



Monopsony, Income Risk and R^* Multiplicity

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WEDNESDAY 3RD JULY 2024, ECB FORUM ON CENTRAL BANKING 2024

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Introduction | Goal of the Talk



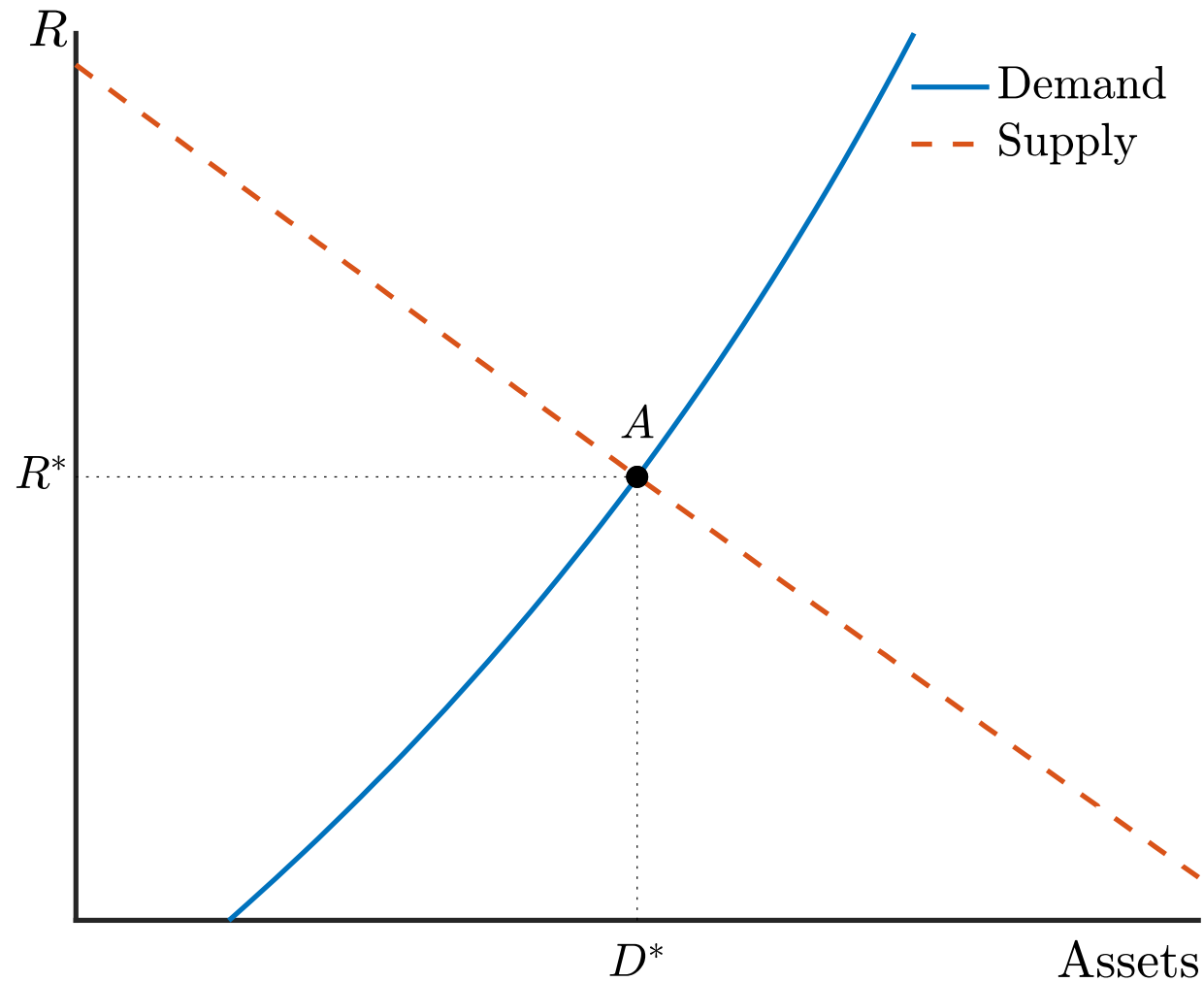
- Provide a framework to understand the behaviour of the neutral real interest rate (R^*) that equilibrates asset markets in the long run
 - In order to inform policy makers

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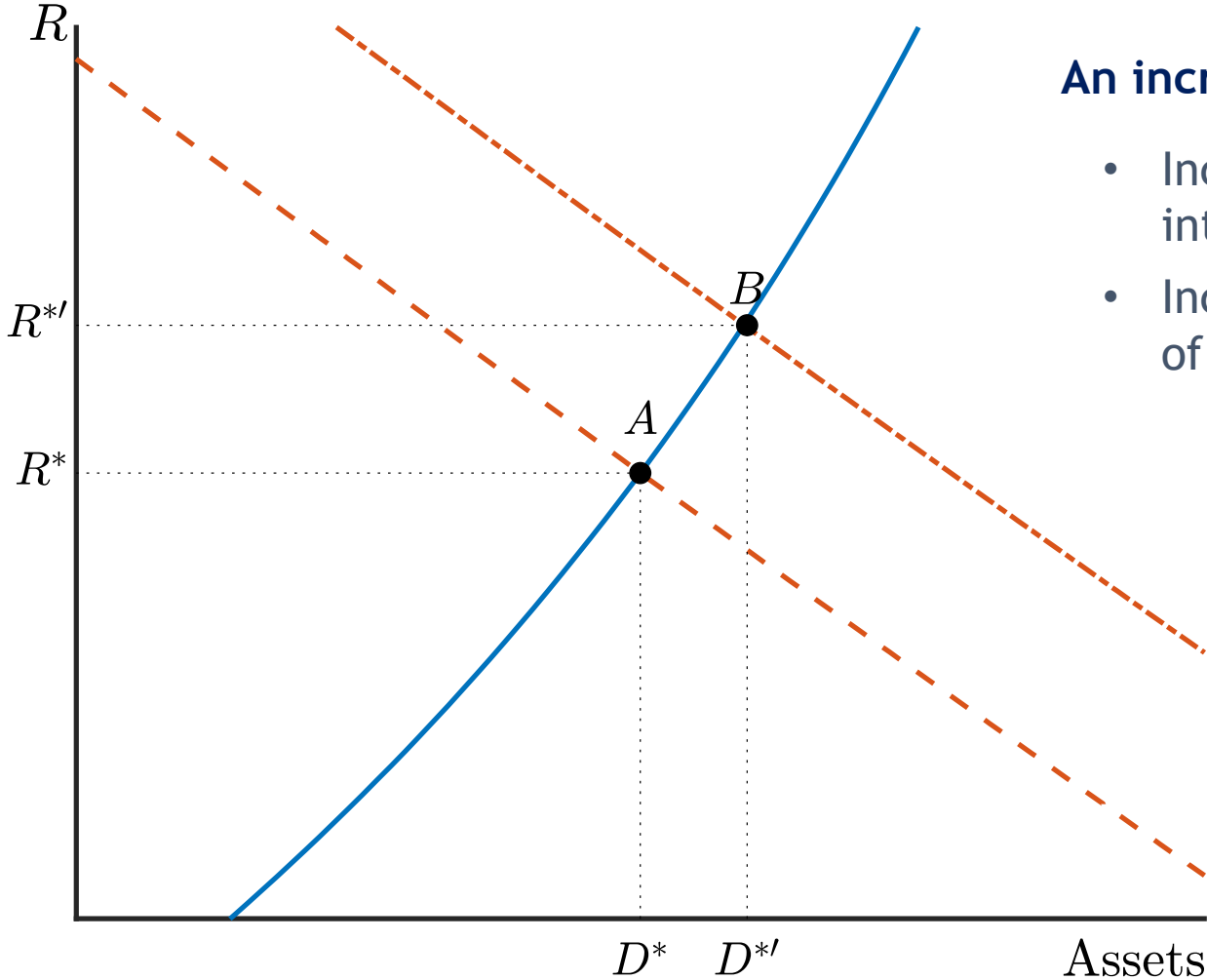


- Provide a framework to understand the behaviour of the neutral real interest rate (R^*) that equilibrates asset markets in the long run
 - In order to inform policy makers
- Standard view of R^* : classical dichotomy (monetary policy cannot affect long-run variables)
 - **Is R^* truly exogenous to monetary policy?**

The Baseline | Demand and Supply of Assets in a Standard Model



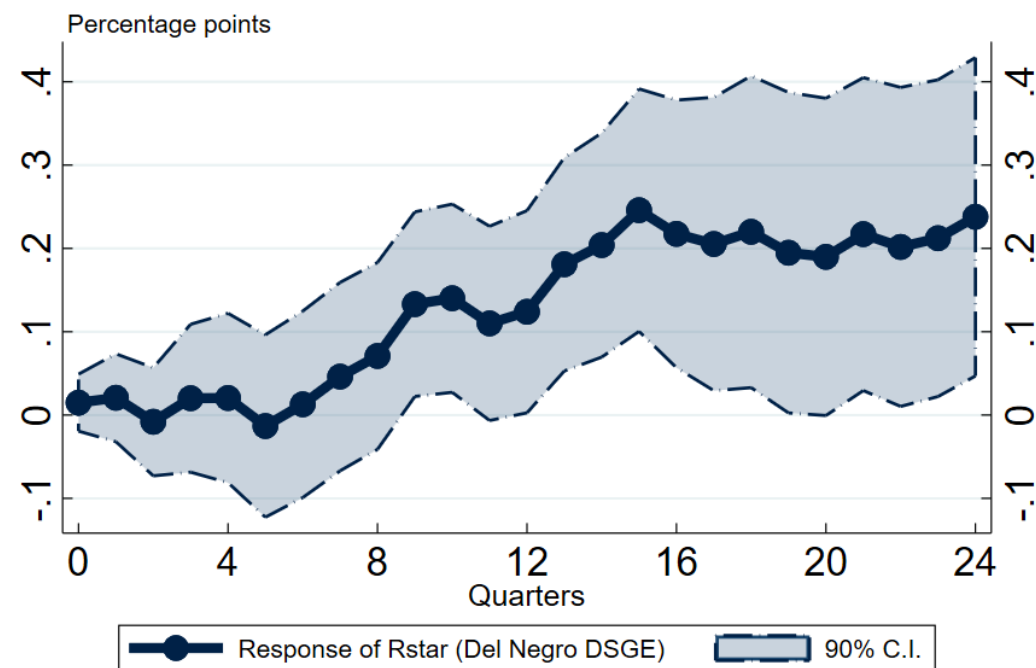
The Baseline | Demand and Supply of Assets in a Standard Model



An increase in the supply of assets

- Increases the equilibrium interest rate (R^* up)
- Increases equilibrium level of assets (D^* up)

