Discussion of “Can the U.S. interbank market be revived”

By Kyungmin Kim, Antoine Martin, and Ed Nosal

Cyril Monnet (BIS)

The views expressed here are those of the author and should not be attributed to the BIS

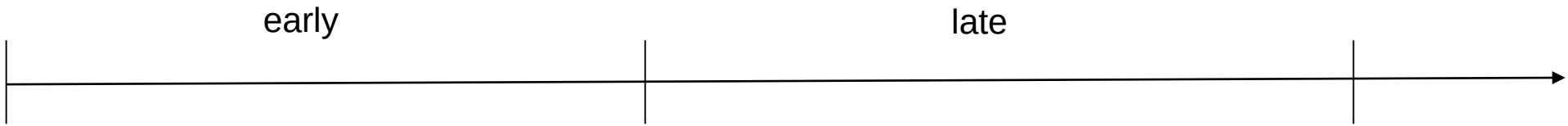
This paper wants to explain…

- Decline of interbank trade volume with QE
- Interest rate below the floor

The authors do so using balance sheet costs and other trading costs

The paper in a (coco-)nutshell

Maintenance period
(zero reserves requirements)



The paper in a (coco-)nutshell

Maintenance period
(zero reserves requirements)

Lending facility: r_w

Deposit facility: r_E

Bank 1: $x_1 = 0$

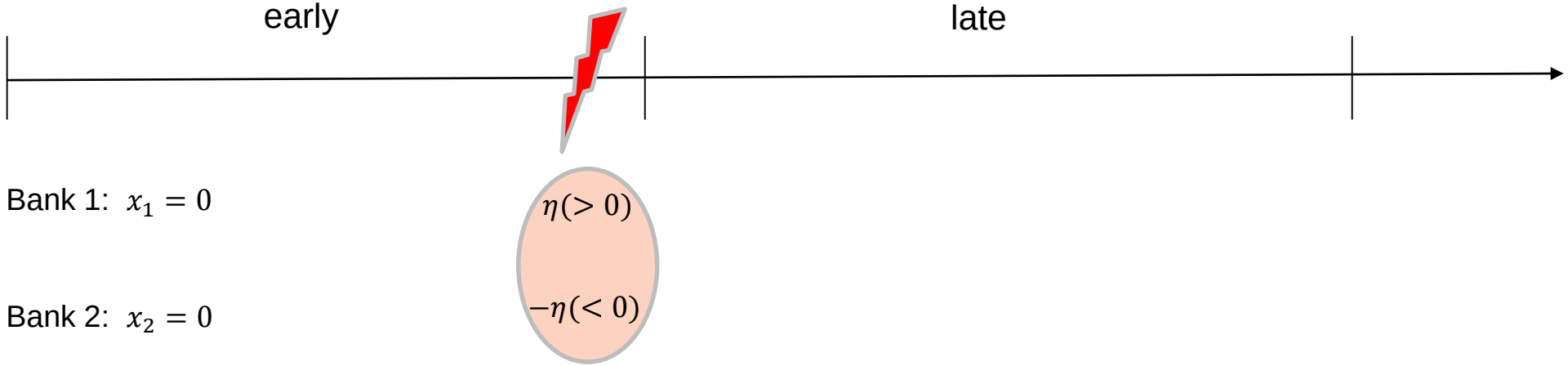
Bank 2: $x_2 = 0$

The paper in a (coco-)nutshell

Maintenance period
(zero reserves requirements)

Lending facility: r_w

Deposit facility: r_E



Bank 1: $x_1 = 0$

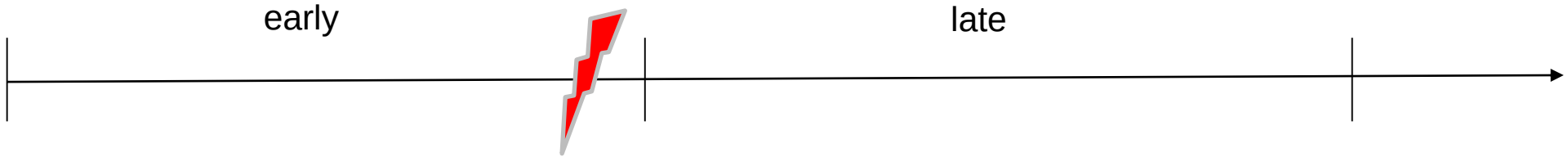
Bank 2: $x_2 = 0$

The paper in a (coco-)nutshell

Maintenance period
(zero reserves requirements)

