Discussion: Indebted Supply and Monetary Policy: A Theory of Financial Dominance

Viral Acharya, Guillaume Plantin, and Olivier Wang

Seung Joo Lee

Oxford University

2025 Financial Intermediation Research Society (FIRS) Conference

May 30, 2025

Summary of the paper

Ex-ante capital structure decision and ex-post financial constraint

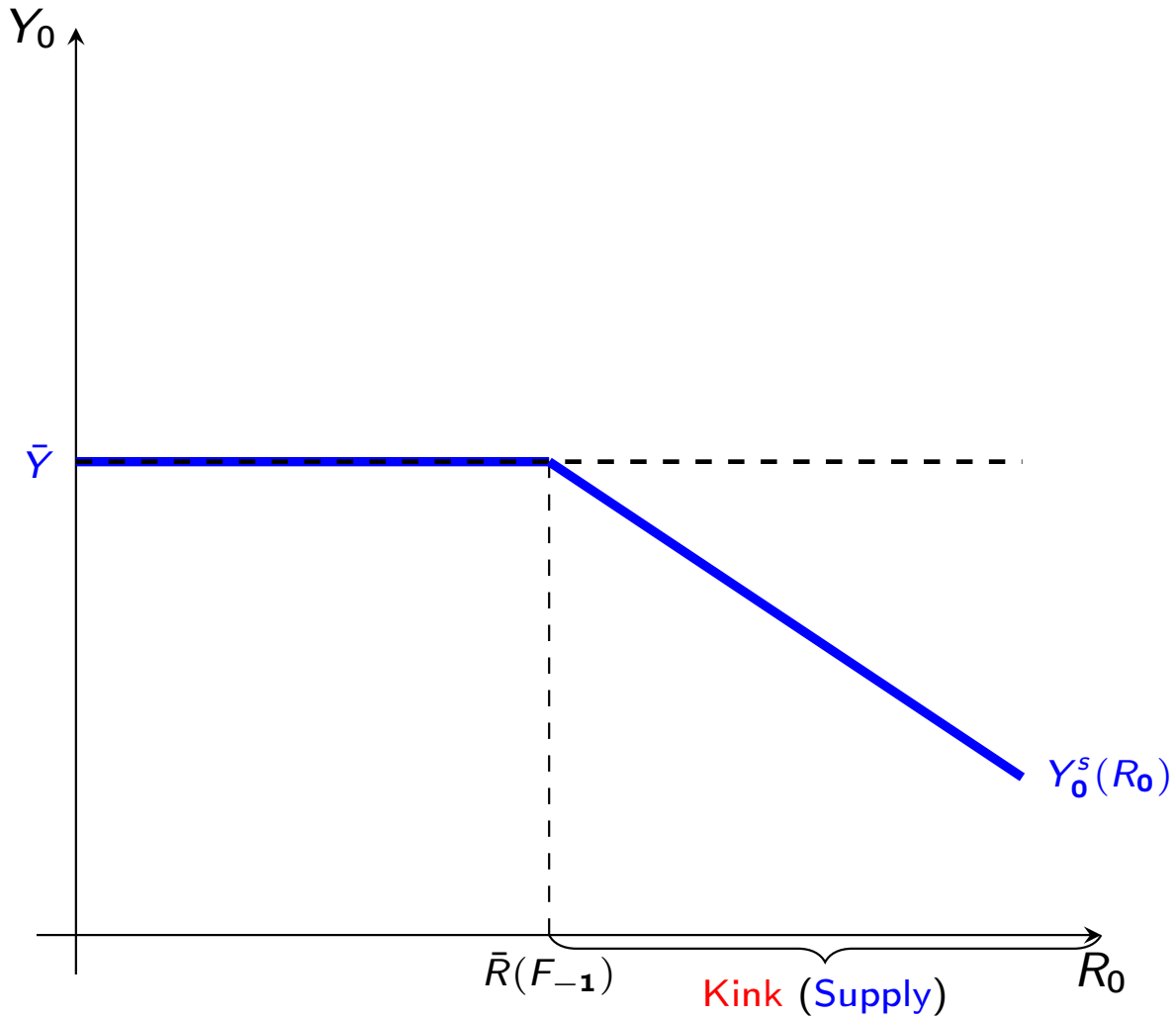
- Ex-ante: lower interest rates spurs "market-timing behavior" of firms (debt financing↑)
- Ex-post: with large initial debt encumbered to long-term investments, a rising interest rate reduces the value of remaining pledgeable assets, hurting financing for short-term production

