

Margin regulation in financial markets

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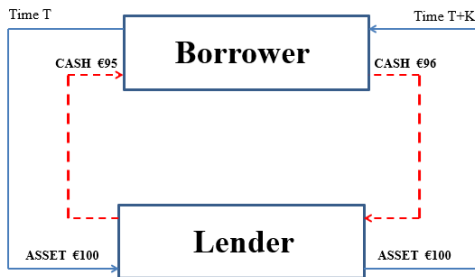
Motivation

One of the objectives of financial regulation is to reduce the procyclicality of credit and leverage (caps on loan-to-value ratios)

In financial markets leverage is associated with collateral requirements (margins or haircuts)

Haircut and leverage in the repo market

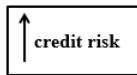
Figure: Repurchase agreement



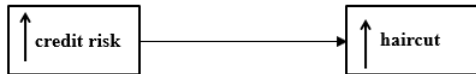
$$\text{Haircut: } \quad \text{€5} / \text{€100} = 5\%$$

$$\text{Leverage: } \quad \text{€100} / \text{€5} = 20$$

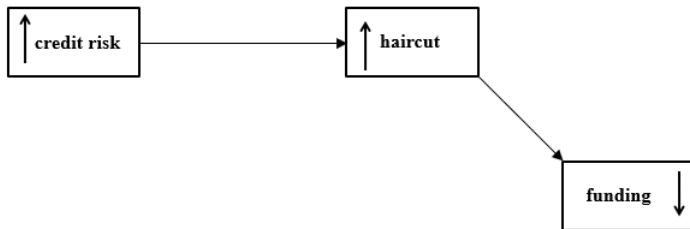
Vicious cycle



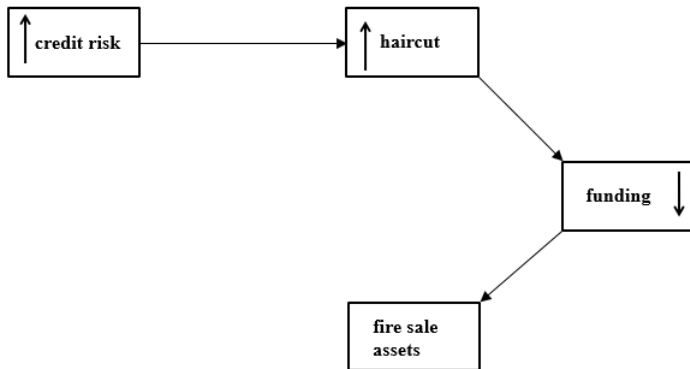
Vicious cycle



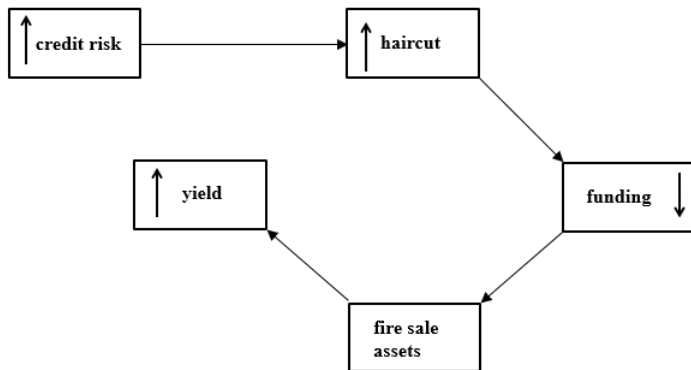
Vicious cycle



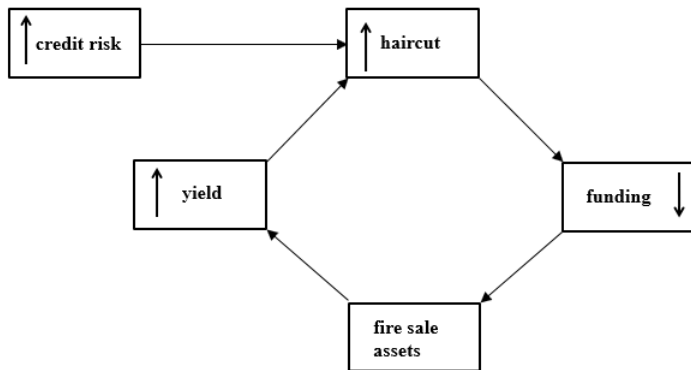
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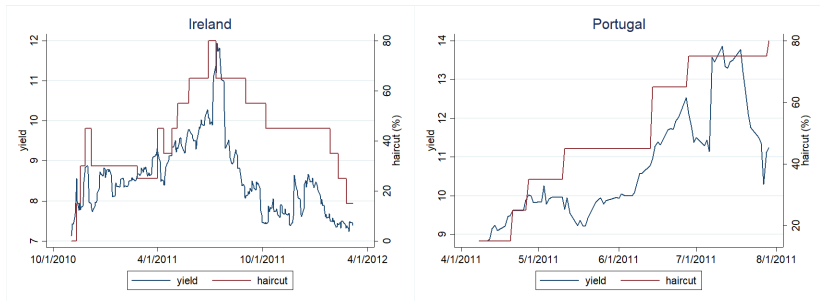


High-Frequency BVAR to assess the impact of an increase in haircut on sovereign bond yields and sovereign CDS spreads

DSGE model with financial frictions (Kiyotaki and Moore 2012) to evaluate the transmission of a rise in haircut to the real economy