Lending facility: r_w

Deposit facility: r_E



Bank 1: $x_1 = 0$

Bank 2: $x_2 = 0$

$\eta(> 0)$

$-\eta(< 0)$

Bank 1: $x_1 = \eta$

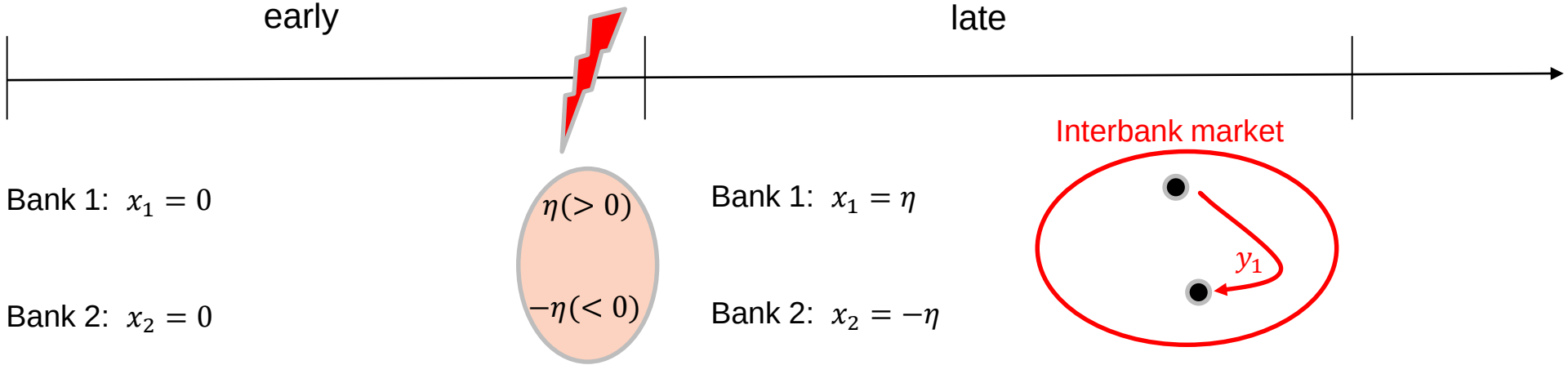
Bank 2: $x_2 = -\eta$

The paper in a (coco-)nutshell

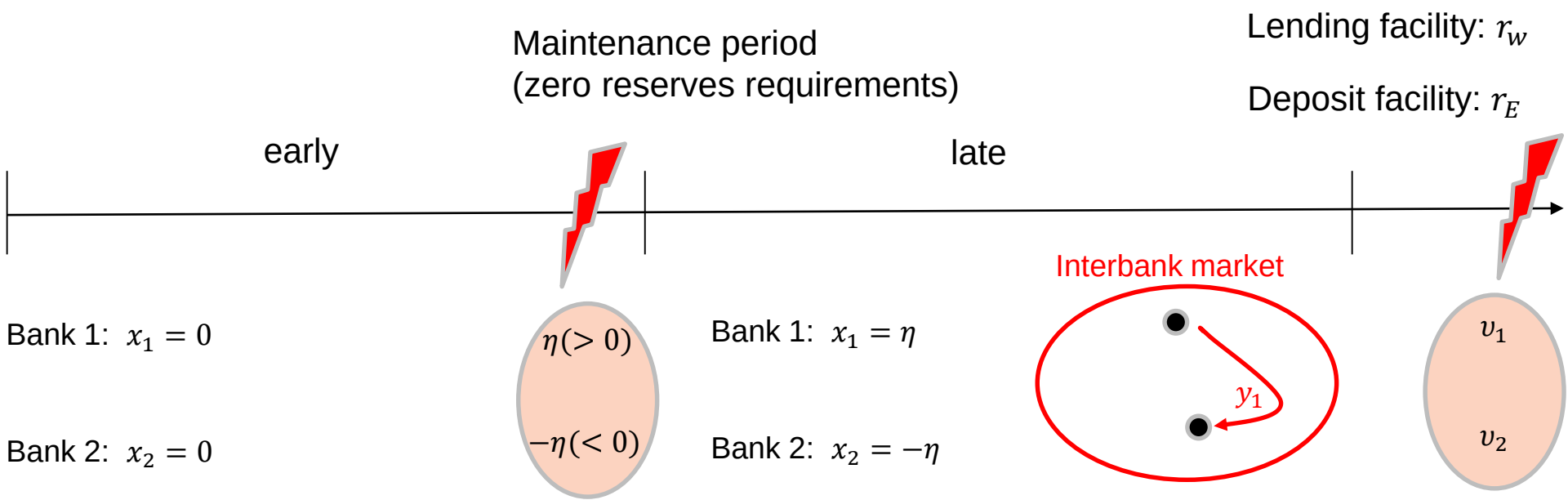
Maintenance period
(zero reserves requirements)