Financial dominance: the previous (and current) capital structure decisions of firms affect the conduct of monetary policy

- Inflationary shock: a higher policy rate with a larger drop in output
- Negative demand shock: a lower policy rate, but it tightens future constraints

Beautiful, impactful paper with a ton of interesting policy-relevant points

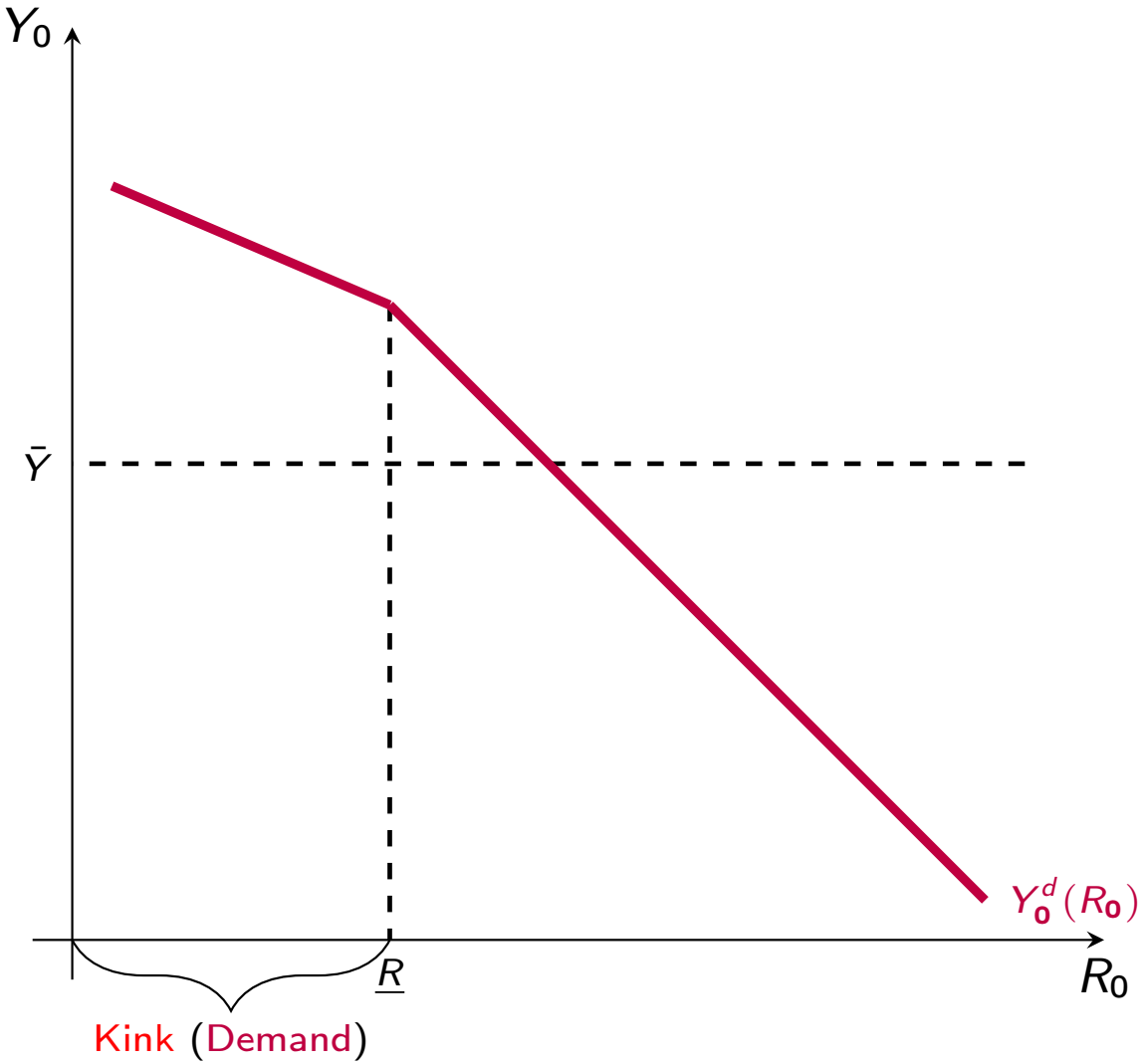
Flexible price (natural) output



With $R_0 > \bar{R}(F_{-1})$, pledgeable asset value $<$ the level required for full continuation