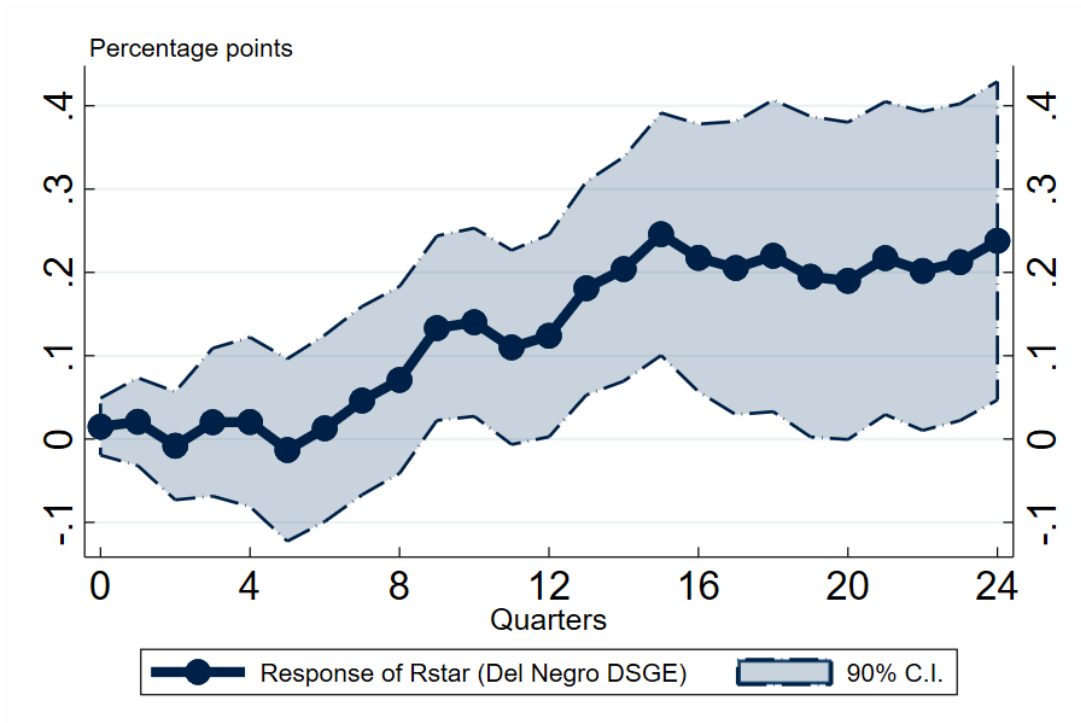
In the Data | This Effect holds pre-2007



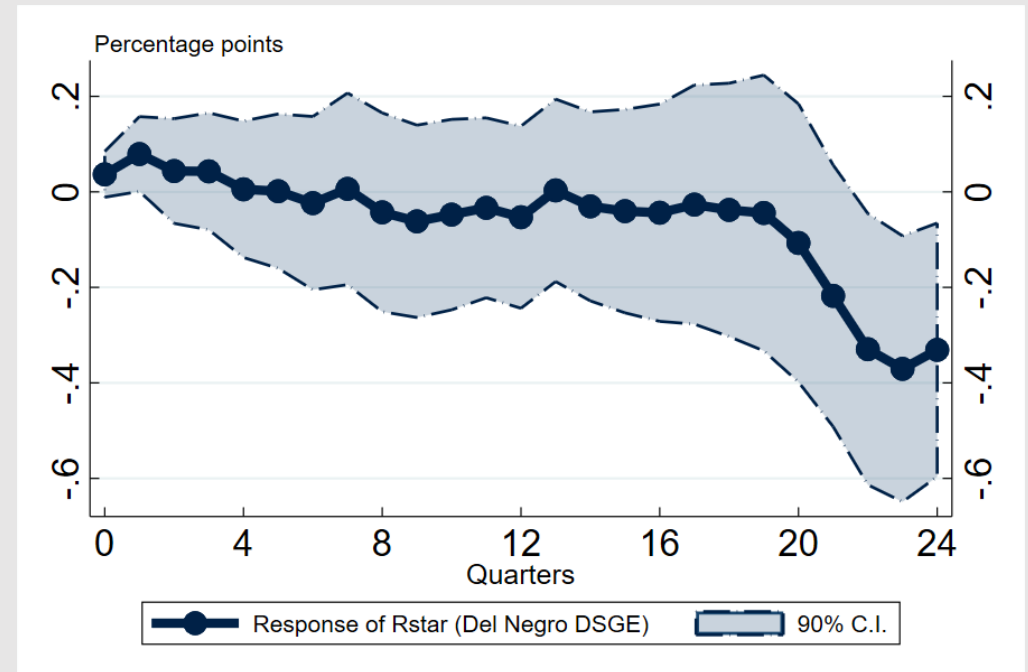
Estimation sample 1997-2007: a positive shock to corporate debt supply causes a **positive** and **persistent response of R^***

In the Data | This Effect holds pre-2007

... but Switches Sign after 2008



Estimation sample 1997-2007: a positive shock to corporate debt supply causes a **positive** and persistent response of R^*



Estimation sample 2007-2019: a positive shock to corporate debt supply causes a **negative** and persistent response of R^*

How Can We Rationalise This Puzzle?

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Forthcoming paper:

“Monopsony, Income Risk and R^* Multiplicity”

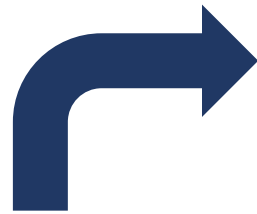
By Federica Romei, Ambrogio Cesa-Bianchi, Sergio de Ferra,
Andrea Ferrero, Alex Kohlhas, Michael McMahon and Giovanni Rosso

The Mechanism | Issuance, Monopsony Power and Income Risk



 Firms issue more debt

The Mechanism | Issuance, Monopsony Power and Income Risk



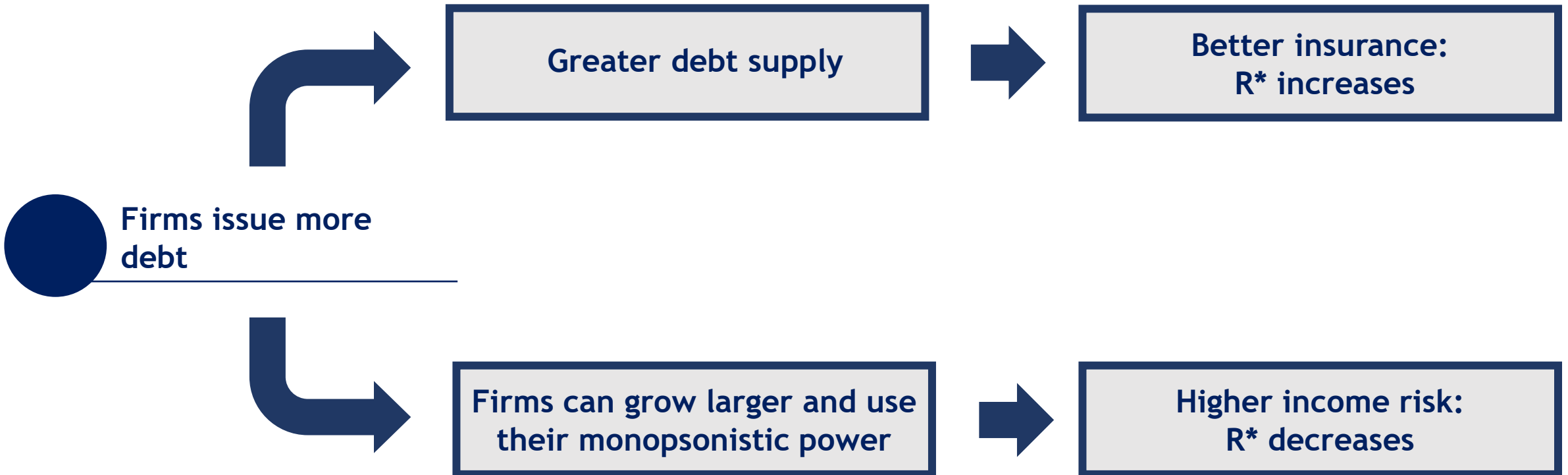
Greater debt supply



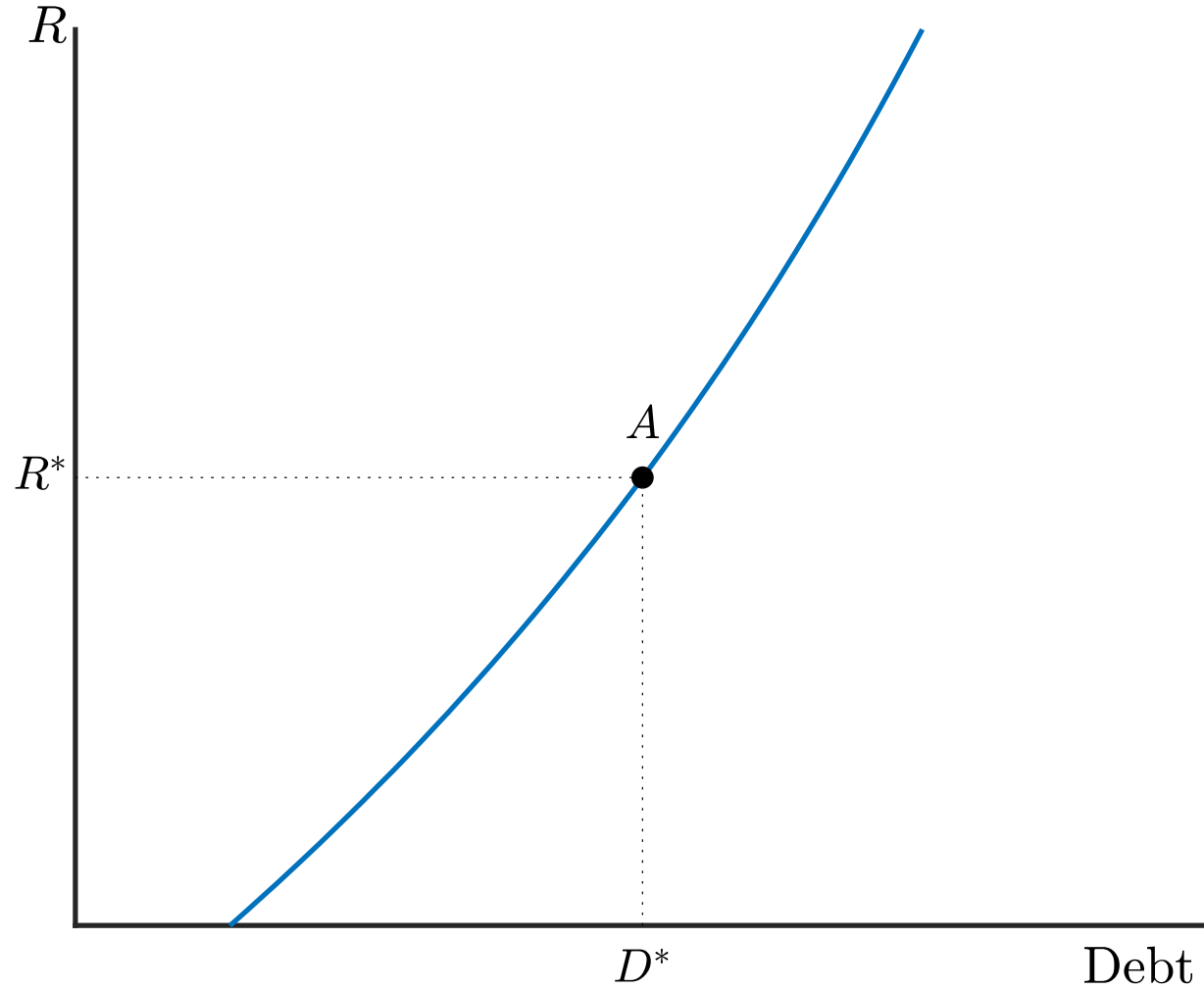
Better insurance:
 R^* increases

 Firms issue more debt

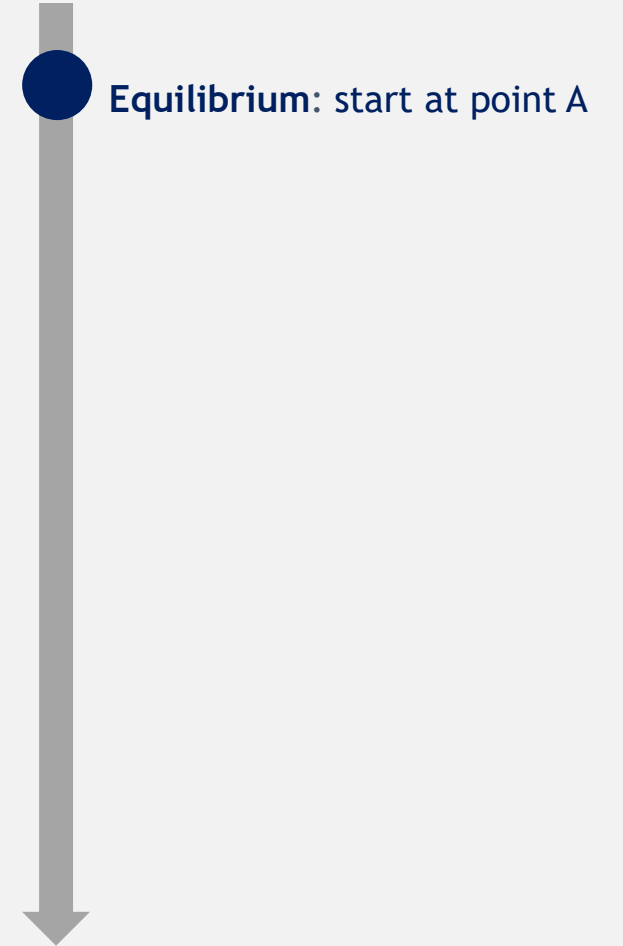
The Mechanism | Issuance, Monopsony Power and Income Risk