Lending facility: r_w

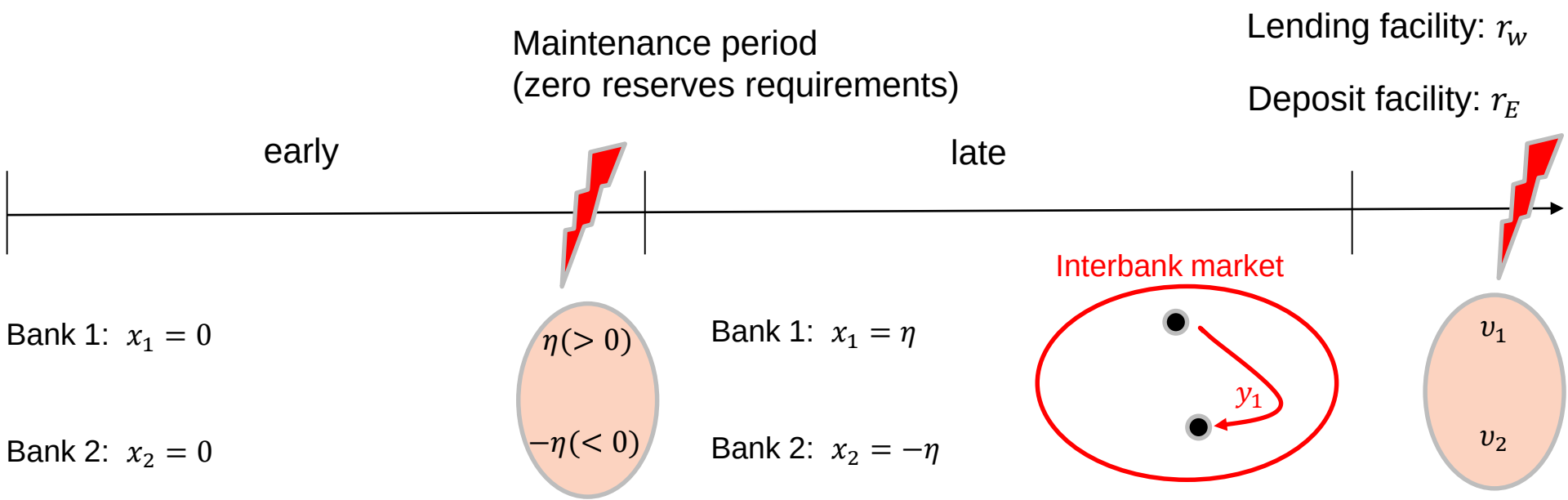
Deposit facility: r_E



The paper in a (coco-)nutshell



The paper in a (coco-)nutshell



Poole (1968)

The paper in a (coco-)nutshell

Maintenance period
(zero reserves requirements)

Lending facility: r_w

Deposit facility: r_E

early

late

Bank 1: $x_1 = 0$

Bank 2: $x_2 = 0$

$\eta(> 0)$

$-\eta(< 0)$

Bank 1: $x_1 = \eta$

Bank 2: $x_2 = -\eta$

Interbank market

y_1

v_1

v_2

$-A_i c_B$

Poole (1968) + Balance sheet costs

Results from Poole with BS costs

- **Balance sheet cost introduces a wedge** between the
- Marginal benefit of the lender from lending 1 unit : $r_R - c_B$
- Marginal cost of the borrower from borrowing 1 unit : r_R

