# Discussion of De Fiore, Hoerova, and Uhlig

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Does interbank lending matter for

the macroeconomy?

#### Motivation

#### Money market disruptions in the euro area

- Potential freeze and shift from unsecured to secured money market funding
- Additional possibility to switch from secured to central bank funding
  - As observed during the sovereign debt crisis
- Reallocation of wholesale funding vs. money market freeze (Pérignon, Thesmar, and Vuillemey 2017)

#### **Motivation**

# This paper: GE model to assess effect on investment and output

- Unconnected banks hold government bonds which can be pledged as collateral, but face different haircuts in the private secured market vs. at the central bank
- Substitution relationship between lending and holding bonds/money
- Calibration suggests that money market disruptions
  ⇒ total lending and output ↓

The role of bank heterogeneity

# Modeling choices

- A real tour de force!
- A key ingredient is bank heterogeneity
- Literature: adverse selection and counterparty risk (Heider, Hoerova, and Holthausen 2015)
- Here: connected vs. unconnected banks (cannot borrow in the unsecured market)

#### Connected vs. unconnected banks

- Why are some banks more connected than others?
  - Relationship lending mitigates concerns of counterparty risk (Bräuning and Fecht 2017)
  - Connectedness  $\Rightarrow$  counterparty risk  $\Downarrow \Rightarrow$  connectedness  $\uparrow \uparrow$

#### Connected vs. unconnected banks

- Why are some banks more connected than others?
  - Relationship lending mitigates concerns of counterparty risk (Bräuning and Fecht 2017)
  - Connectedness  $\Rightarrow$  counterparty risk  $\Downarrow \Rightarrow$  connectedness  $\Uparrow$
- But the same repayment schedule:

$$\begin{array}{ll} \overline{F}_t &=& (1-\kappa^F)\overline{F}_{t-1}+\Delta\overline{F}_t\\ & \quad \text{(law of motion for funds from central bank)} \\ \overline{B}_t &=& (1-\kappa)\overline{B}_{t-1}+\Delta\overline{B}_t\\ & \quad \text{(law of motion for government debt)} \end{array}$$

# Banks' response to ECB collateral policy

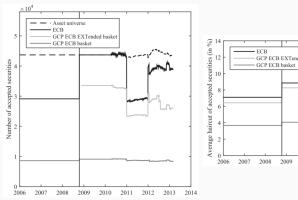
- Surge in secured vis-à-vis unsecured funding: compositional effect across exogenously connected vs. unconnected banks
- Weakly-capitalized banks borrowed more from the ECB as lender of last resort (Drechsler et al. 2016)
- Suggestions: (try to) endogenize connectedness and/or provide a richer characterization (capitalization etc.)

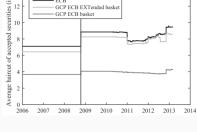
Haircuts in the private secured market vs. at the central bank

### Implications for haircuts

- Determines banks' switching from private secured market to central bank funding
- How crucial is the role of only one type of collateral (government bonds) subject to different haircuts?

# Number of vs. average haircut for accepted securities





Source: Mancini, Ranaldo, and Wrampelmeyer (2016)

# Increase in ECB collateral eligibility

Private haircuts $1-\widetilde{\eta}$		
A	1%	
В	2%	
С	3%	

CB haircuts $1 - \eta$	
A	1%
В	2%
С	3%

# Increase in ECB collateral eligibility

Private haircuts $1-\widetilde{\eta}$	
A	1%
В	2%
С	3%
D	100%
E	100%
F	100%

CB haircuts $1 - \eta$	
A	1%
В	2%
С	3%
D	100%
E	100%
F	100%

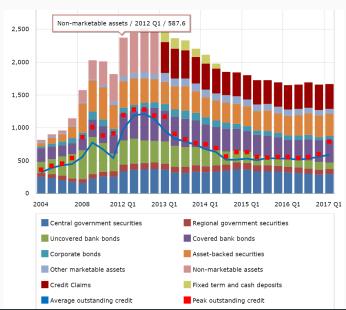
# Increase in ECB collateral eligibility

Private haircuts $1-\widetilde{oldsymbol{\eta}}$	
A	1%
В	2%
С	3%
D	100%
E	100%
F	100%

CB haircuts $1-\eta$	
A	1%
В	2%
С	3%
D	4%
E	5%
F	6%

"Haircut subsidy" on collateral increases with its risk (Drechsler et al. 2016)  $\Rightarrow \widetilde{\eta} < \eta$  is a reasonable comparative static for both intensive and extensive margin

# Use of collateral and outstanding credit



# Collateral eligibility requirements in the sovereign debt crisis

- ECB relaxed rating requirement for eligible RMBS
- December 2011: ECB made A-rated (Class 2) RMBS at issuance temporarily eligible as collateral
- June 2012: ECB made BBB-rated (Class 3) RMBS temporarily acceptable at a higher haircut (26% for BBB compared to 16% for AAA/A)

# Implications for bank lending and risk taking

- RMBS ≠ government bond:
  collateral framework favors illiquid collateral ⇒ effect on real economy through overproduction of illiquid real assets
- Increase in (ex-post risky) loan supply and lower mortgage rates (Van Bekkum, Gabarro, and Irani 2017)

#### Conclusion

- Interesting paper on an important topic!
- Clarity of mechanism depends on modeling choices: one type of collateral and exogenous connectedness of banks
- Implications for monetary-policy transmission in the euro area
  - Transmission of negative policy rates depends on banks' funding structure (Heider, Saidi, and Schepens 2017)