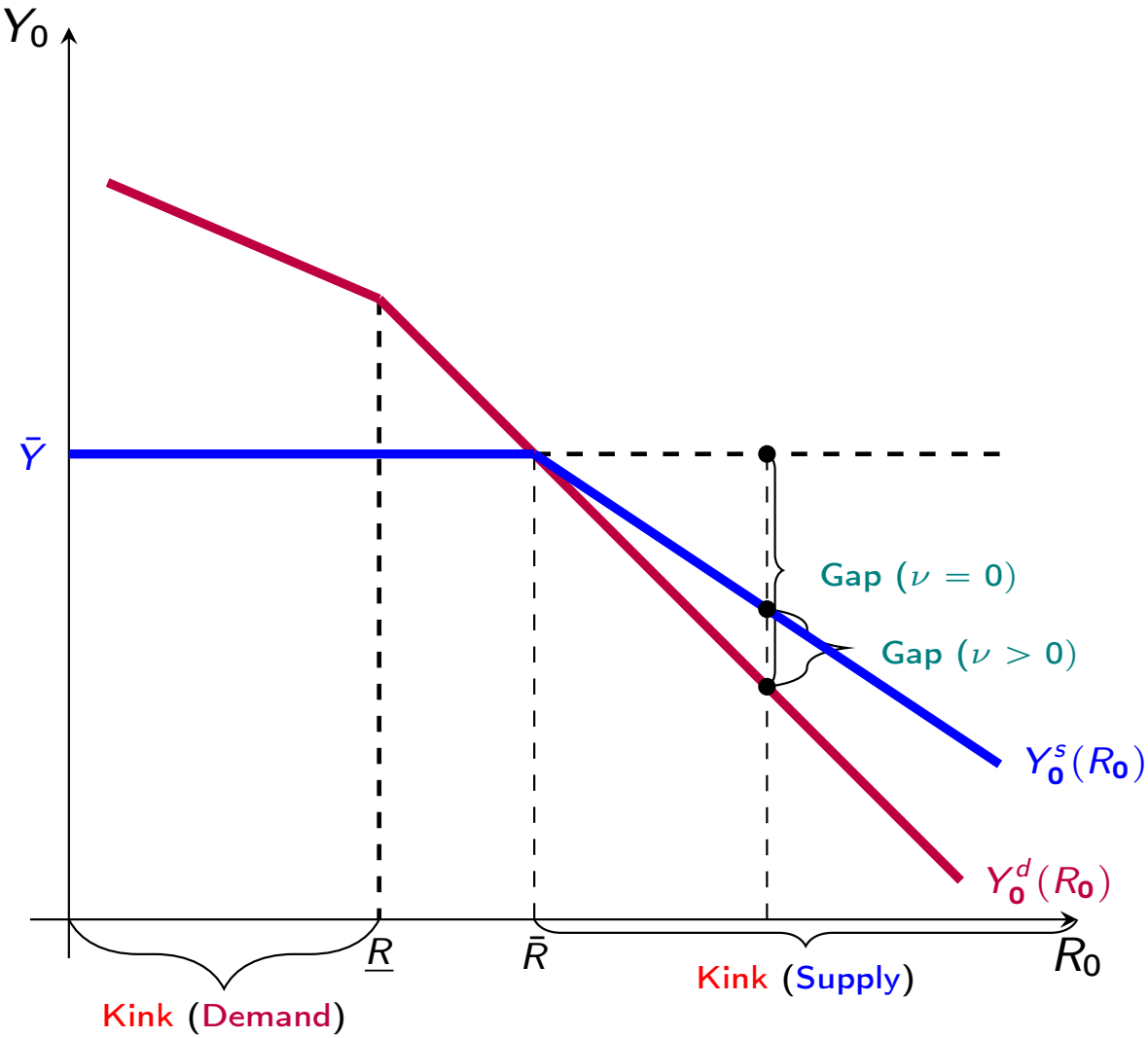
- $F_{-1} = R_{-1} l_{i,-1}$: debt to be repaid at $t = 0$. $\bar{R}(F_{-1})$ is decreasing in F_{-1}
- Kink (Supply) caused by the ex-post financial constraint

Aggregate demand



With $R_0 < \underline{R}$, firms take too much debt now $\longrightarrow$ future supply is indebted (constrained)

- Lower output at $t = 1$ reduces $t = 0$ income, weakening the monetary policy power
- Kink (Demand) caused by the ex-ante market-timing behavior of firms

