

“Firm-bank linkages and optimal monetary policy in a lockdown”

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Government interventions in corporate credit markets

Why?

How?

Stylized models

Brunnermeier & Krishnamurthy (2020)

Bankruptcy externalities (?)

Subsidized loans

Hanson, Stein & Sunderam (2020)

Bankruptcy externalities

Subsidized + staged loans

Segura & Villacorta (2021)

Bank risk constraints

Deposit insurance + firm transfers

Quantitative models

Elenev & al. (2021)

Bank risk constraints (?)

Firms transfers

Crouzet & Tourre (2021)

Sudden stop + deadweight losses

Targeted loans w/ "strings attached"

The world in 2019

b_0 : DEBT IN PLACE

- CASH FLOW p
- NEED TO PAY p TO CONTINUE



[FIRM]

$$\theta \hat{p}(b_0)(A - b_0) - \hat{e}(b_0)$$

[BANK]

$$\theta \hat{p}(b_0) b_0$$

[FIRM]

0

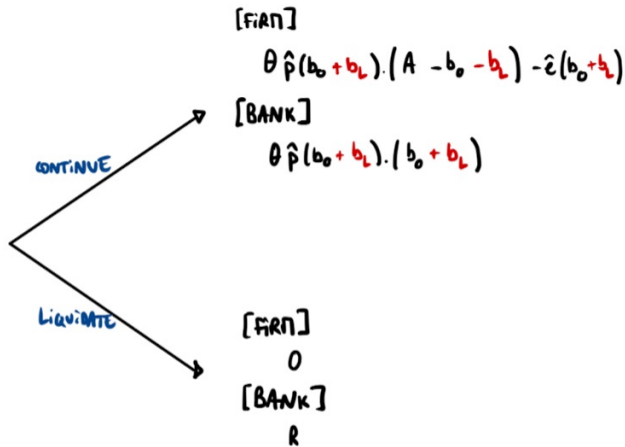
[BANK]

- θ : aggregate shock; $E(\theta) = 1, \theta \geq \underline{\theta}$
- $\hat{p}(\cdot), \hat{e}(\cdot)$: "moral hazard" / "debt overhang"

The world in 2020 (without government intervention)

b_0 : DEBT IN PLACE

- CASH FLOW 0
- NEED TO PAY p TO CONTINUE



· b_L : repayment promised to bank in exchange for ρ

Option 1: bank finances extra loans with equity

$$\underbrace{\hat{p}(b_0 + b_L^1) \cdot (b_0 + b_L^1) - \hat{p}(b_0) \cdot b_0}_{\text{value of newly issued loans}} = \rho$$

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Constrained optimum s.t.

- "moral hazard"
- external financing = loans (not equity)
- old/new loans pari-passu

Option 2: bank finances extra loans using safe deposits

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- distortion gets worse when "unexpected" lending is required \implies bank lending

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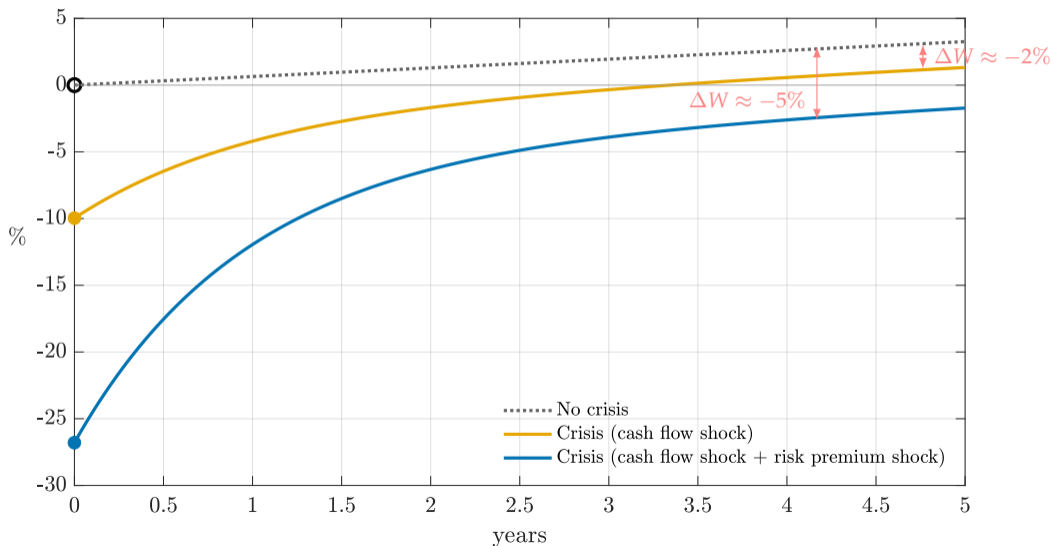
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Enterprise value in an estimated model

(Crouzet and Tourre, 2021)



Credit interventions: why?

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because bank need to keep their liabilities safe

Government intervention 1: deposit insurance

$$I(\theta) = (d_0 + \rho - \theta \hat{p}(b_0 + b_L^3))^+ \quad \text{[deposit insurance]}$$

$$P = E(I(\theta) | \theta < \kappa) \quad \text{[fairly priced premium]}$$

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- zero fiscal cost in expectation, but gov't losses state by state ($\theta < \kappa$)

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- fiscal cost X
- in combination with deposit insurance: can restore constrained efficiency ($W_4 = W_1$)

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4. Does the optimal policy map to real-world credit guarantees?

Credit guarantees in Europe

(Véron et al., 2021)

Credit support programs	Number of programs	Envelope of programs (% total)
Guarantee on loans and other non-trade credit	14	92%
Guarantee on trade credit	3	2%
Purchase of debt securities	2	5%
Funding of loans	1	See note
Subordinated loans	1	1%
Wholesale refinancing of loan portfolio	1	0%
Total	22	100%

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- partial guarantees
- not indexed by θ (i.e. cover any credit loss, idiosyncratic or aggregate)