Discussion: Banks as Regulated Traders by Falato, Iercosan, Zikes

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NBER CF Spring Meeting
April 12th, 2019

Summary

- Research Questions
  - How does banks' trading contribute to systemic risk?
  - How did it change after the Volcker-rule?
- Exercise
  - Define trading returns as

$$r_{it} = \frac{\text{P\&L}_{it}}{\sqrt{N_t}\,\text{VaR}_{it}} - R_t^f$$

  - Regress returns on Market, Volatility, Level, Term, Dollar, Commodity factors and interact exposures with Volcker-rule dummy
- Findings
  - Before Volcker: economically large exposures to equity market risk
  - After Volcker: practically no exposure to equity market risk, continued exposures to credit and dollar factors
- Contribution
  - Unique data could lead to useful set of stylized facts

Discussion

Paper: Measures risk-exposures of trading activities to understand whether they increase/decrease systemic risk

Conclusion: Volcker rule was successful

Discussion:

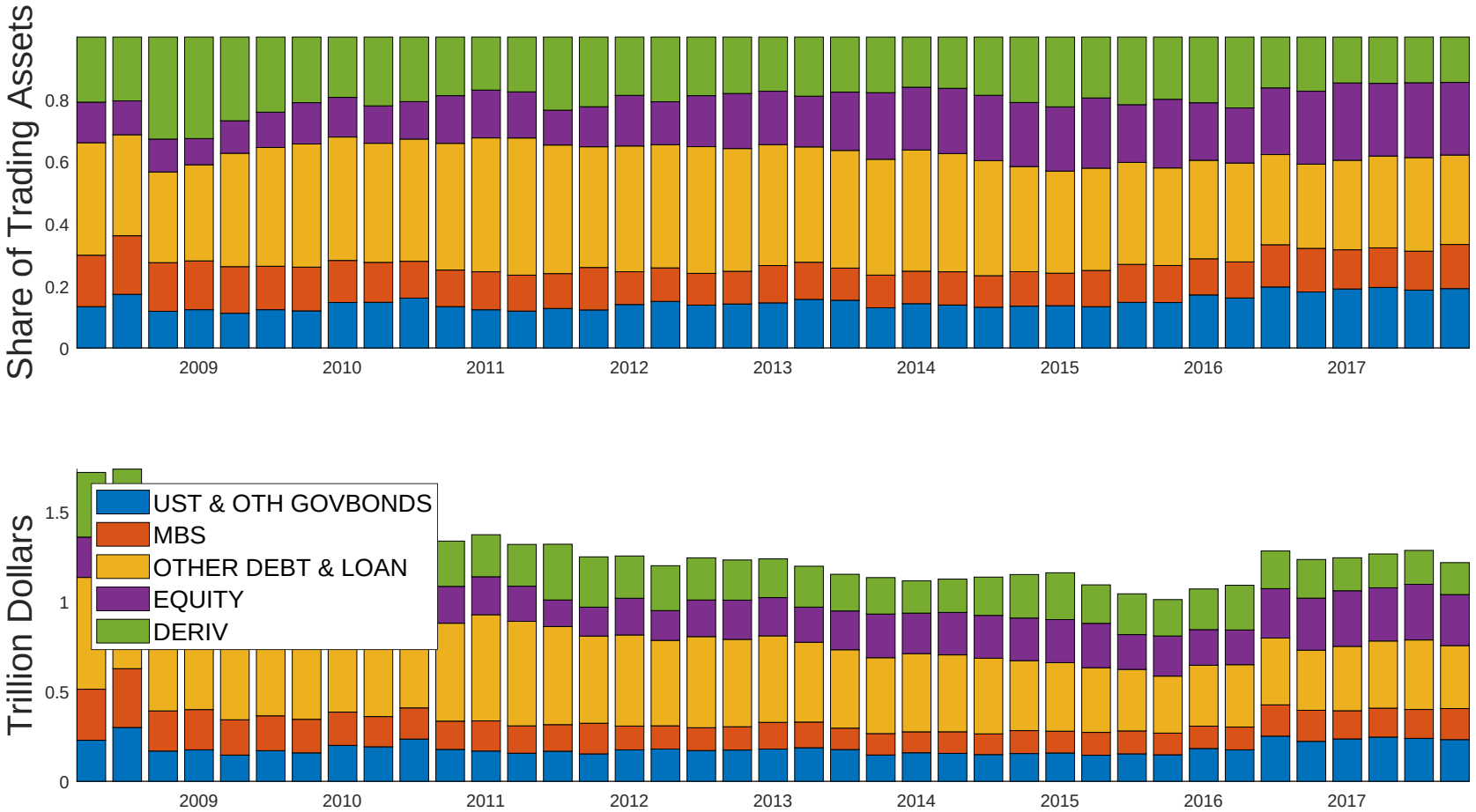
(1) Quarterly trading positions and P&L seem to disagree