- **The wedge implies there is no interbank trade if the gains from trades are too small** (large Reserve Balances)

- But $r_R \geq r_E$

Boring details

- Marginal benefit of lending: $r_R - c_B$
- Marginal cost of lending: $(r_E - c_B)P(x - l + v \geq 0) + r_w P(x - l + v < 0)$

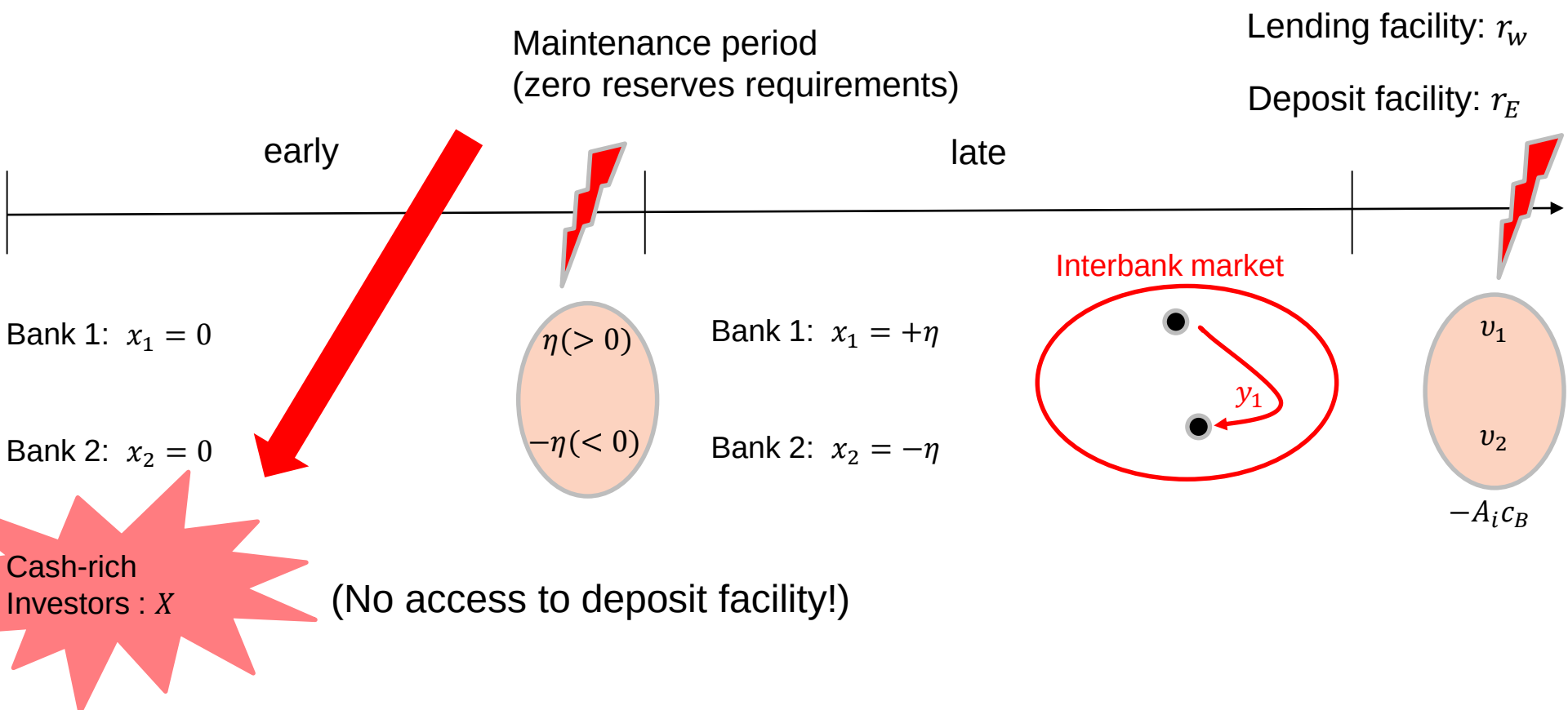
There is no lending ($l = 0$) whenever

