

Optimal Response to Unemployment Fluctuations

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Optimal nominal interest rate i^*

$$i^* = i - \frac{[u - u^*]}{du/di}$$

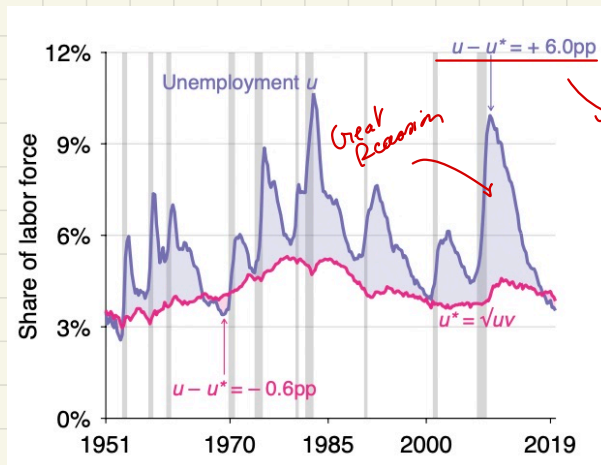
Midrange estimate of monetary multiplier. $du/di = 0.5$

$$i^* = i - 2 \times (u - u^*)$$

↳ for any unemployment gap (pp), the optimal response of monetary policy is **2x gap**

↳ ex: if unemployment gap is -1pp, FFR should ~~drop~~ ^{increase} by 2pp

US



FFR should drop by $6 \times 2 = 12pp$. But FFR = 5% in 2008 \Rightarrow FFR should be $< 0 \Rightarrow$ ZLB is binding