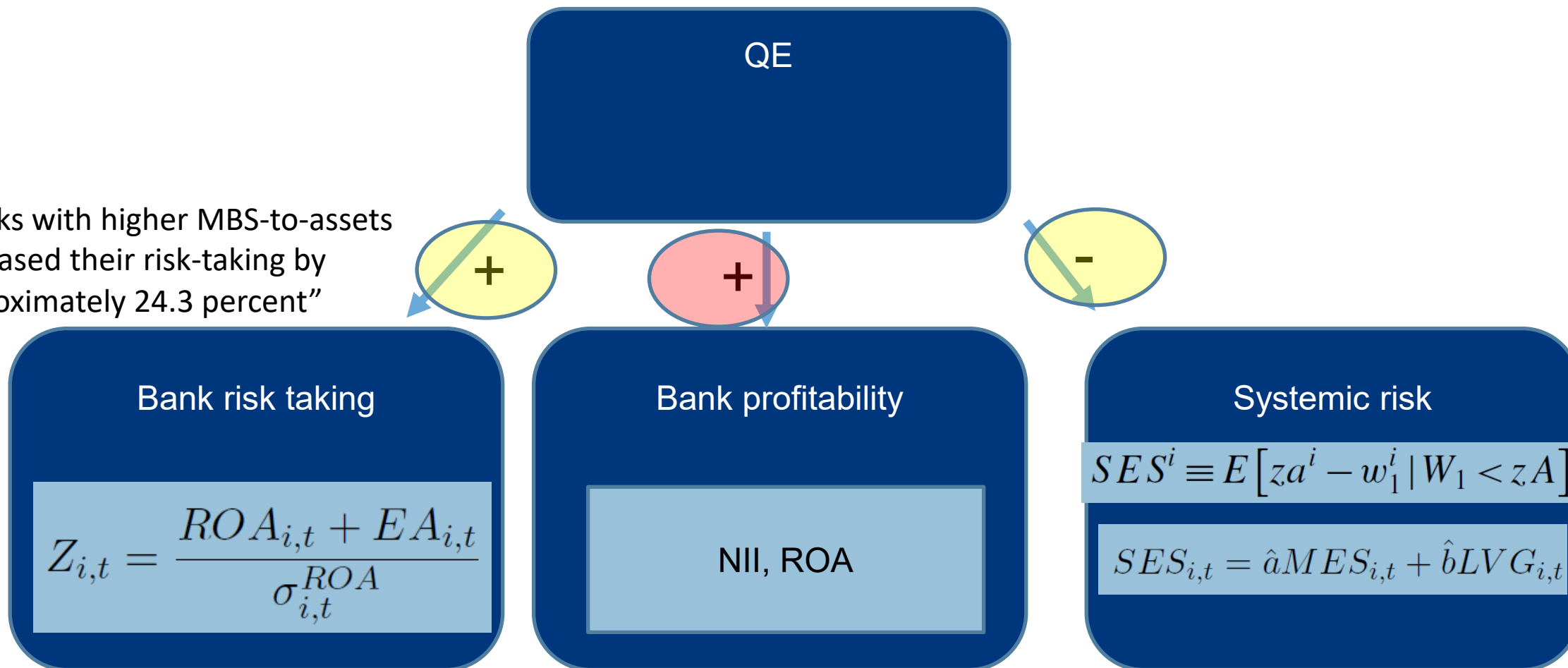


Idier et al (2013) „We find that standard balance-sheet metrics like the tier one solvency ratio are better able than the MES to predict equity losses conditionally to a true crisis.“

Results:

Can we understand the results?

“banks with higher MBS-to-assets increased their risk-taking by approximately 24.3 percent”



Results: the puzzles

1. How can QE increase risk taking, but at the same time decrease systemic risk?

Attempt at explanation:

Perhaps decrease of systemic risk *contribution of these banks*, but overall increase of risk?

2. How has QE increased NII when we know low interests weigh negatively on NII?

(see also Kerbl & Sigmund 2016)