$$r_R - c_B < (r_E - c_B)P(x + v \geq 0) + r_w P(x + v < 0)$$

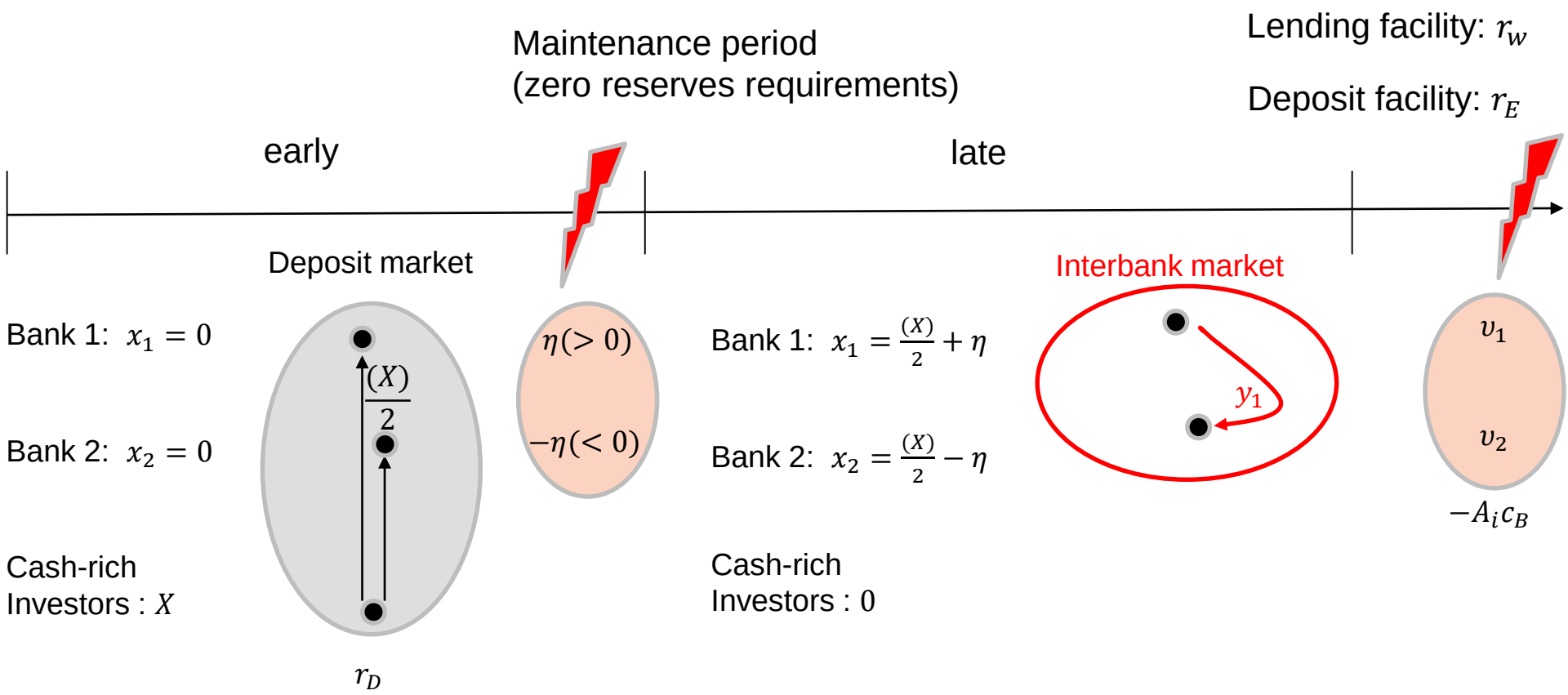
There is no borrowing ($b = 0$) if

$$r_R > (r_E - c_B)P(x + v \geq 0) + r_w P(x + v < 0)$$