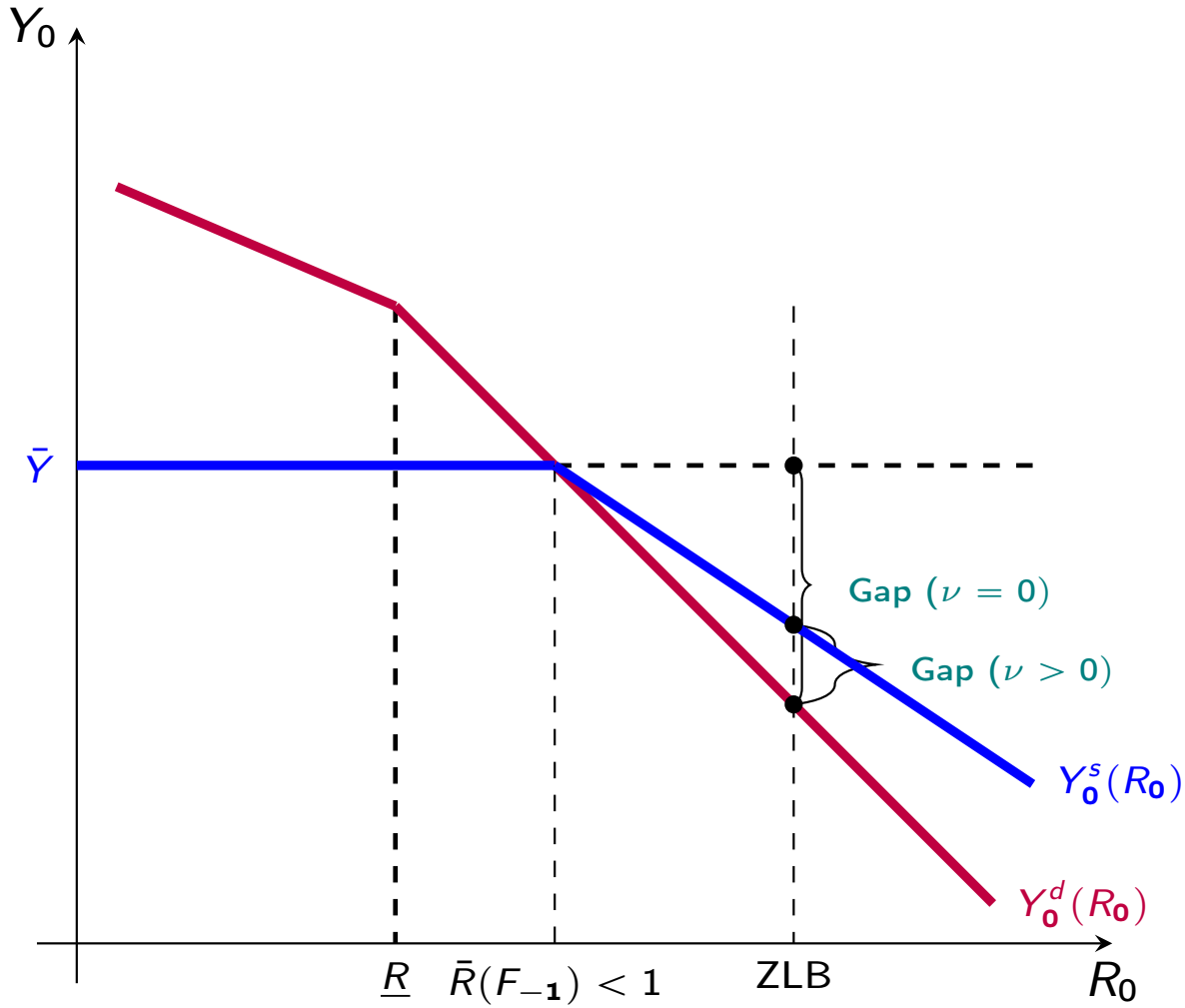


The gap between the two curves determine inflation

- With $R > \bar{R}$, (absolute) gap ($\nu > 0$) is lower than the case without financial constraint ($\nu = 0$): less deflationary (kinked Phillips curve)

Inflationary shock | Negative demand shock

Missing disinflation during the Great Recession?