Evolution of yields and haircuts

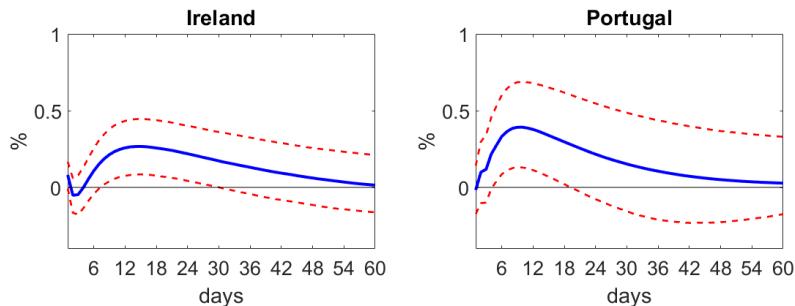
Figure: Yields (LHS) and haircuts (RHS) on Government bonds



Note: The figure shows the evolution of Government bond yields and haircuts applied on these securities by LCH Clearnet Ltd for Ireland and Portugal. Source: Datastream and LCH Clearnet Ltd website.

Haircut shock

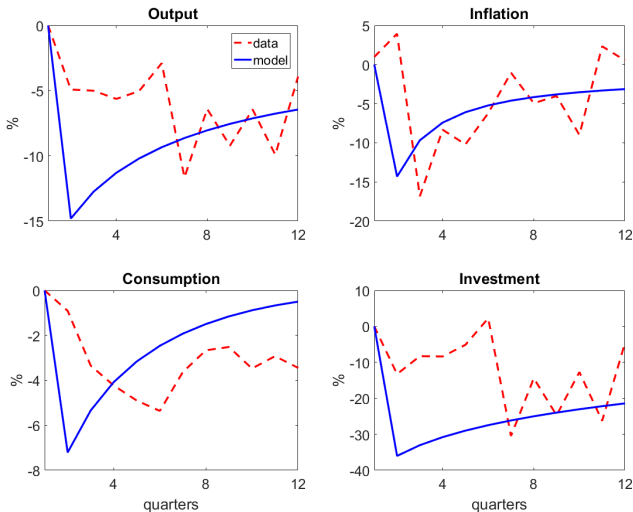
Figure: Response of yield to a haircut shock



Note: The figure shows the response of Government bond yield to a one percent increase in the haircut.

DSGE model with financial frictions

Figure: Response of real variables to a haircut shock



Policy implications

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(European Systemic Risk Board 2017)

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- Fixed numerical floor
- Time-varying haircut buffers
- Haircut add-ons
- Speed limits on haircut increases
- Haircut ceilings

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Proposals for the creation of Euro safe bonds that could be used as collateral in the repo market with stable haircuts

Thank you for your attention