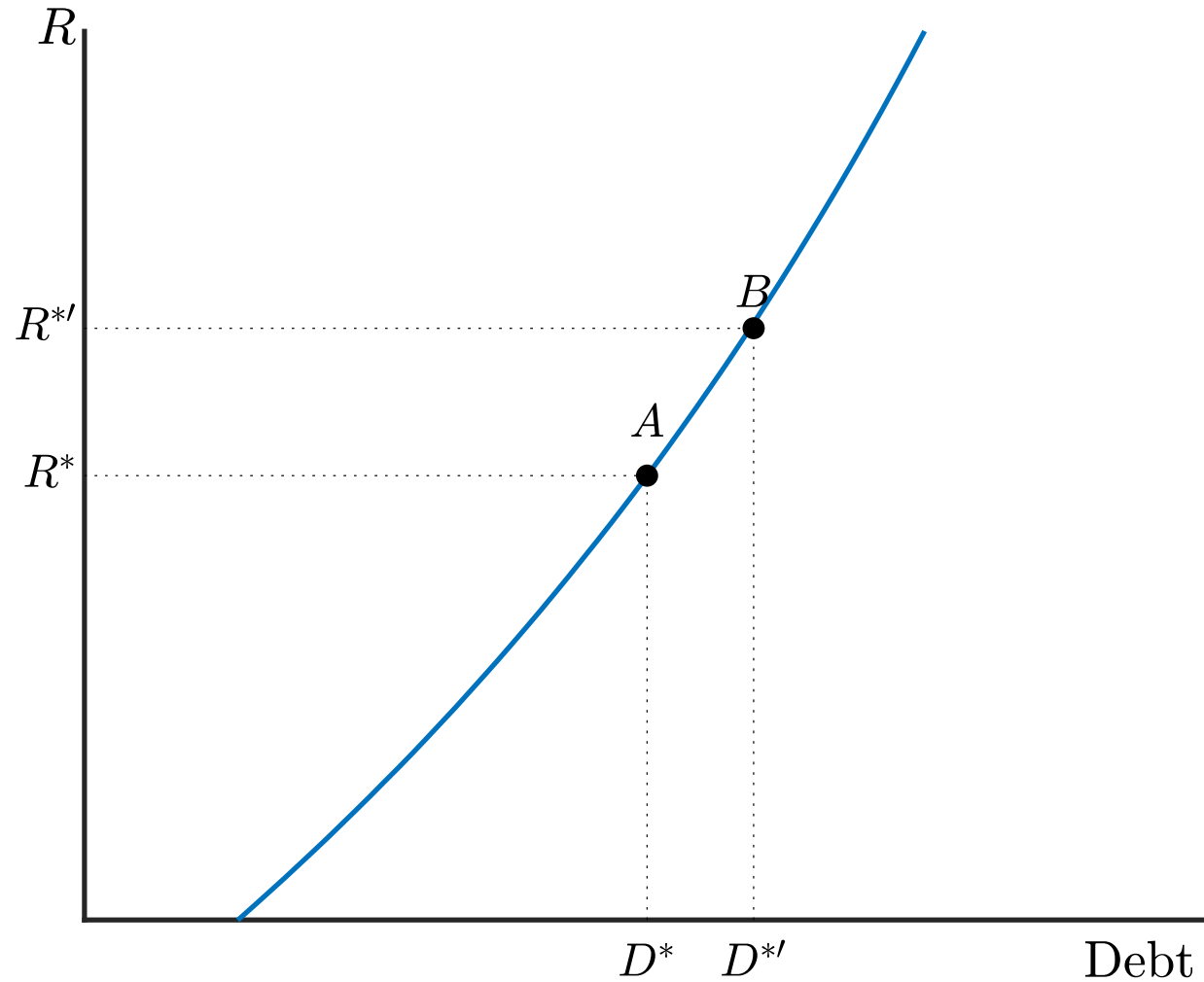
The Mechanism | The Initial Equilibrium



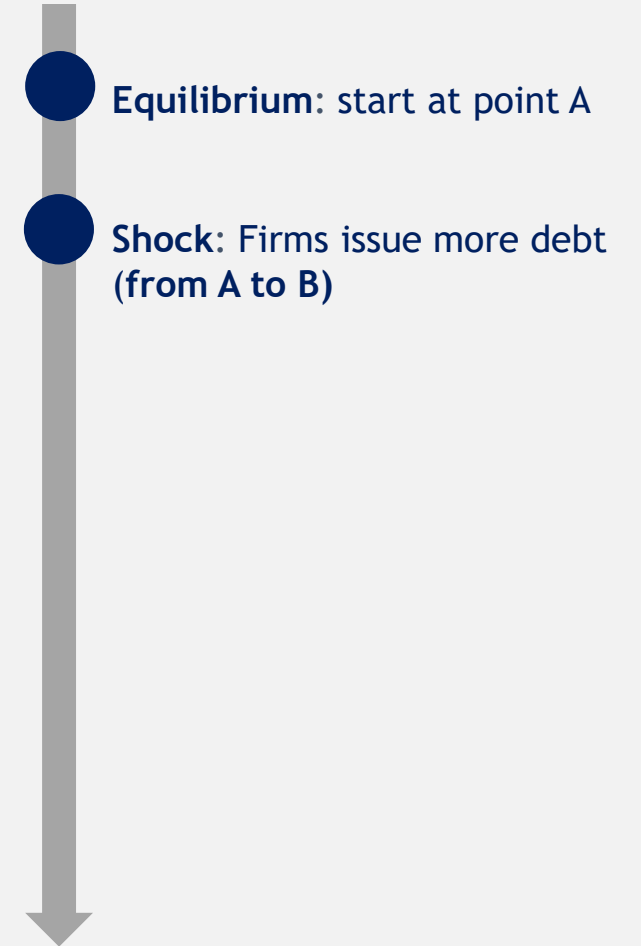
Model Timeline



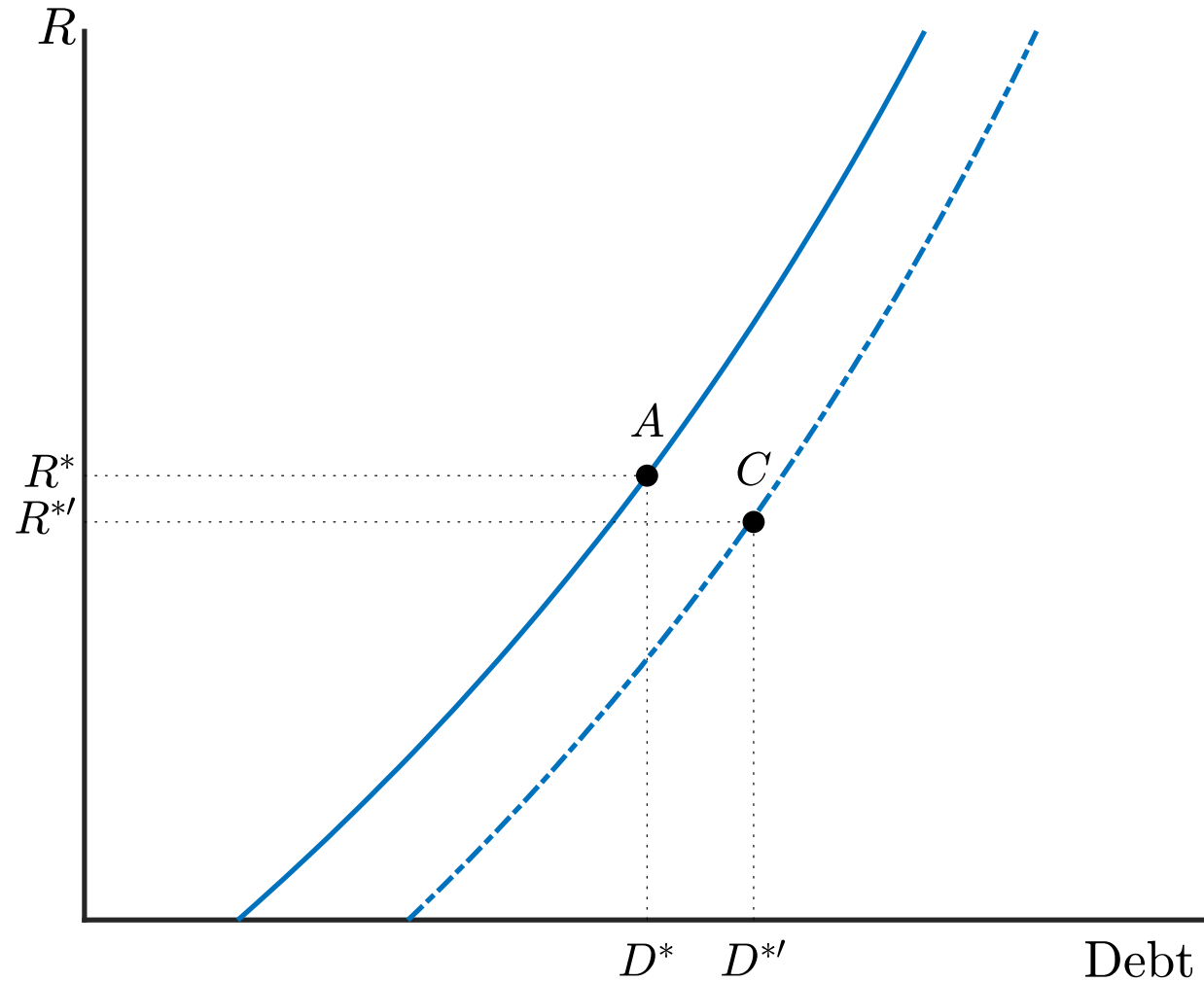
The Mechanism | Firms Issue More Debt




Model Timeline



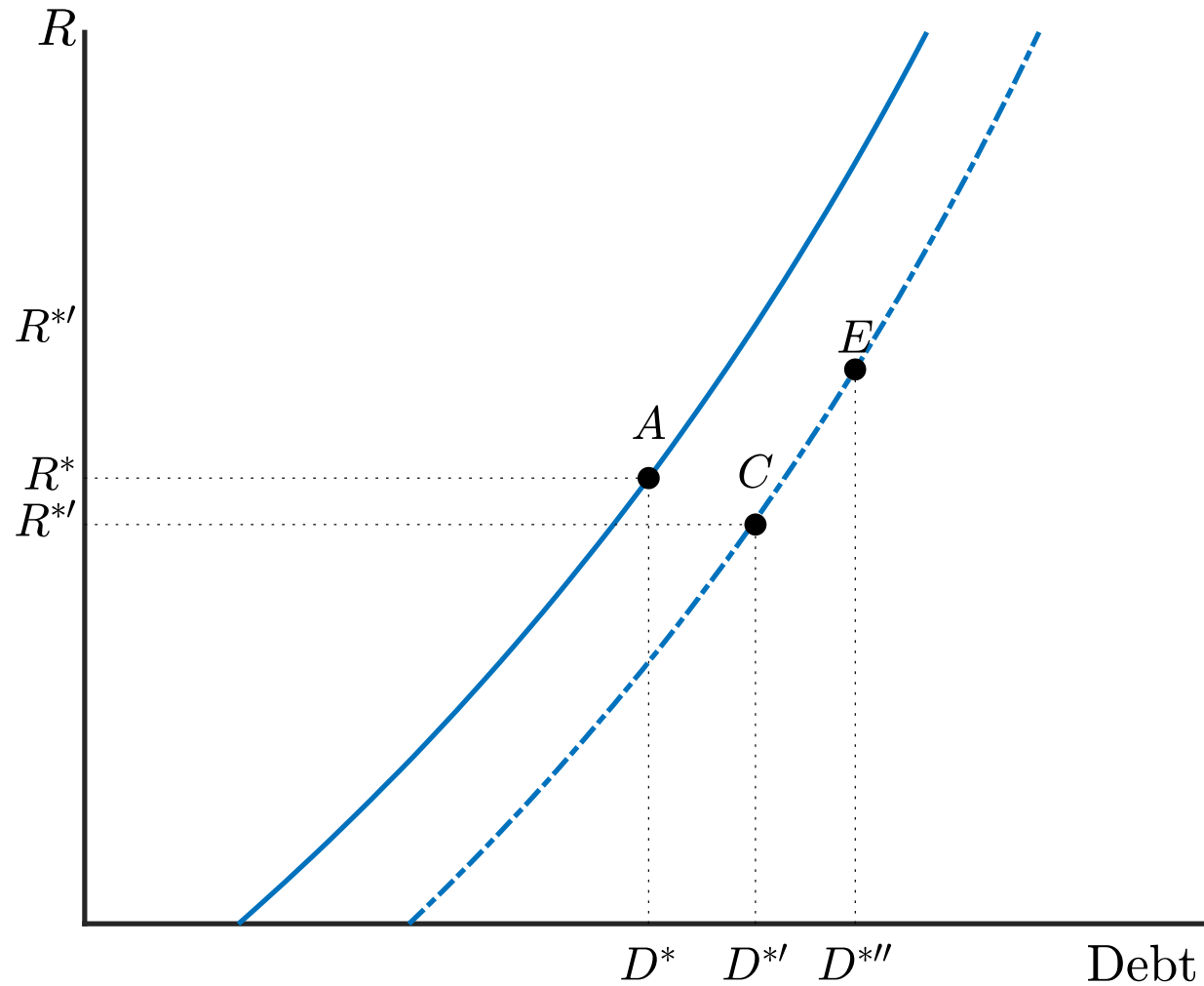
The Mechanism | Income Risk Increases - Demand shifts



Model Timeline

- 
- Equilibrium: start at point A
 - Shock: Firms issue more debt (from A to B)