With high F_{-1} from the previous corporate debt boom periods, e.g., Ivashina et al. (2024)

- $\bar{R}(F_{-1})$ can go below 1, in which case R_0 is constrained by ZLB
- Less disinflationary, aligned with Coibion and Gorodnichenko (2015) who suggested the increase in oil prices and the inflation expectation from 09' to 11'

Ex-ante capital structure decision

Ex-ante, firm i chooses $F_{i,t}$ to maximize

$$\underbrace{[\Pi_{i,t+1}(x_{i,t+1}(F_{i,t})) - \gamma x_{i,t+1}(F_{i,t})K]}_{\text{Net profits from production}} + \underbrace{\frac{\kappa_t}{R_t} F_{i,t} K}_{\substack{\text{Market timing} \\ \uparrow \text{ when } R_t \downarrow}}$$

where $\kappa_t = R_t^E - R_t$.

- In the benchmark model, κ_t does not move with R_t: lower R_t raises $F_{i,t}$
- κ_t is the total spread between debt and equity above and beyond risk premium, which could stem from a combination of compensation for additional costs borne by equity investors and convenience yields that allow debt to pay a lower return

With lower policy rates, usually we have

- Risk premium$\downarrow$: e.g., Dreschsler et al. (2018), Kekre and Lenel (2022)
- Convenience yield$\downarrow$: e.g., Krishnamurthy and Lustig (2019)

