EUROPEAN CENTRAL BANK

EUROSYSTEM

**Florian Heider**

ECB and CEPR

# Discussion of "Central Counterparty Resolution: The Right Move at The Right Time" by Huang, Faruqui, and Shirakami

Economics of Payments IX

BIS

November 15, 2018

# CCPs may have to be resolved

CCP does not take into account costs imposed on members

# Paper in a nutshell

## CCPs may have to be resolved

CCP does not take into account costs imposed on members

## But when should authority intervene?

Early?

→ Spend public money when CCP could have recovered

Late?

→ Costly if the CCP does not recover

# Paper in a nutshell

## CCPs may have to be resolved

CCP does not take into account costs imposed on members

## But when should authority intervene?

Early?

→ Spend public money when CCP could have recovered

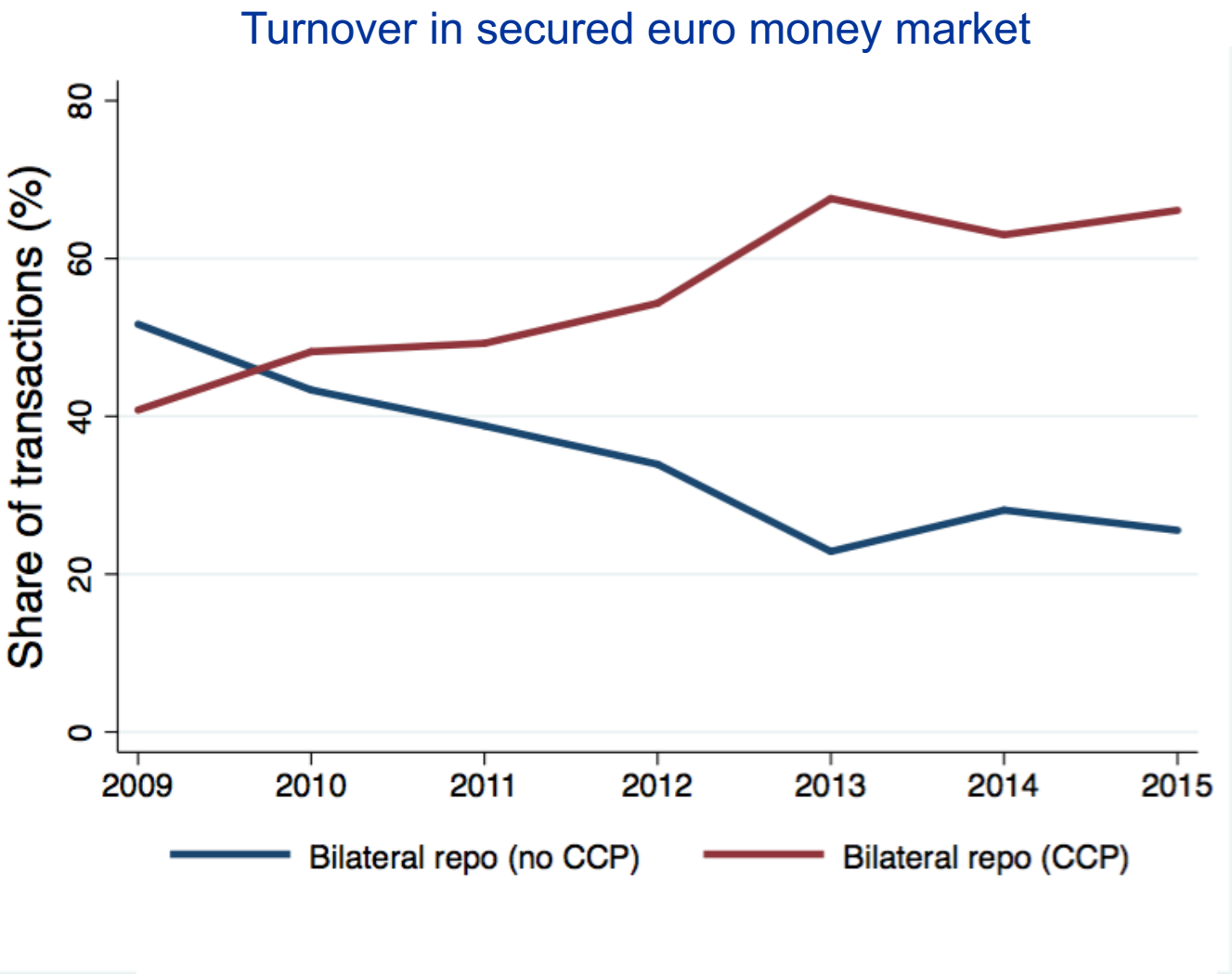
Late?

→ Costly if the CCP does not recover

## How to make CCP member contribute?

Cash calls vs variation margin gains haircut (VMGH)

# Increasing importance of CCPs



# Advantages of CCPs

## Netting

Duffie & Zhu (2011), but see Kubitza, Pelizzon & Sherman (2018)

## Information (fewer contractual externalities)

## Pooling of risk (mutualisation)

## Margin calls

Reduces risk-taking incentives of CCP members (Biais, Heider & Hoerova, 2016)

But could lead to (inefficient?) fire-sales (Biais, Heider & Hoerova, 2018)

# European CCP resilient

Mancini, Ranaldo & Wrampelmeyer (2016)

# CCPs may have to be resolved

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## But repo prices in 2011/12 reflect risk of CCP default

Boissel, Derrien, Örs & Thesmar (2017)

# CCPs may have to be resolved

## European CCP resilient

Mancini, Ranaldo & Wrampelmeyer (2016)

## But repo prices in 2011/12 reflect risk of CCP default

Boissel, Derrien, Örs & Thesmar (2017)

## What if a CCP does fail?

Bignon & Vuillemey (2018) study failure of CLAM (Caisse de Liquidation des Affaires en Marchandises) in 1974

Agency problems matter!

# Cash vs Variation Margin Gain Haircuts

Regulators' objective function (before resolution at time T)

$$\int_0^T R_t - X_t - C_t \, dt$$

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Losses on positions
Brownian motion
(market risk)

# Cash vs Variation Margin Gain Haircuts

Regulators' objective function (before resolution at time T)

$$\int_0^T R_t - X_t - C_t \, dt$$

contributions from (surviving) members

- Cash calls
- VMGH

Regulators' objective function (before resolution at time T)

$$\int_0^T R_t - X_t - C_t \, dt$$

Losses because members cannot pay contribution

Poisson jump process

$dC_t = \varepsilon R_t \, dN$

(Liquidity risk)

# Cash vs Variation Margin Gain Haircuts

Regulators' objective function (before resolution at time T)

$$\int_0^T R_t - X_t - C_t \, dt$$

VMGH: $R_t dt = X_t dt$

Regulators' objective function (before resolution at time T)

$$\int_0^T R_t - X_t - C_t \, dt$$

Cash call $\longrightarrow$ " $\tilde{R}_t$

Poisson jump process

$$d\tilde{R}_t = -\varepsilon \tilde{R}_t \, dN_t$$

# Questions/Suggestions

Why is intervention irreversible?

Can authority really afford to wait?

What if the CCP has to declare “bankruptcy”?

What is different for CCPs relative to systemic banks?

- How to make stakeholders contribute?
- Difference cash call vs. VMGH