 - New Equilibrium: Higher income risk (from B to C)

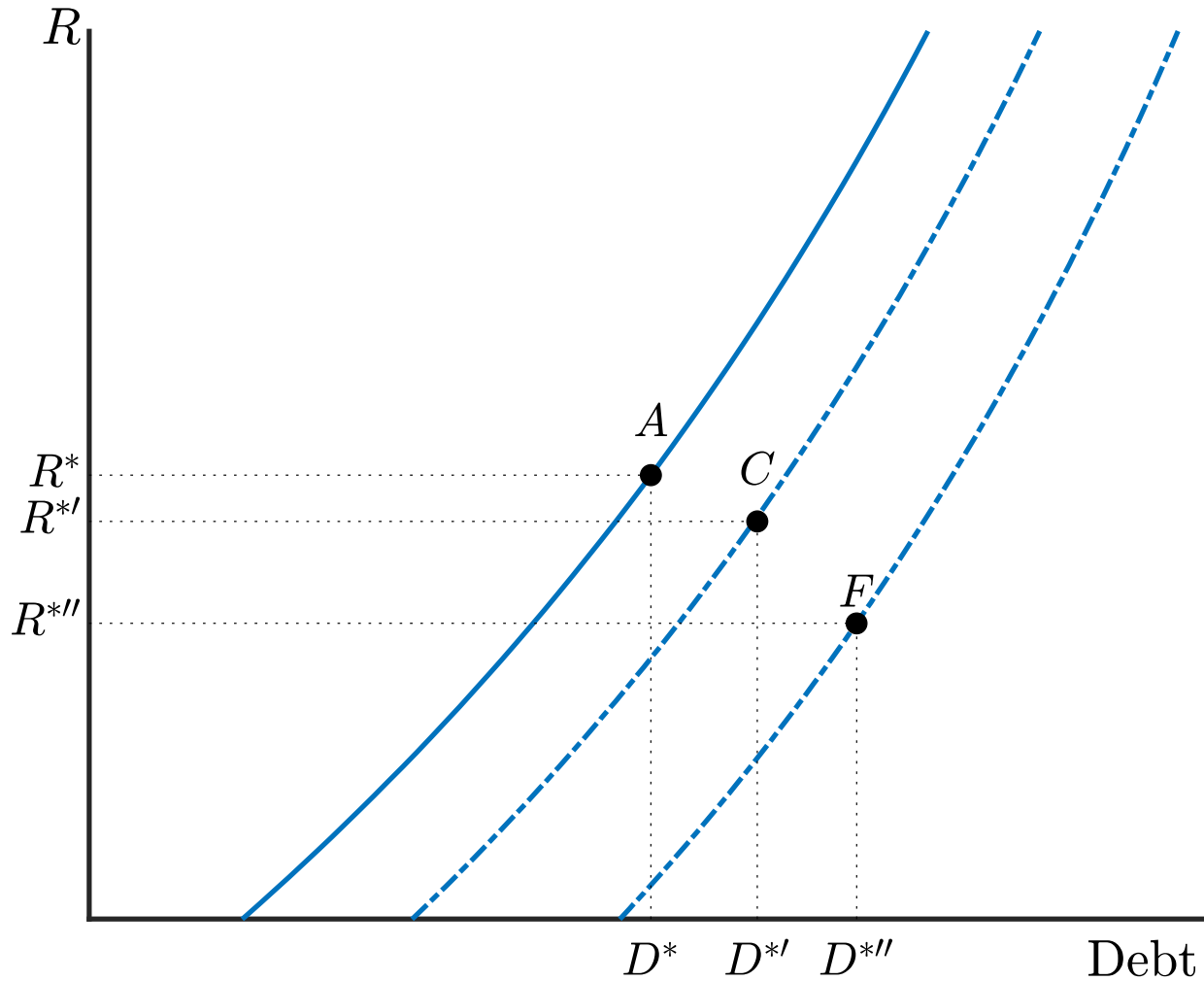
The Mechanism | Repeat the Same Experiment



Model Timeline

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- Onwards: iterating the same process produces point E etc

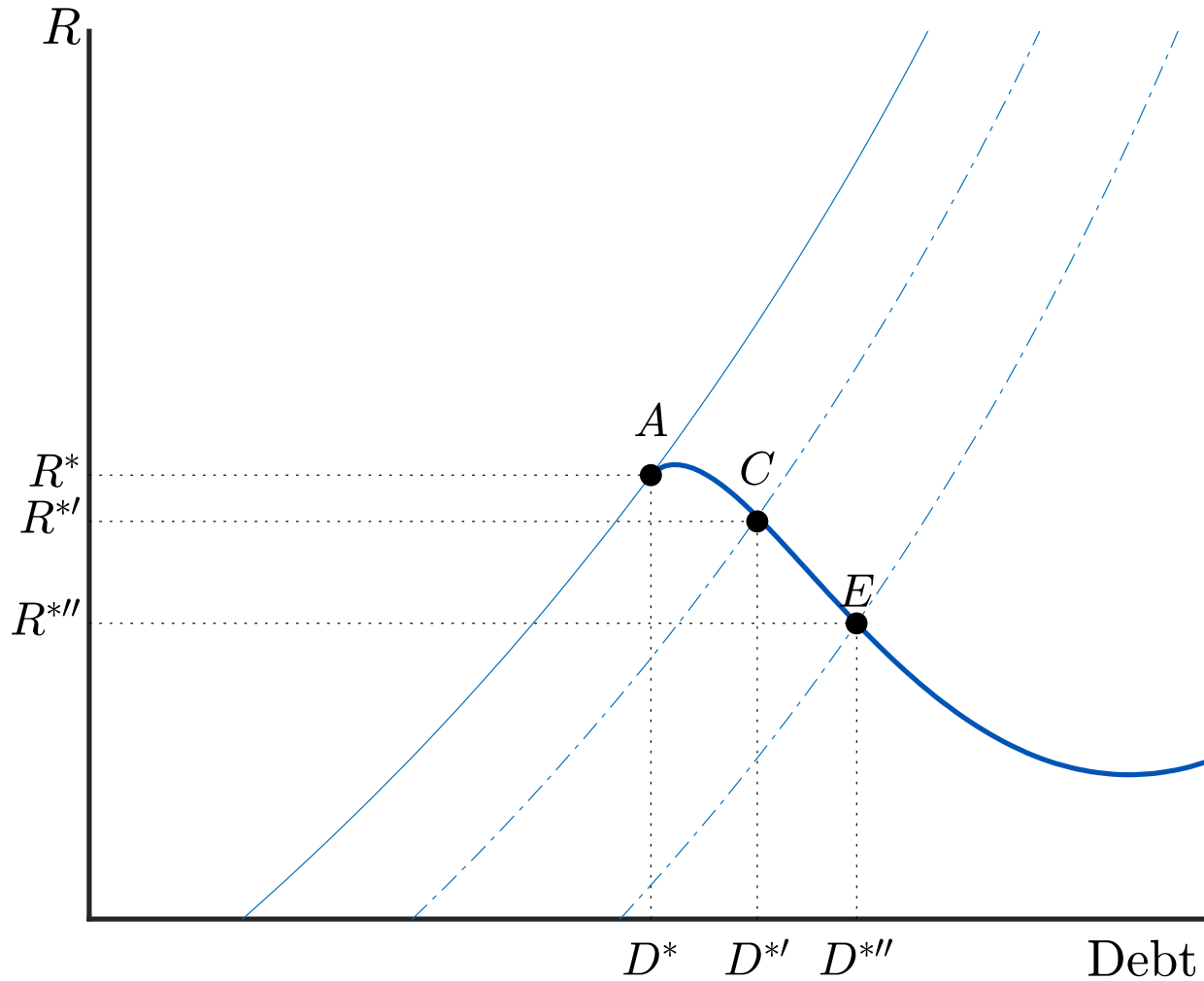
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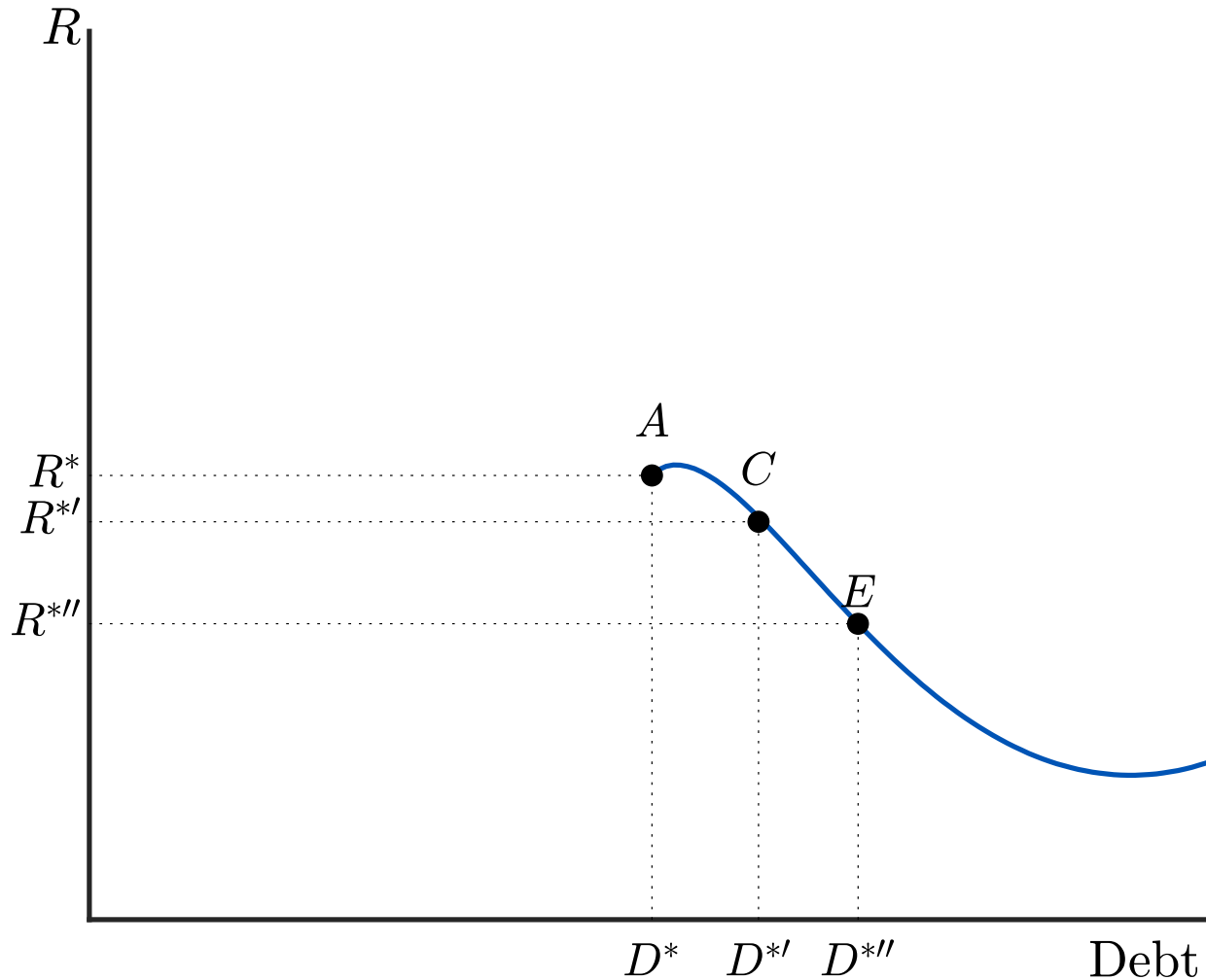
The Mechanism | A New Demand Curve