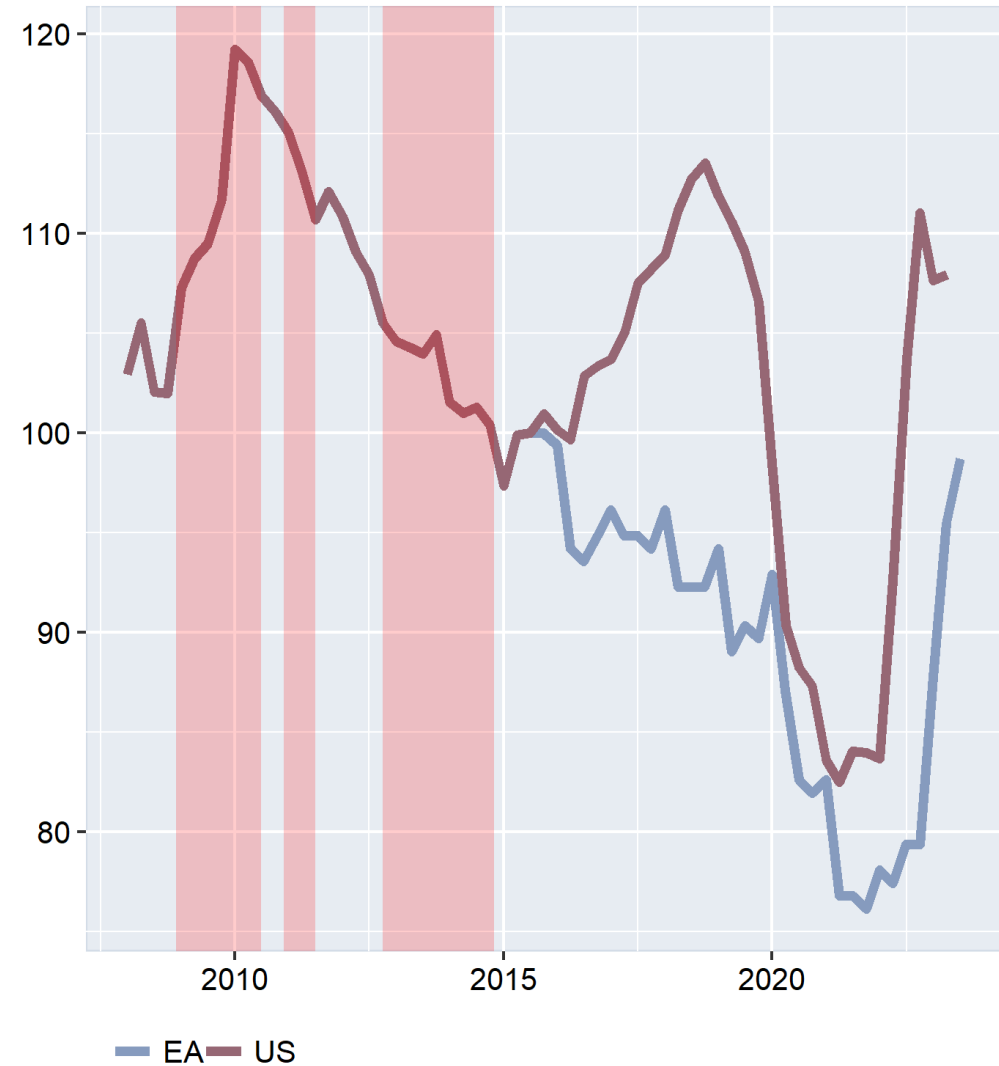
Attempt at explanation:

Regression measures profitability *change in comparison to other banks (non-treatment)*.

3. Why QE3 so strong, while not QE1 (and QE2)?

4. Robustness checks show 5-10 fold stronger effects.

Net Interest Margin US and EA SIs
Index June 2015 = 100



ECB Supervisory Banking Statistics and FRED.

Conclusions

Applaud:

- + research question
- + variations in endogenous variables explored

Recommend:

- . Identification strategy that allows more flexibility with regards to entities and time periods
- . Measure what you want to measure & what can be interpreted.

Literature

Board of Governors of the Federal Reserve System (US), Assets: Securities Held Outright: Wednesday Level, retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/WSHOTSL>, October 9, 2023.

Idier, J., Gildas Lamé and Jean-Stéphane Mésonnier (2013) How useful is the Marginal Expected Shortfall for the measurement of systemic exposure? A practical assessment. ECB Working Paper Series, No 1546

Kapoor, Supriya and Adnan Velic (2023) QE: Implications for Bank Risk-Taking, Profitability, and Systemic Risk. Working Paper.

Kerbl S. and Sigmund M. (2016). From low to negative rates: an asymmetric dilemma, Oesterreichische Nationalbank, Financial Stability Report, Vol. 32, pp. 120–137.

Danke für Ihre Aufmerksamkeit

Thank you for your attention

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-0.048 (Table 4, Z_Score, QE3, main results)

0.038 (Table 5, NII, QE3, main results)

-0.125 (Table 5, systemic risk, QE3, main results)

Compared to Table 7:

| | Z-Score | NII | SES |
|--------------------------|----------------------|--------------------|--------------------|
| | (1) | (2) | (3) |
| $QE1_t \times Treat_i^Q$ | -0.044 (0.122) | 0.084 (0.067) | -0.324 (0.616) |
| $QE2_t \times Treat_i^Q$ | 0.003 (0.198) | 0.069 (0.109) | -0.056 (0.051) |
| $QE3_t \times Treat_i^Q$ | -0.529*** (0.140) | 0.159** (0.077) | -1.56** (0.706) |