Extreme case where $\kappa_t = \kappa_0 \cdot R_t$, then no financial dominance

- Empirical evidence about how κ_t moves with R_t will be very helpful

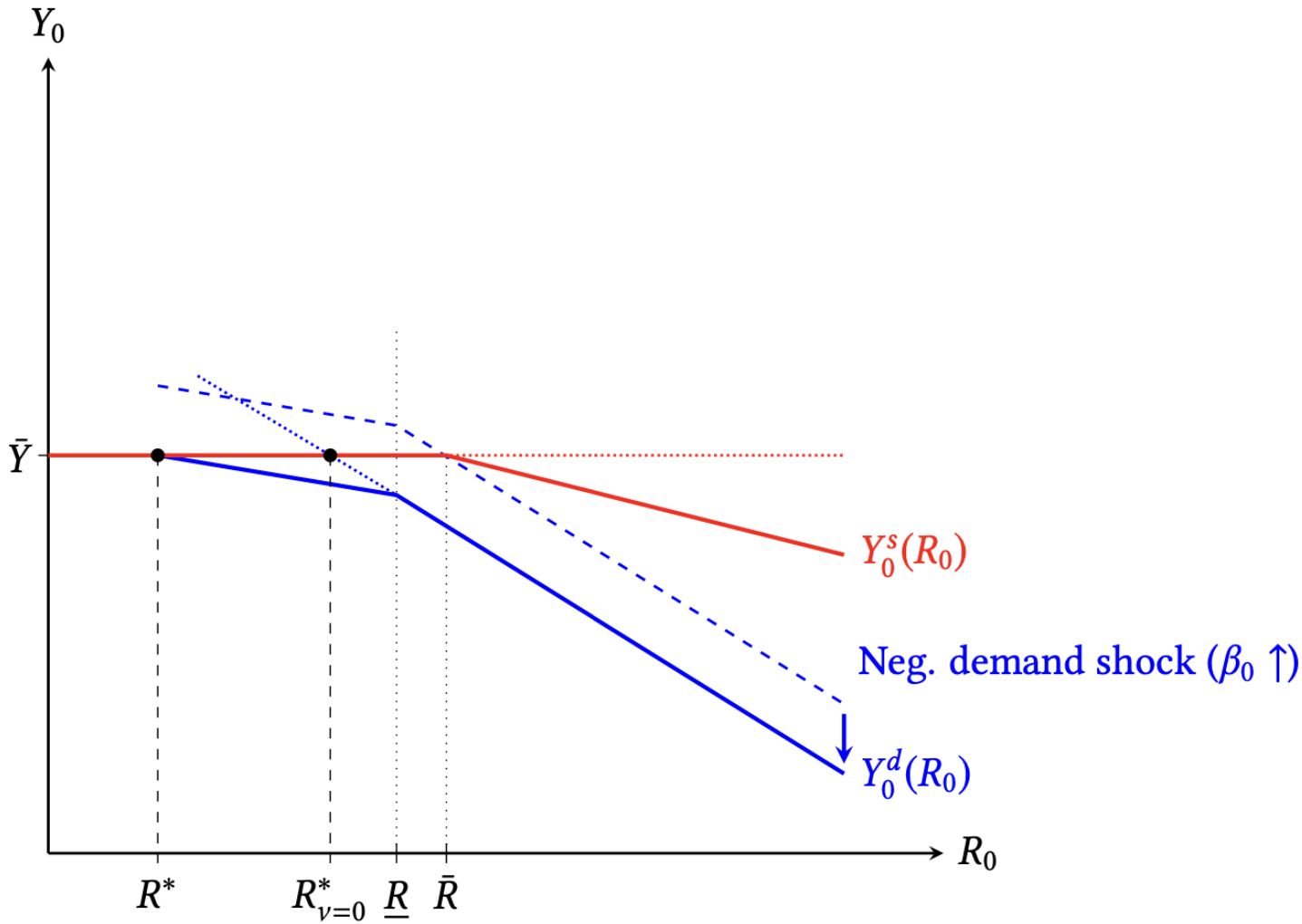
Aggregate supply-demand externality

Externality: each firm does not internalize the effect of its capital structure decision on future aggregate supply, which in turn affects current aggregate demand

As in Farhi and Werning (2016), we can employ

- Ex-ante macroprudential policy
- Ex-post redistribution (to firms) policy

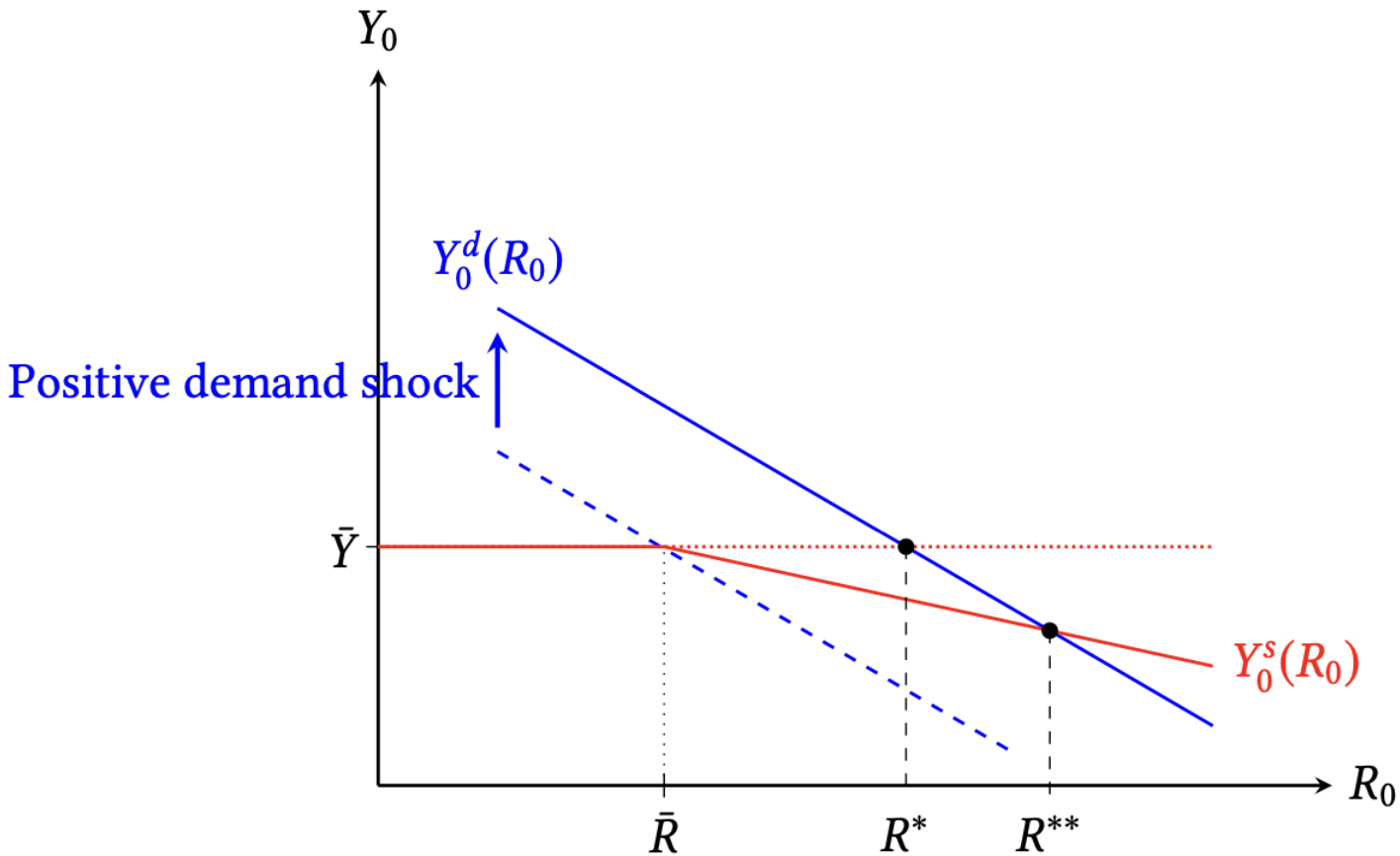
Ex-ante macroprudential policy with negative demand shock