Model Timeline

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- Points A,C,E together identify the new demand curve

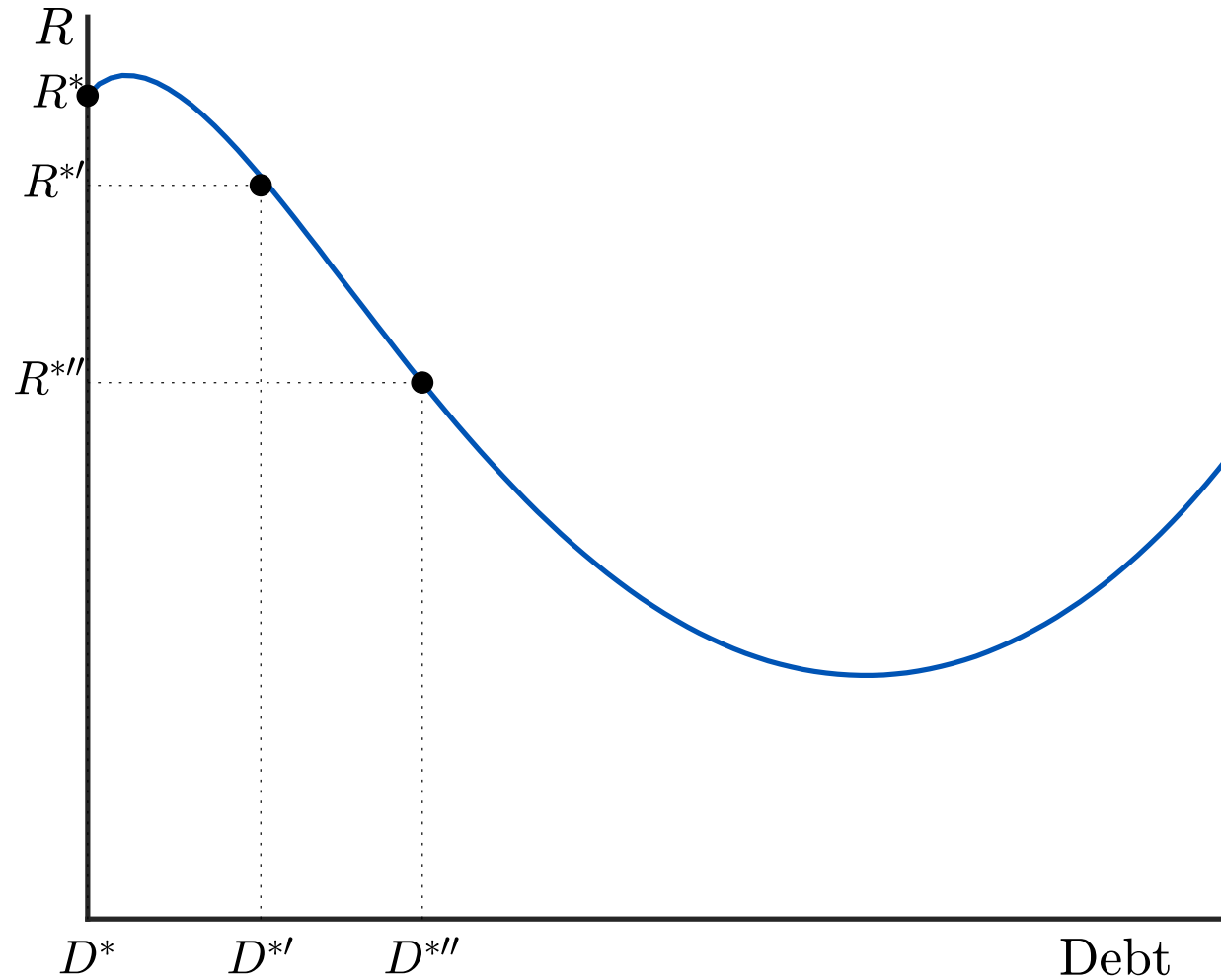
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Model Timeline

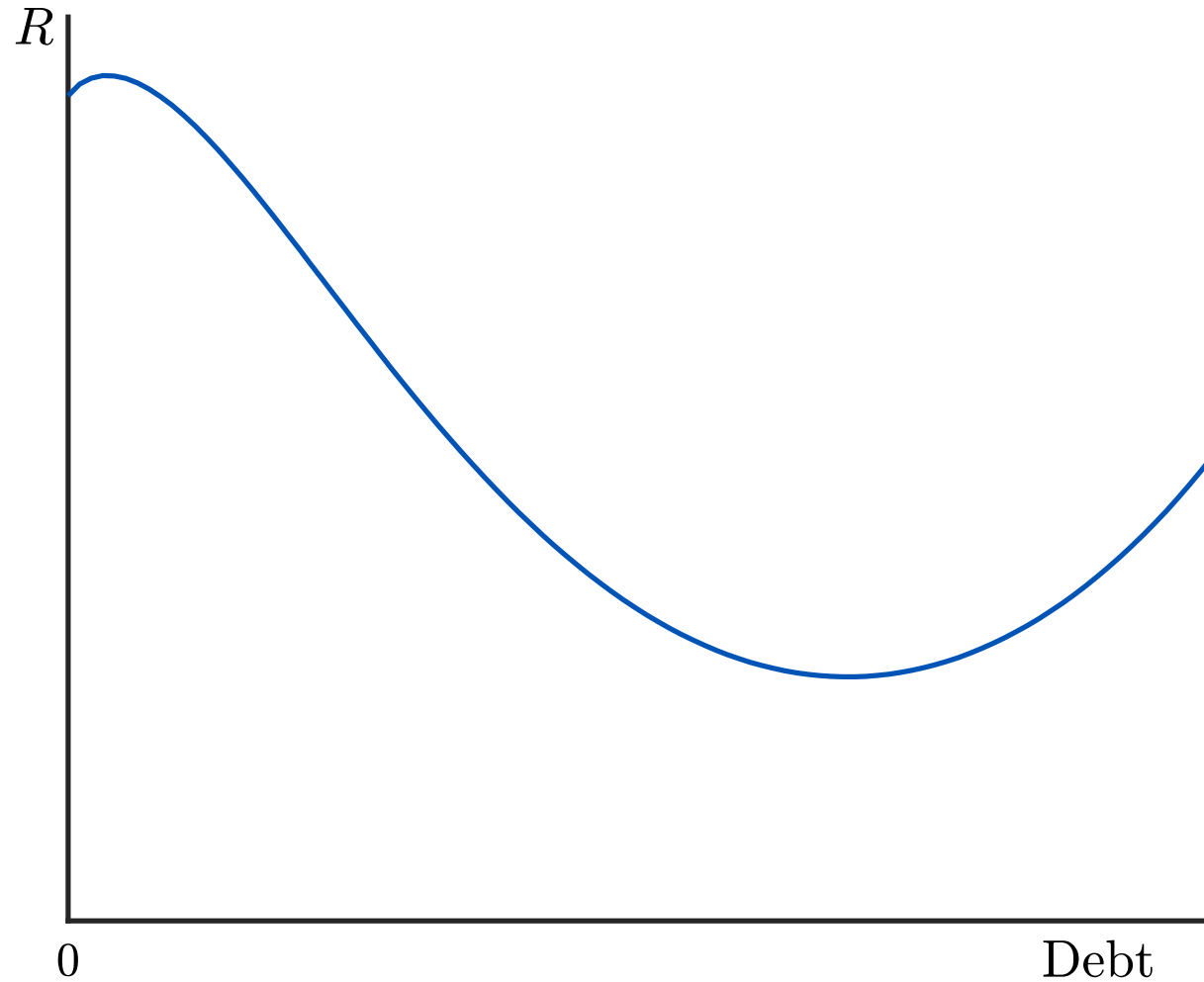
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The Model | New Demand Curve