(2) Problem with the interpretation of the results

(3) Suggestions

Quarterly trading positions

Small increase in equity securities held for trading

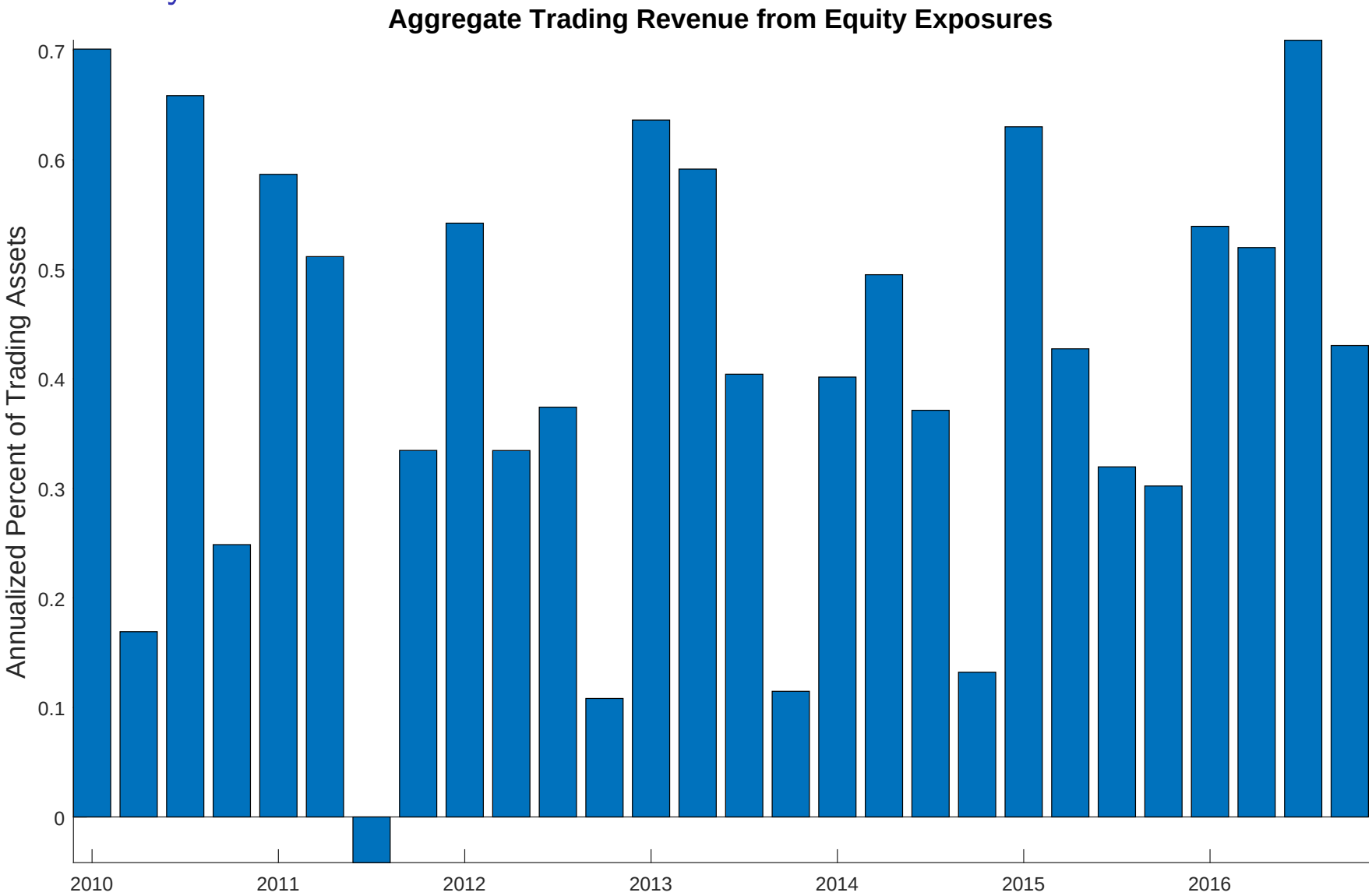


FR-Y-9C bank holding company filings

Banks report P&L based on underlying risk exposures