Lower κ at $t = 0$ (i.e., subsidize equity financing or taxing debt financing) to

$$\kappa = R^*_{\nu=0}\left(\bar{x}^{1-\nu} - 1\right)$$

Ex-post redistribution policy with positive demand shock

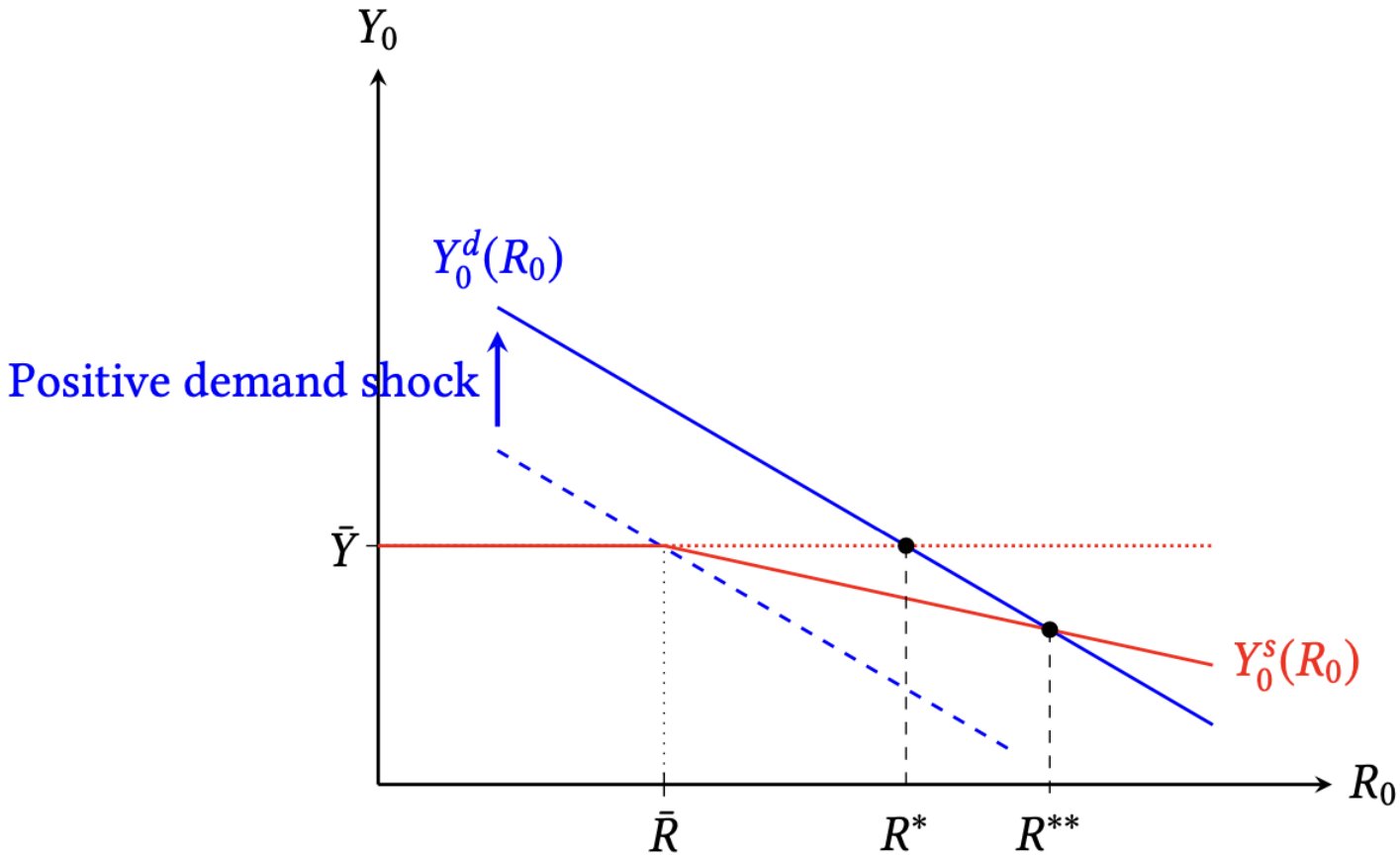


Lower γ_0 (liquidity shock parameter) to

$$\gamma_0 = \beta_0 - F_{-1}$$

Thank you very much!
(Appendix)