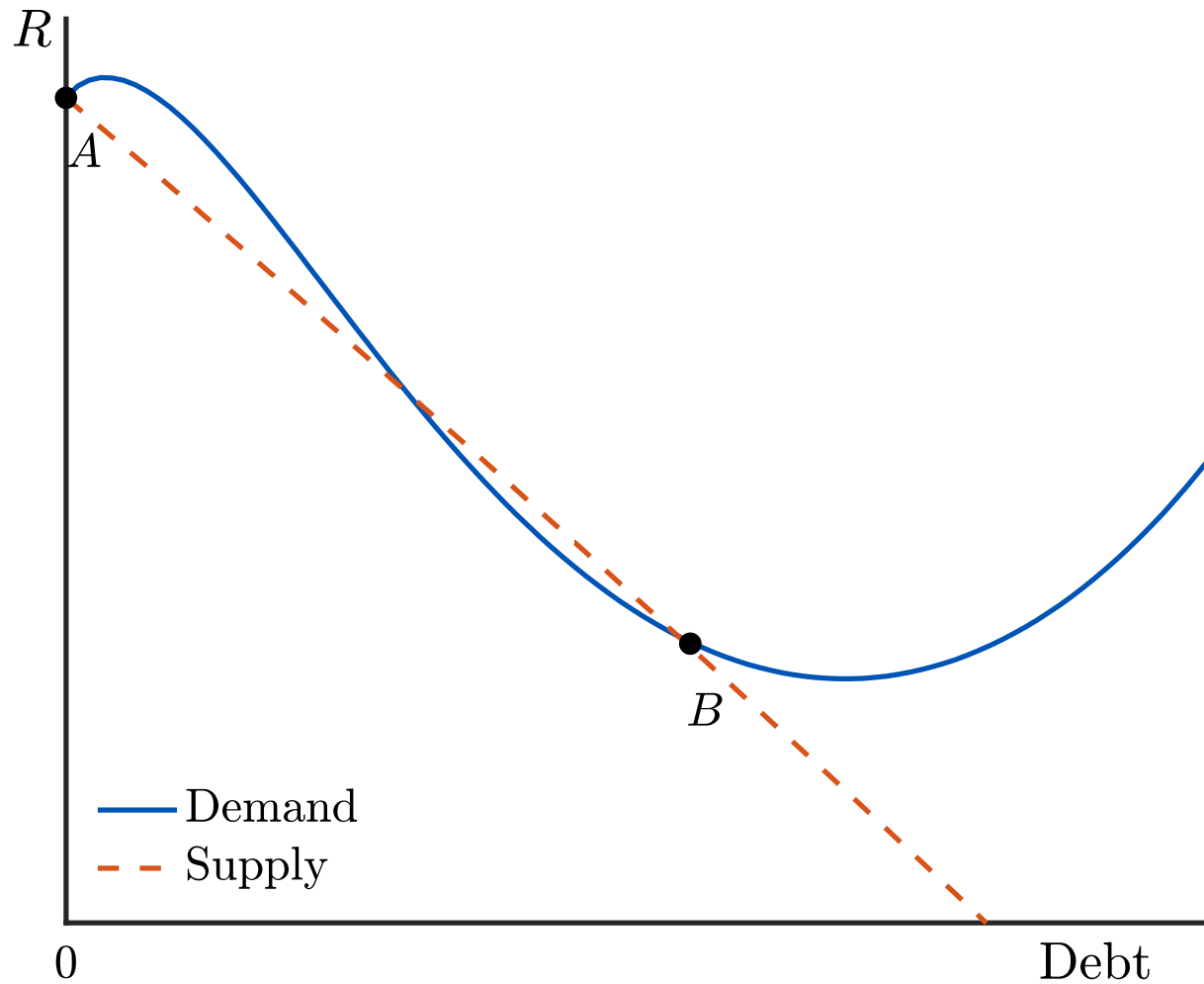
Demand can become downward-sloping for some level of debt

The Model | New Demand Curve

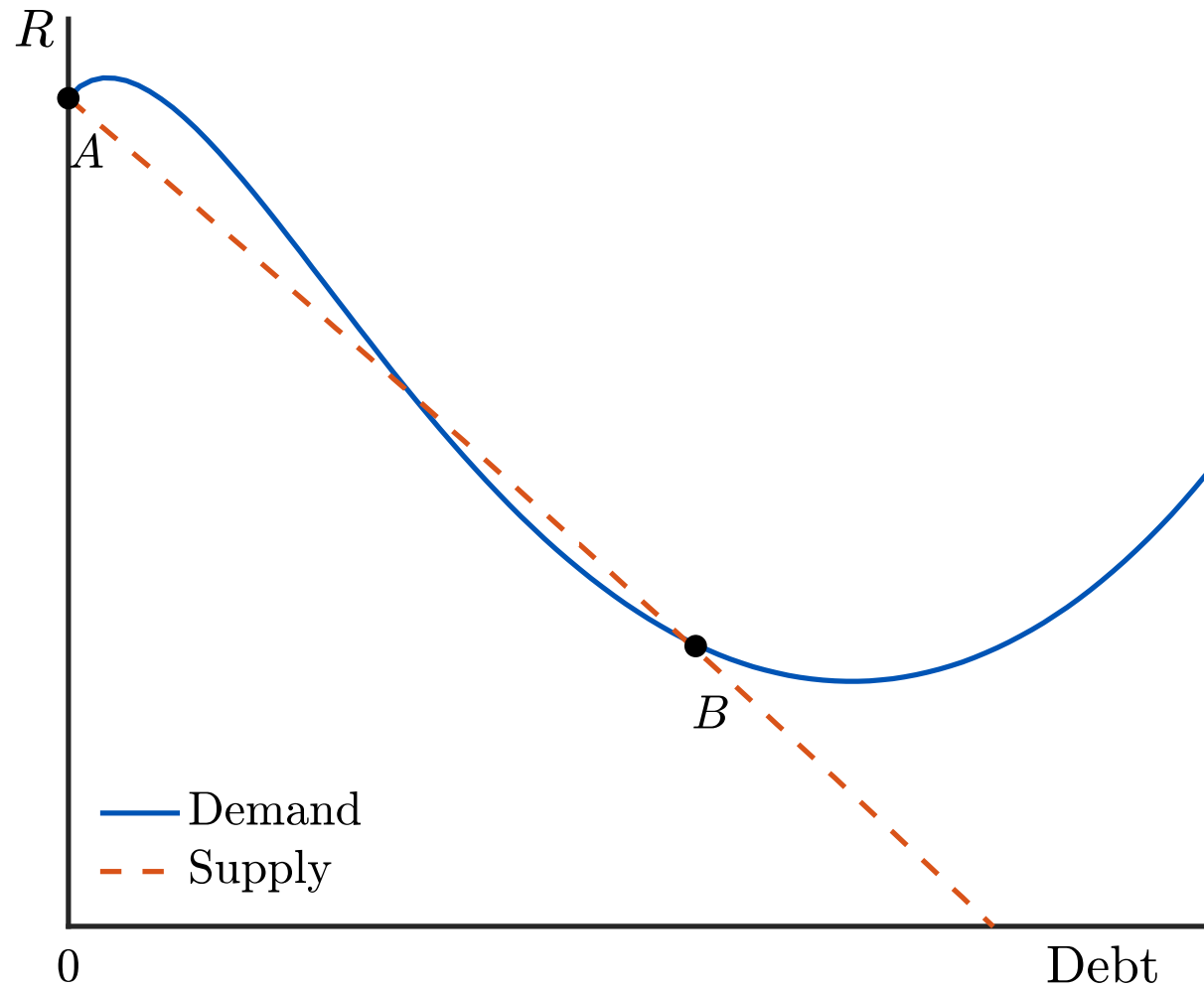


Demand can become downward-sloping for some level of debt

The Model | Demand and Supply - Multiple (Stable) Equilibria



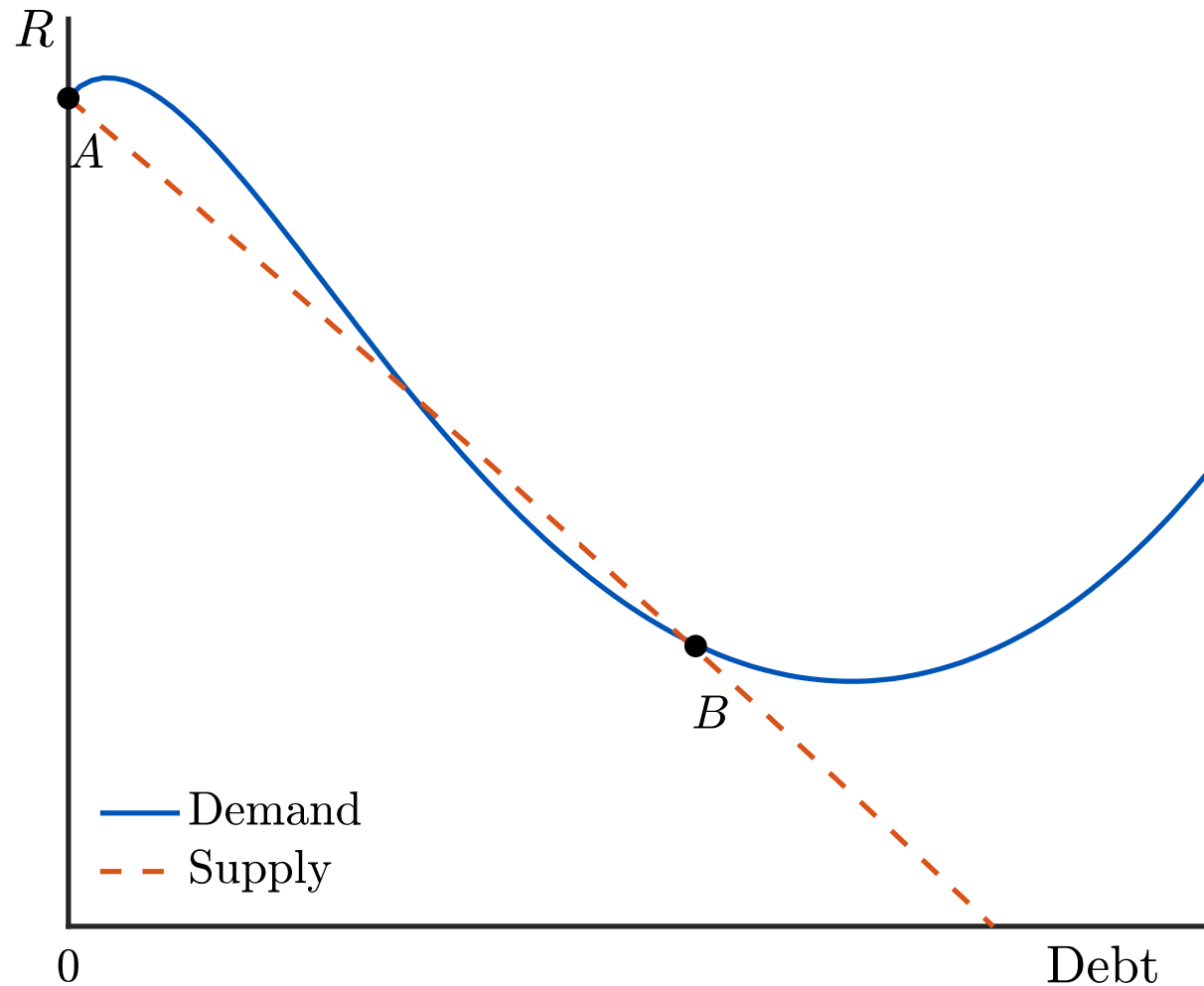
The Model | Demand and Supply - Multiple (Stable) Equilibria



Multiple equilibria may emerge

- **Point A (pre-2007):**
 - High R^*
 - Low consumption risk
 - Low monopsonistic power