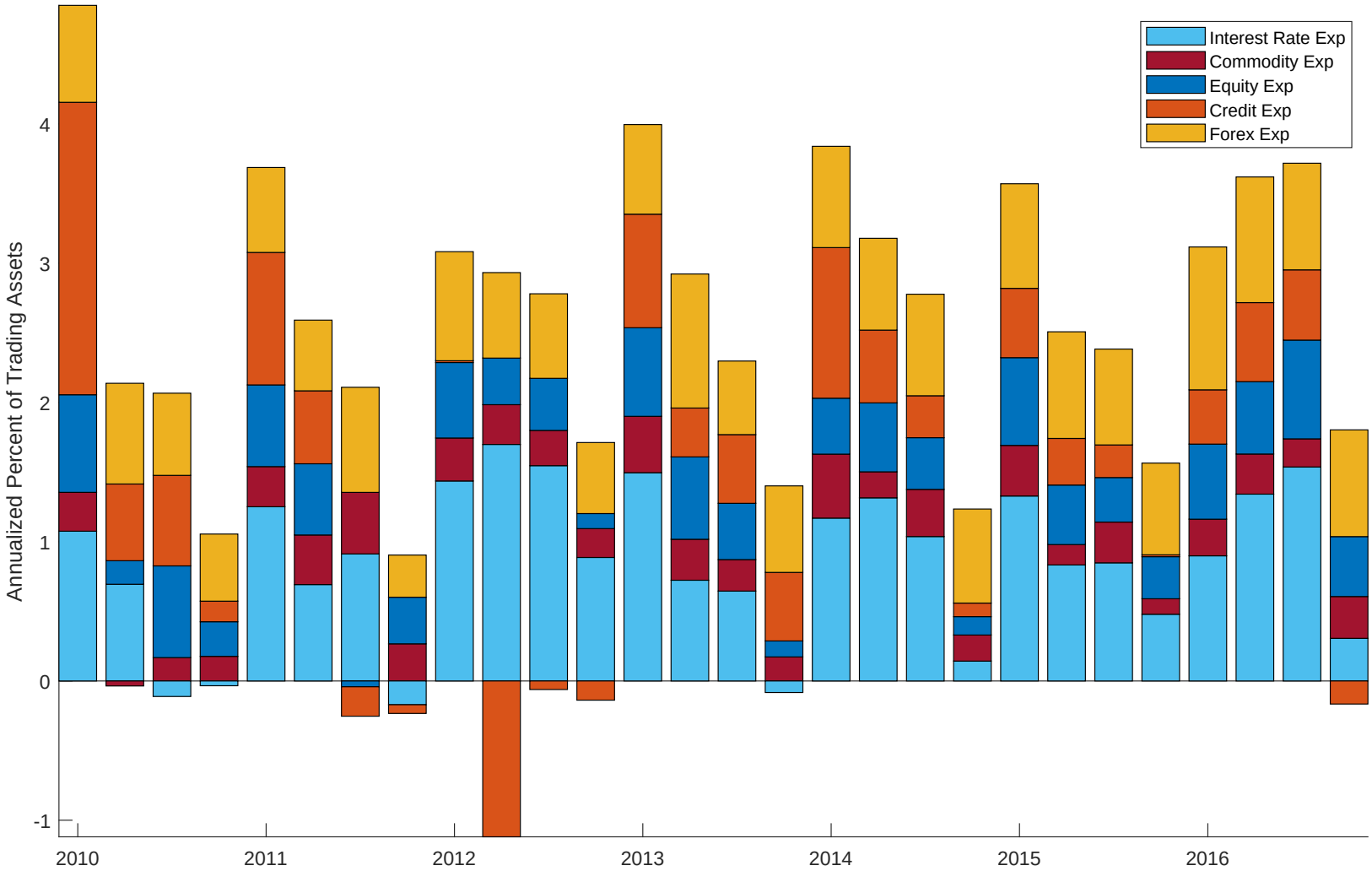
No change in equity P&Ls post-Volcker

Looks very similar in dollars



- Note: P&L definition as in paper

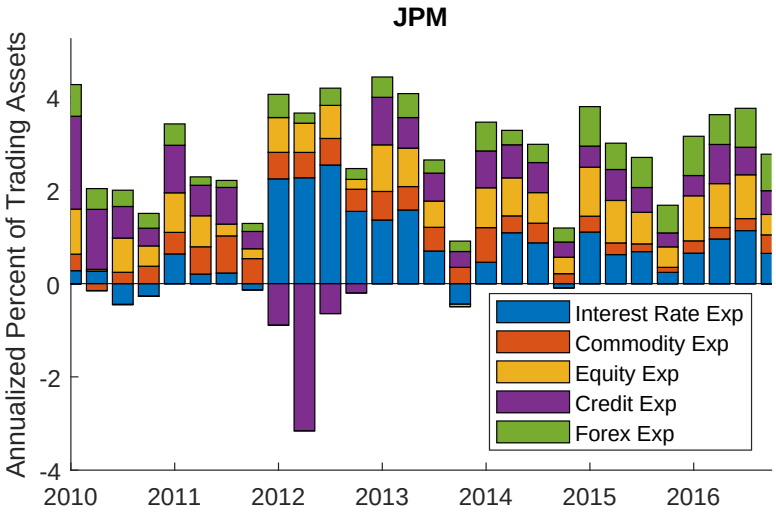
Modest contribution from equity risk to trading revenue