Inflationary shock

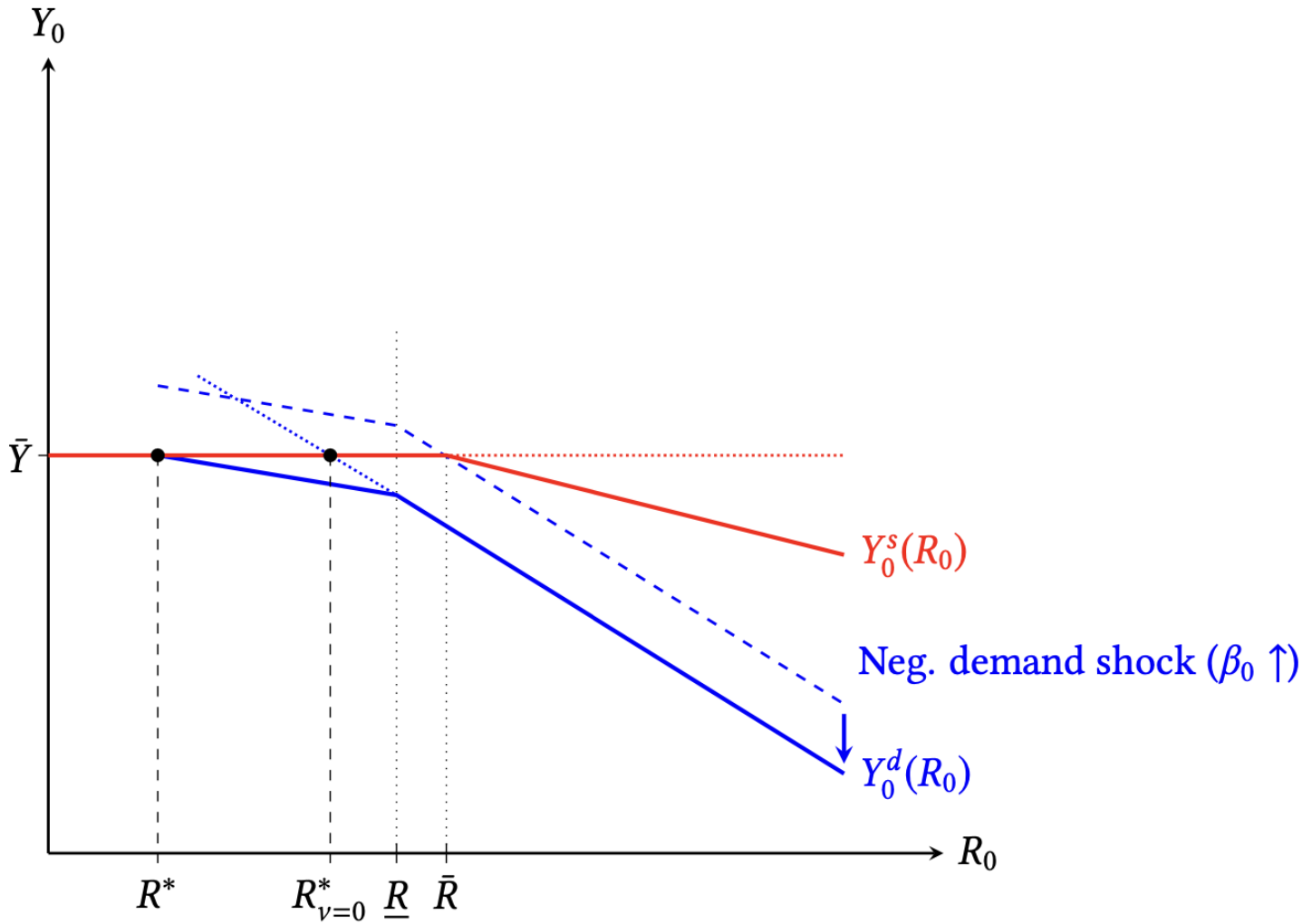


Financial dominance: stronger monetary policy response to close the gap (for price stability)

- Issue: natural output$\downarrow$ as $R\uparrow$ from $\bar{R}$, which is inflationary

Go back

Negative demand shock



Financial dominance: stronger monetary policy response to stabilize output

- Issue: lower policy rate makes future supply indebted $\longrightarrow$ aggregate demand$\downarrow$ now
- Still, production next period not fully utilized (i.e., slow recovery)

Go back