The paper in a (coco-)nutshell



The paper in a (coco-)nutshell



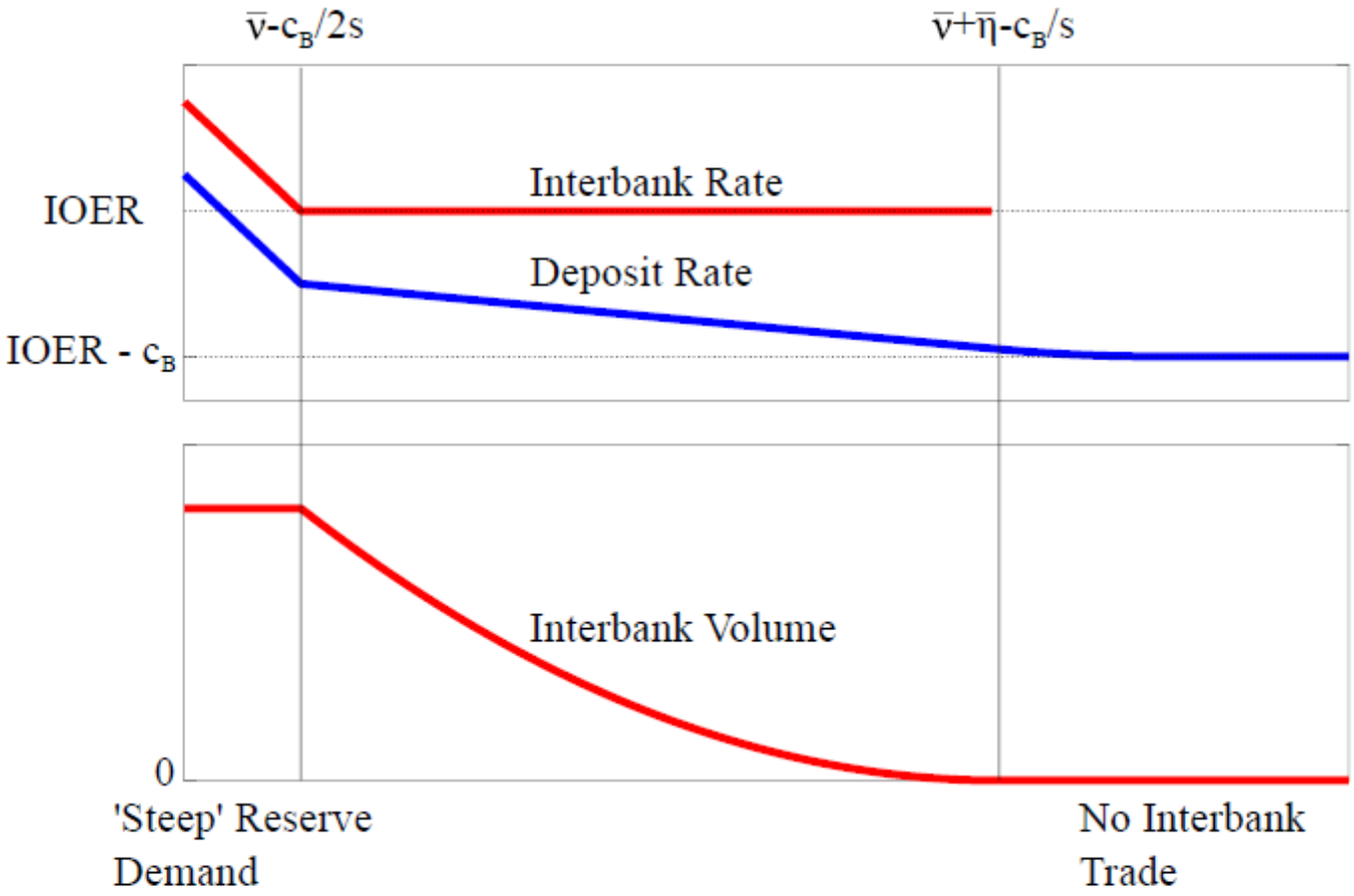
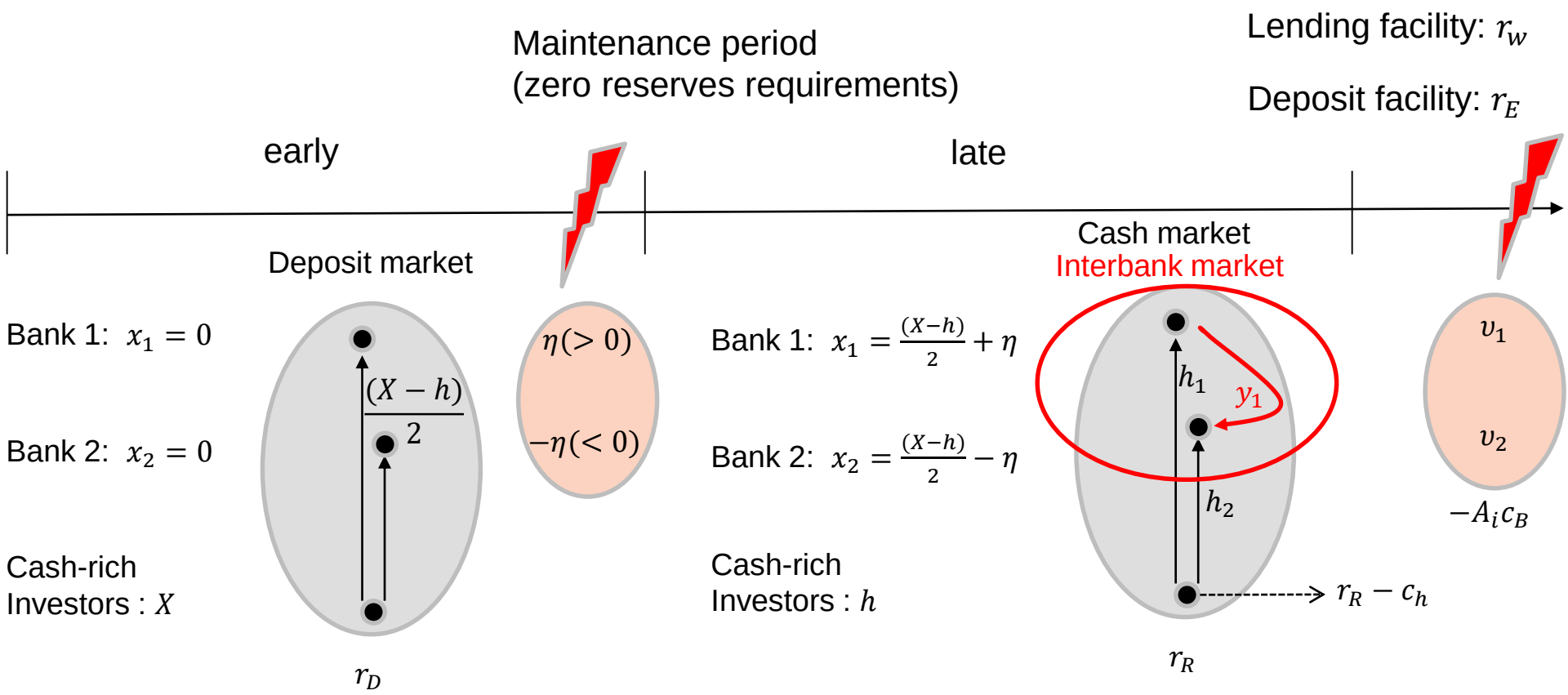