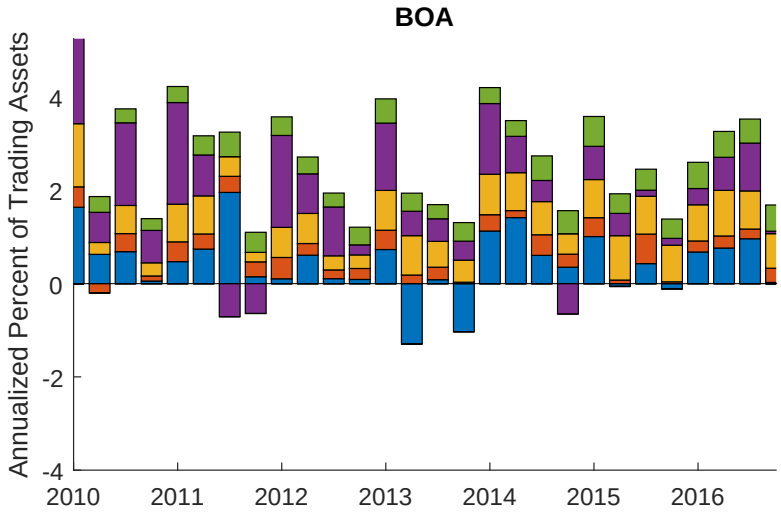


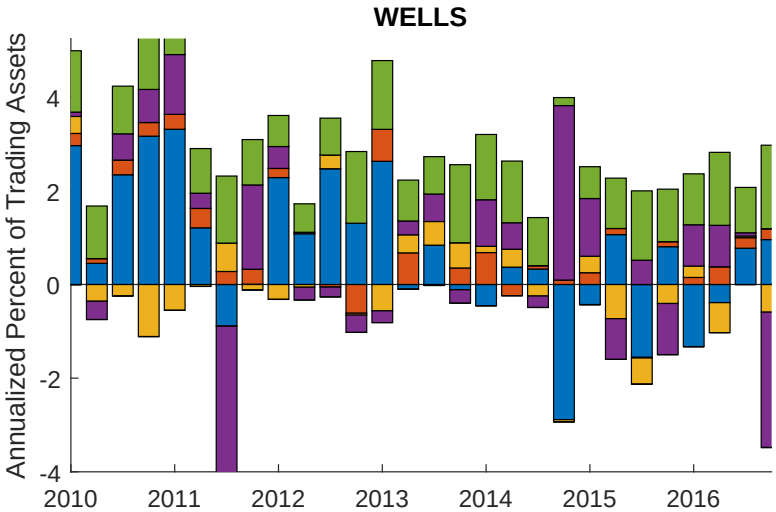
Interesting heterogeneity in Top 4 trading P&L

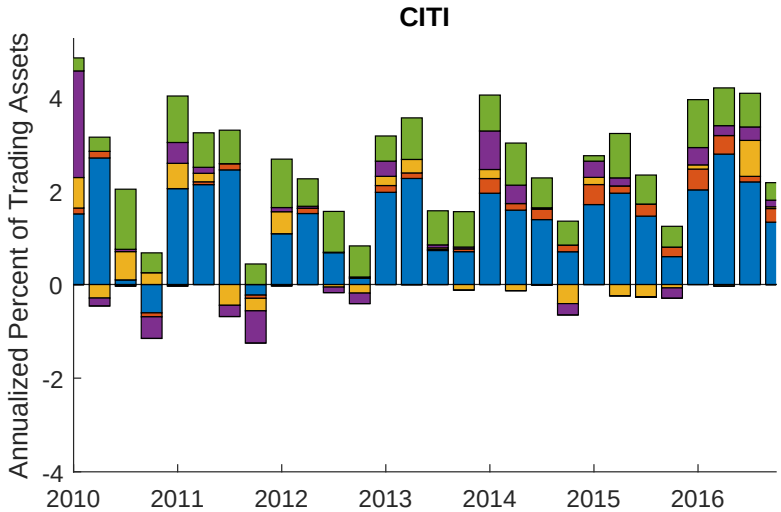
No interesting cross-sectional differences based on author's return definition

Distribution of P&L consistent w/ banks' trading market shares









Paper documents large equity exposures pre-Volcker & small post

But $ profits due to equity exposures have not changed

Reconciliation

(1) Return definition

(2) Dollar amount of risk

Trading portfolio return definition

- "Returns" akin to a Sharpe Ratio - standardizing P&L

$$r_{it} = \frac{\text{P\&L}_{it}}{\sqrt{N_t}\,\text{VaR}_{it}} - R_t^f$$

- Value-at-Risk (VaR) says how much a portfolio stands to loose
  - Over time period t (day)
  - In x% of the time (99% quantile)
    VaR \$100 of portfolio XYZ means Prob(Loss(XYZ)$\geq$ \$100) = 1%
- View in paper: VaR like committed capital
  - Not invested capital
  - VaR function of factor changes
    E.g., if market risk goes up VaR can increase at the same time banks experience losses $\Rightarrow$ lower absolute "trading returns"
- Alternative to VaR as scaling measure:
  FR 2644 weekly trading asset positions

Exercise does not measure how *much* risk banks take

- Profits/VaR exposures low while invested $ dollar exposures high
- Begenau, Piazzesi, Schneider (2015): quarterly data to estimate banks' credit and interest rate risk exposure for entire balance sheet and derivative positions

  Suggestion
  - Replicating portfolio approximates the $ value change of trading books
  - Use weekly Fed 2644 form for $ asset positions (not at portfolio level)

  Advantages:
  - Measures quantity of risk
  - Unlike VaR can aggregate replicating portfolios across institutions to calculate systemic risk measure
  - Can efficiently characterize entire distribution of the portfolio value

Conclusion

- Interesting data and promising paper on trading book facts
  - Need more analysis before calling the Volcker rule a success
- Reconcile quarterly positions and P&L
- Suggestions:
  - Instead of VaR or RWA (function of VaR) use weekly trading asset positions to normalize gains and losses - closer to actual return definition
  - Calculate replicating portfolio of trading book to get at quantity of risk