

FINANCIAL CONDITIONS AND THE BUSINESS CYCLE

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September 20, 2023

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“BUSINESS CYCLE ANATOMY” SETUP

VAR with 10 variables, 1955 to 2017

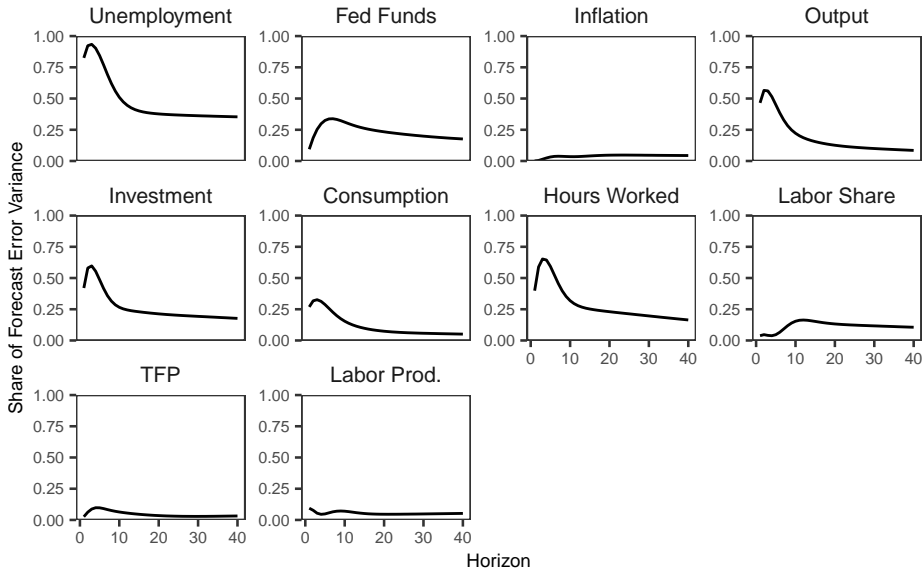
Identification scheme:

Choose the linear combination of empirically estimated reduced-form VAR residuals that explains most of the forecast error variance in a target variable, at a target frequency.

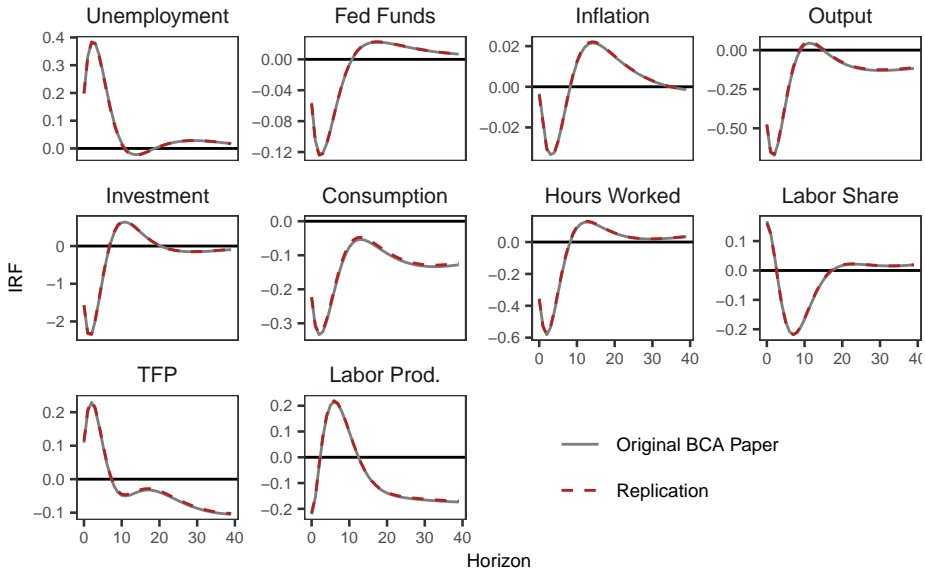
Initial Target:

- Business cycle frequency: $\left(\frac{2\pi}{32}, \frac{2\pi}{6}\right)$
- Unemployment

FORECAST ERROR VARIANCE MAXIMIZATION



REPLICATION OF “BUSINESS CYCLE ANATOMY”

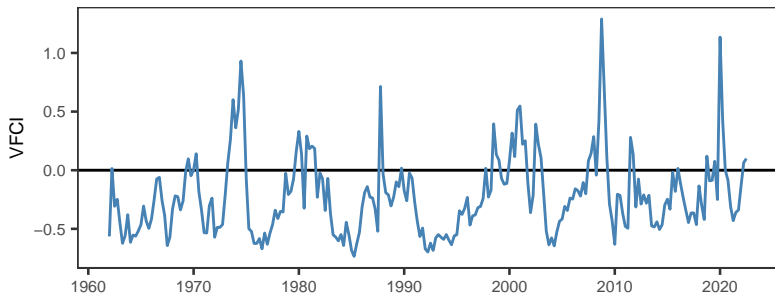


VOLATILITY FINANCIAL CONDITIONS INDEX (VFCI)

The VFCI is an estimate of the price of risk.

In many models, this would be equal to the volatility of the stochastic discount factor.

Empirically, estimated from consumption and asset prices.

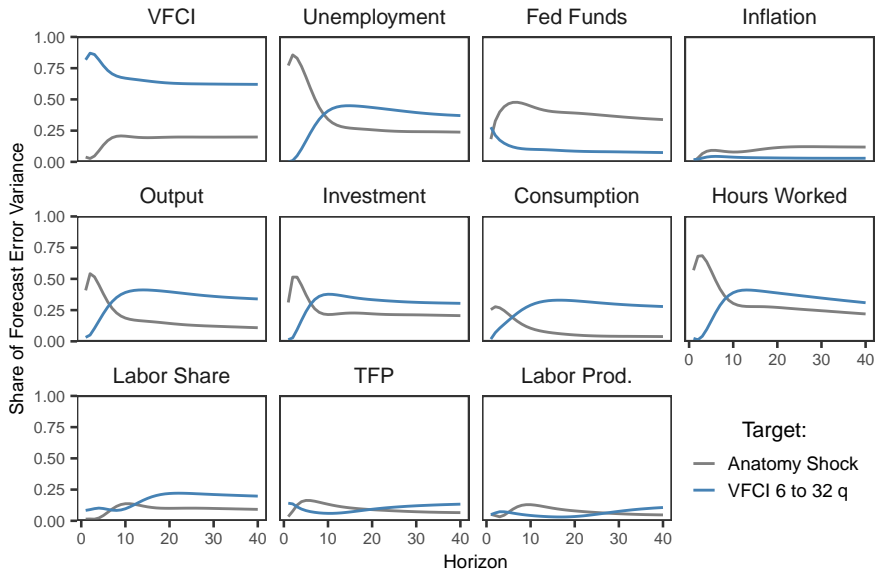


WHAT WE SHOW

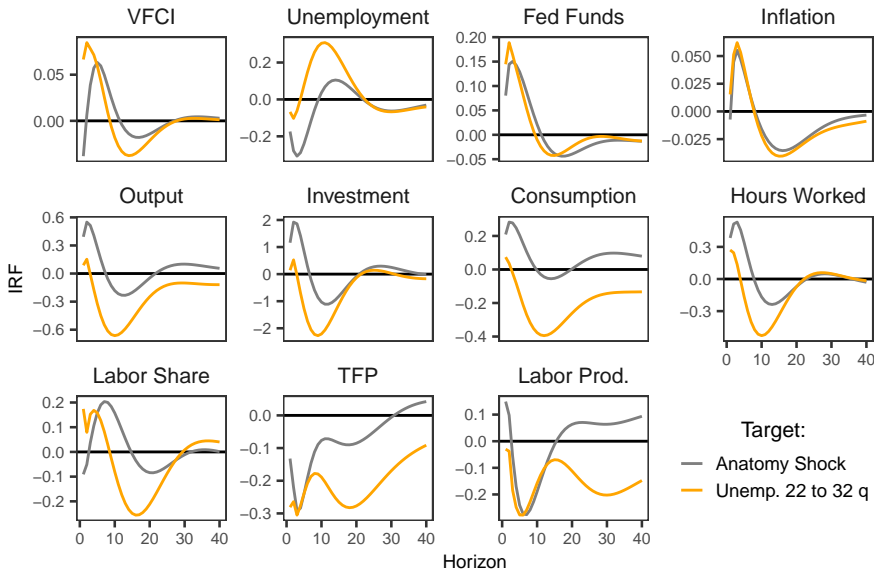
The “Anatomy” Business Cycle shock is composed of two shocks:

1. One targeting financial conditions at original frequency
2. One targeting unemployment at 22 to 32 quarters instead of original frequency

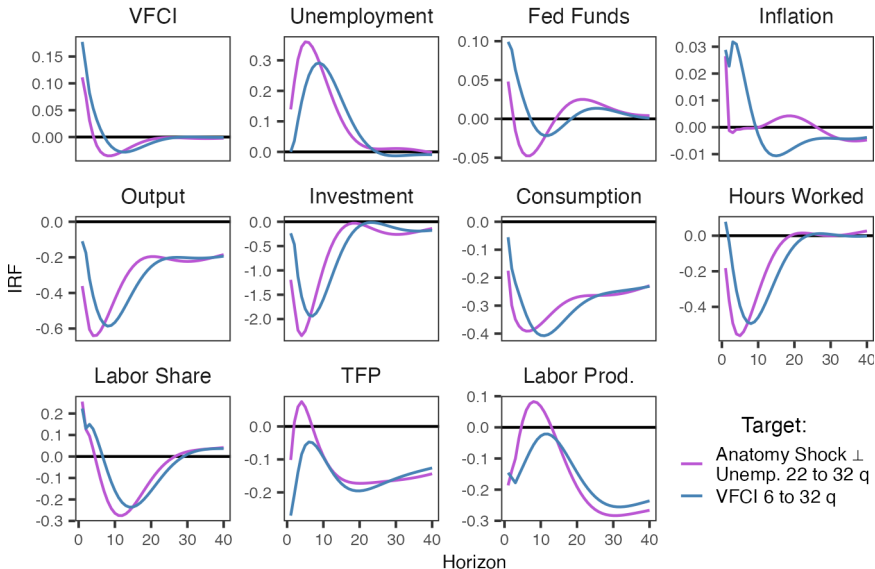
VFCI SHOCK EXPLAINS LONGER HORIZONS



SECOND SHOCK DIFFERENT THAN ANATOMY SHOCK

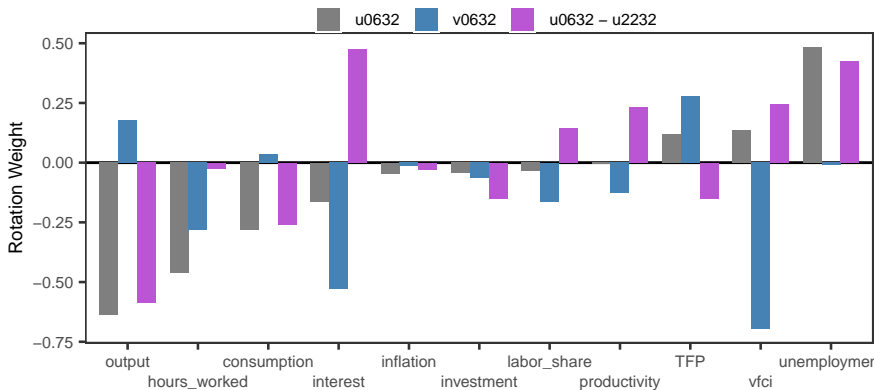


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APPENDIX

ROTATION WEIGHTS



EMPIRICAL SHOCK WEIGHTS