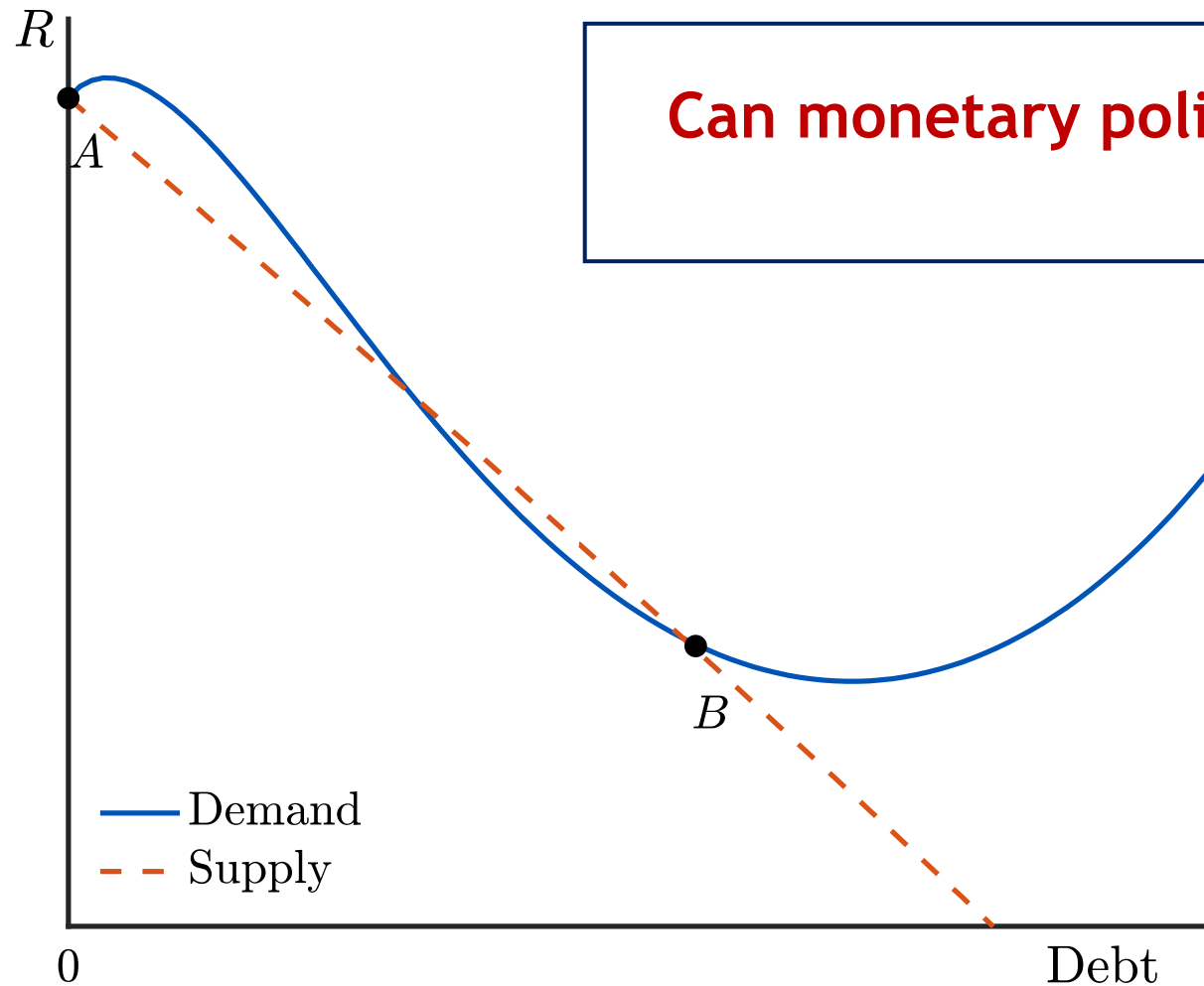
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Multiple equilibria may emerge

- Point A (pre-2007):
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- Point B (post-2008):
 - Low R^*
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 - High monopsonistic power

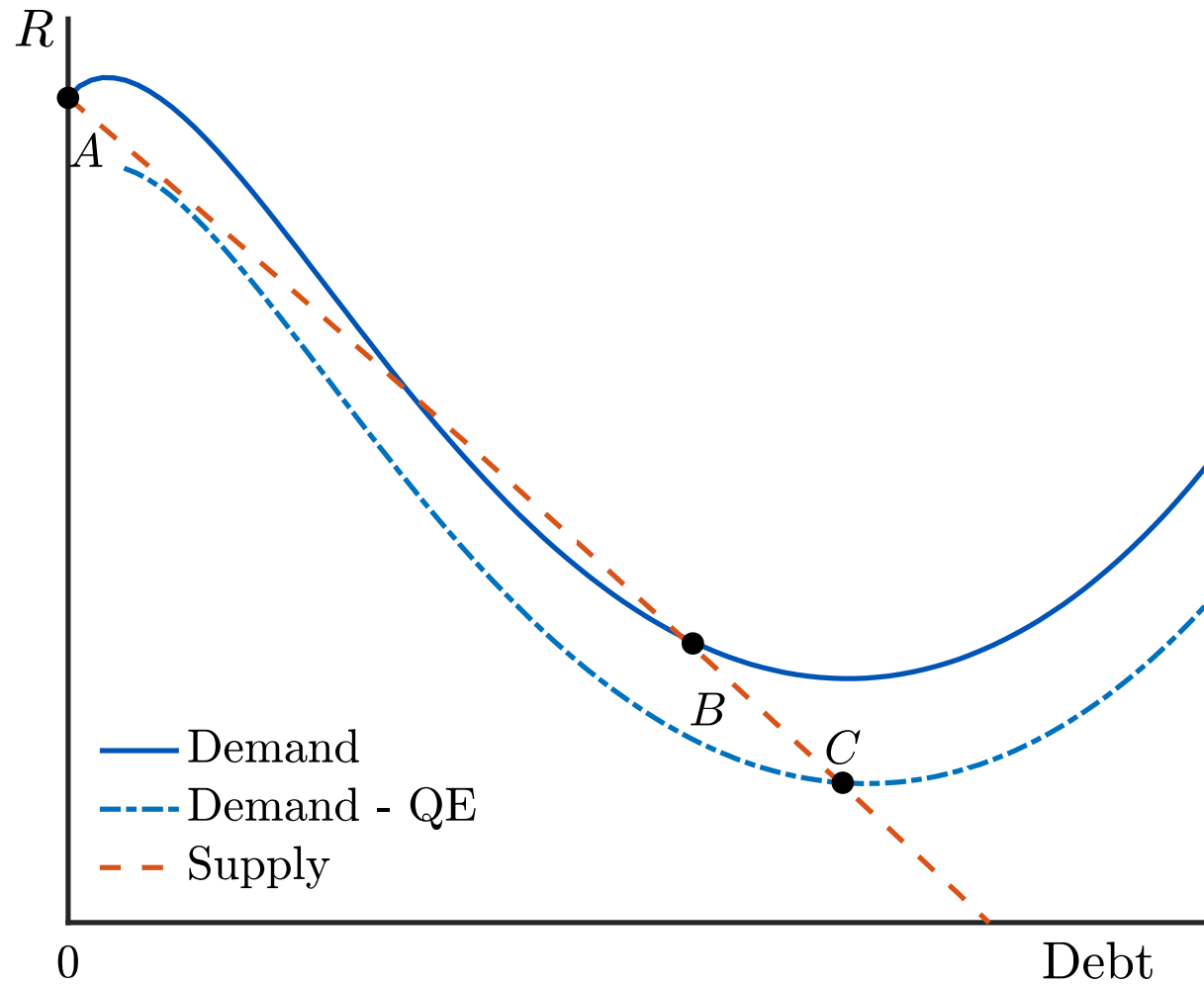
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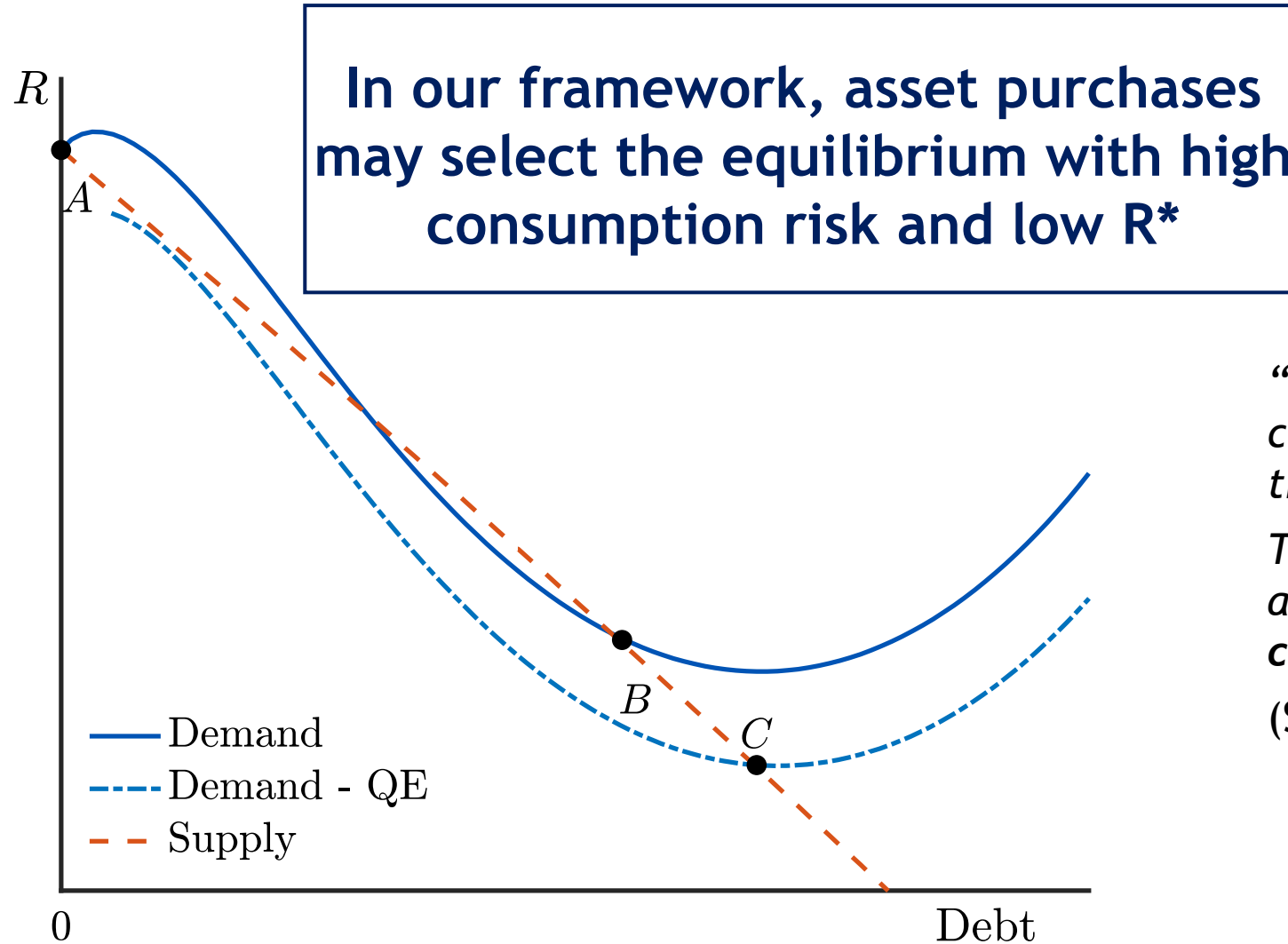


Can monetary policy select between A and B?

- Low consumption risk
- Low monopsonistic power
- Point B (post-2008):
 - Low R^*
 - High consumption risk
 - High monopsonistic power

Policy | Asset Purchase Programmes





“Even if asset purchases have clearly quantifiable benefits, they also come with side effects. These may be difficult to assess, as they can materialise with considerable delay.”

(Schnabel, 2024)

Conclusions | Policy Can Affect Long-Run Equilibria



- It may be **difficult** to predict future R^* **independently** of the path of monetary policy
- Our framework features multiple equilibria (Benhabib, Schmitt-Grohé and Uribe, 2001) and **breaks the classical dichotomy** (Benigno and Fornaro, 2018, Jordà, Singh and Taylor, 2024, Ferrari and Queirós, 2024,)

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 - **Policymakers have extra power: they can affect long-run equilibria**