Figure 8: Future path with no late non-bank lending.

The paper in a (coco-)nutshell



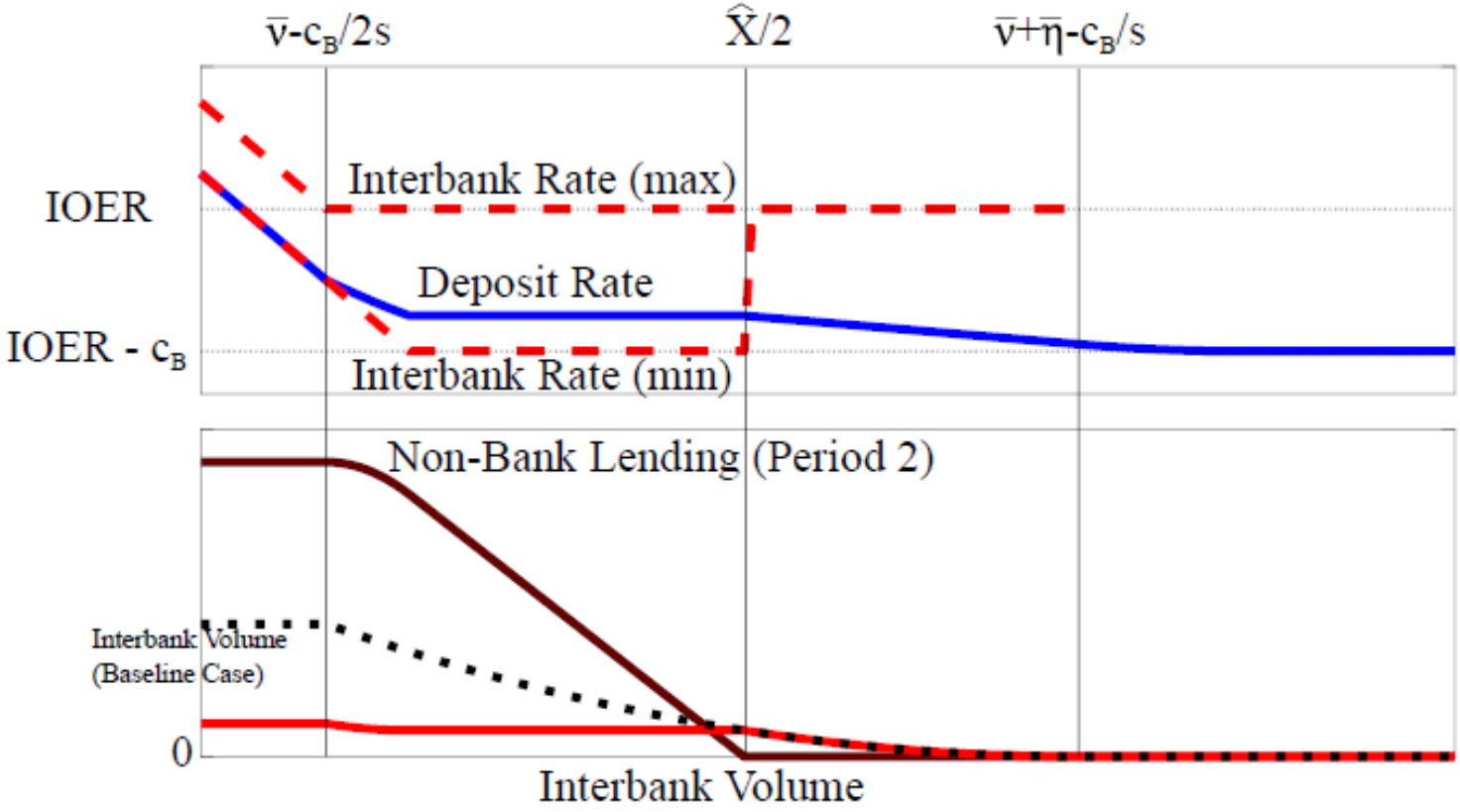


Figure 9: Future path with a constant marginal cost.

Results (in a nutshell)

- BS cost implies **interbank market can disappear** because lending is more costly
  - Needs to be sufficient gains from trade
  - If reserves are large, not enough gains

- **Distribution of reserves matters**: if all non-banks have reserves, banks prefer to borrow from them (they get better terms when non-banks have lower lending costs)

Lending by non-banks crowds out interbank lending

This can further reduce interbank trading volume

Results (in a nutshell)

- BS cost implies **interbank market can disappear** because lending is more costly
  - Needs to be sufficient gains from trade
  - If reserves are large, no enough gains

- **Distribution of reserves matters**: if all non-banks have reserves, banks prefer to borrow from them (they get better terms when non-banks have lower lending costs)

Lending by non-banks crowds out interbank lending

This can further reduce interbank trading volume

SO WHAT?

Comments

- There is no reason to have an interbank market in the model.

Balance sheet costs imply it is (first) best to have non-banks intermediate reserves.

Monetary policy works very well through RE and RW

- What are the reasons for the unsecured interbank market in practice (except saving on collateral) ?

- If interbank market is important, the model suggests it is efficient to give non-banks access to CB deposit facility (reverse repo?)

Comments

- Change the title from

  “Can the U.S. Interbank market be revived”

to

“Should the U.S. Interbank market be revived”

Comments

- Can the model explain the recent jitters in the US money markets?
  Likely not, because the model is too smooth
  there is no idea of “concentration”
  there is no variability

- Estimates of cB would give a couple of bp only. Does this square with J. Diamond’s claim that reserves are so desirable (relative to UST)?

- Cash-rich investors “deposit” using the repo market. QUID of collateral in the model?

Conclusion

- Nice and complete characterization of the equilibrium of the Poole model with BS costs and cash-rich investors with no access to CB facilities
  - -- Interbank market trades can disappear
  - -- Banks can borrow below the floor
- Not convinced that cash-rich investors finds it costly to lend late in the maintenance period
- The model is yet (still) too smooth
- Could be used to rationalize reverse repos ?