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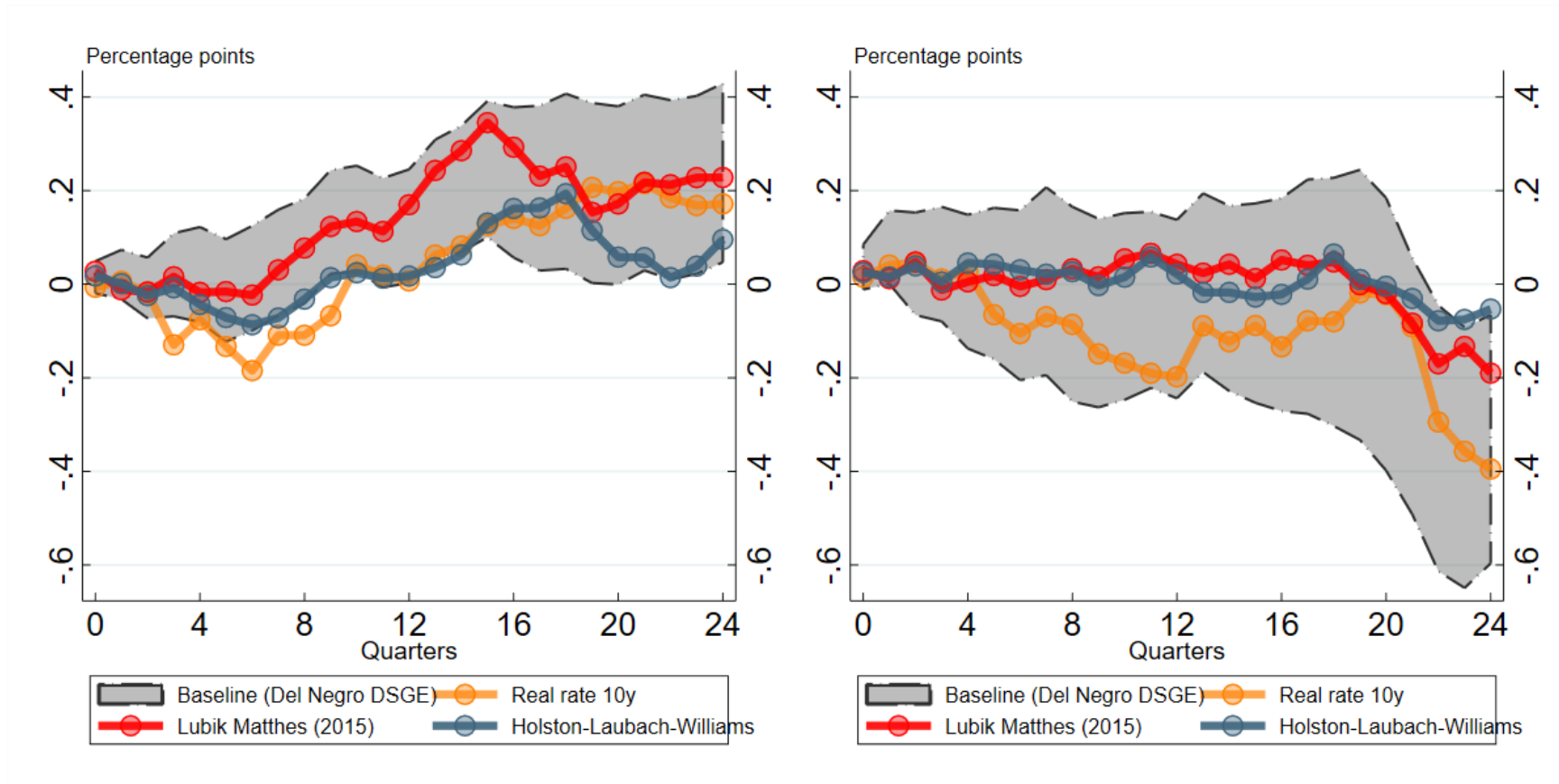
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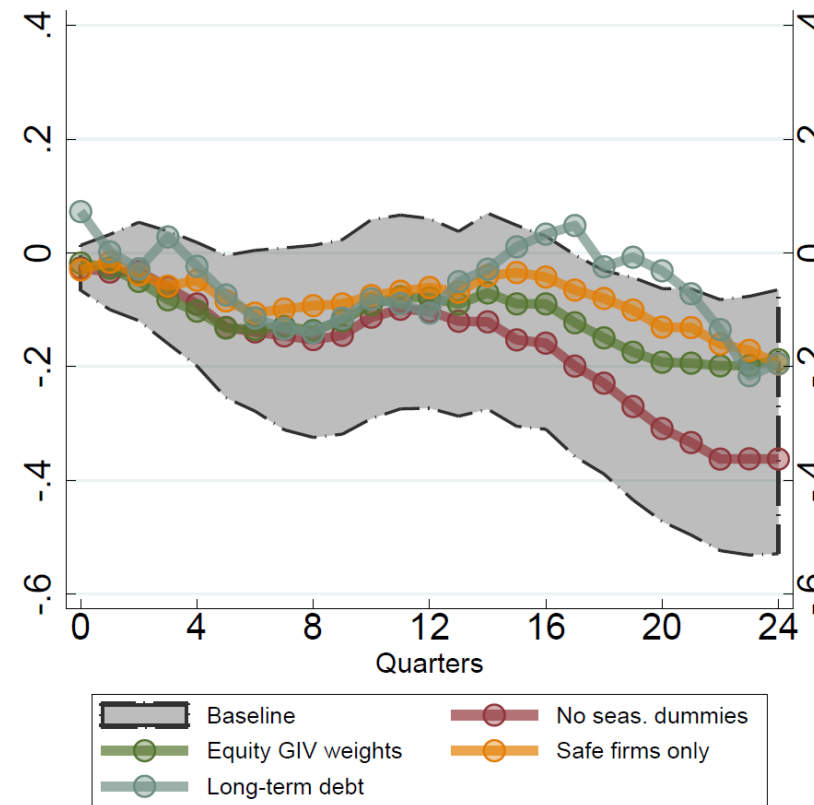
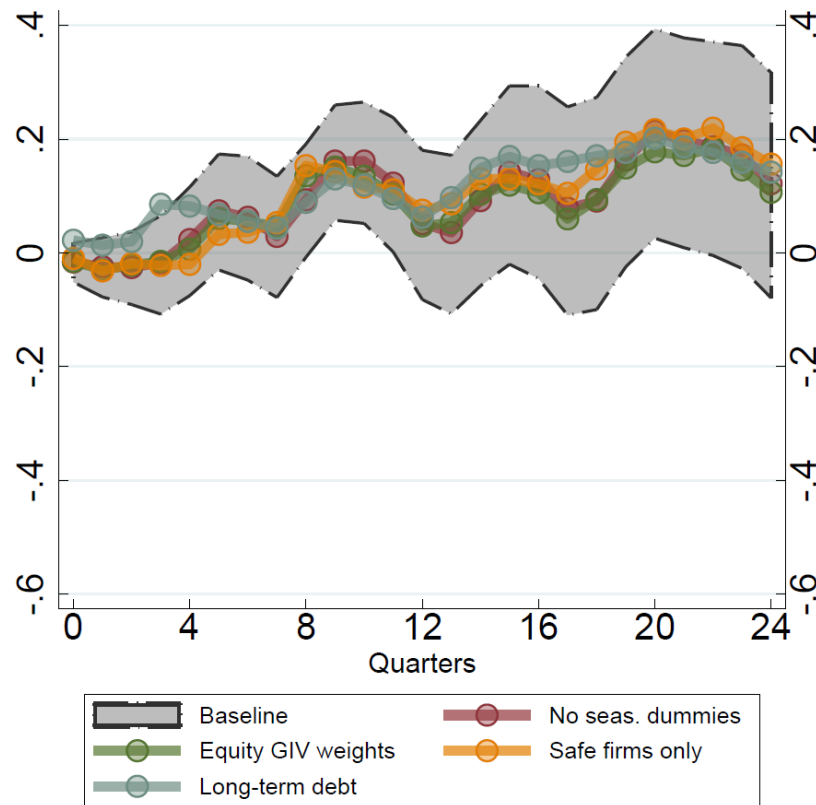
“With great power R^ , comes great R^* responsibility”*

(Uncle Ben, Stan Lee, 1962)

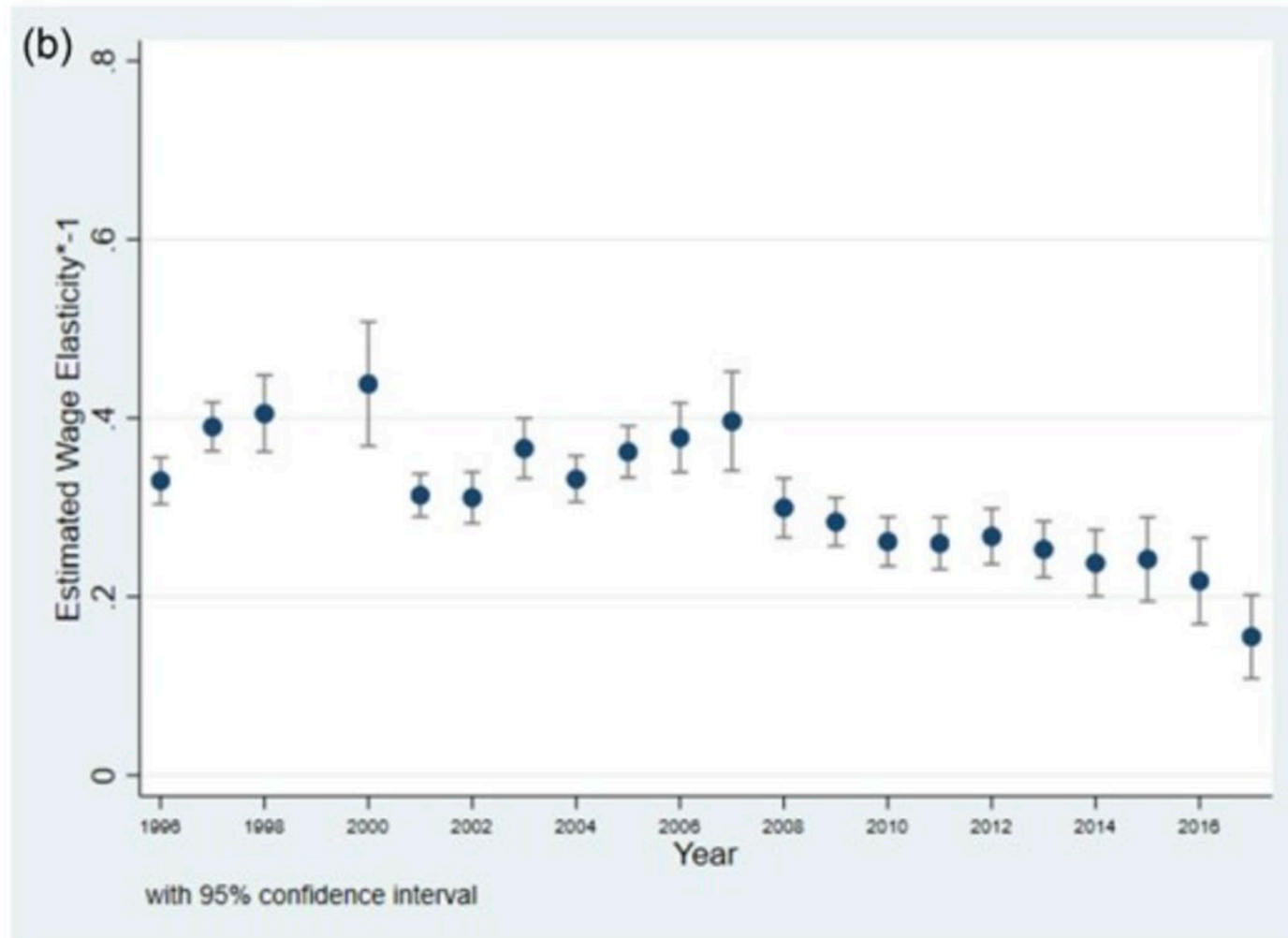
Appendix | robustness of IRFs of R^* to GIV



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Appendix | Monopsony



Appendix | Salaries and Leverage

- For given size, salary costs are negatively associated with leverage

$$Salary_{it} = \alpha_i + \alpha_{sct} + \beta Assets_{it} + \gamma (Assets_{it} \times Leverage_{it}) + \Gamma Z_{it} + u_{it}$$

Table I SALARY COSTS, SIZE, AND LEVERAGE

	(1)	(2)	(3)	(4)
Assets	0.47*** (0.02)	0.49*** (0.02)	0.58*** (0.02)	0.56*** (0.02)
Assets × Leverage			-0.03*** (0.00)	-0.02*** (0.00)
Observations	263125	262867	263125	262867
R ²	0.534	0.894	0.544	0.896
Firm FE	no	yes	no	yes
Sector FE	yes	no	yes	no

NOTE. Robust standard errors (clustered two-way, at the year and firm level) are reported in parentheses, with (0.00) indicating a value lower than 0.005. *** p<0.01, ** p<0.05, * p<0.1. Coefficients corresponding to the constant, fixed effects, and controls (log number of employees and log leverage) are not reported.



Appendix Leverage

