

*Discussion of:*  
**Managing Overreaction during a Run**  
**Caio Machado**

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Margaret Davenport  
King's Business School, King's College London

Behavioural Macro and Finance, Bank of England & London School of  
Economics

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## Contributions

- ➊ Methodological: How to solve global game model of bank runs (Morris & Shin, 2000) with diagnostic expectations (Bordalo, Gennaioli & Schleifer, 2018) - nests the RE case  $\theta \rightarrow 0$ .
- ➋ Application: Trading suspensions to attenuate overreaction can be counter-productive.

## Contributions

- ➊ Methodological: How to solve global game model of bank runs (Morris & Shin, 2000) with diagnostic expectations (Bordalo, Gennaioli & Schleifer, 2018) - nests the RE case  $\theta \rightarrow 0$ .
- ➋ Application: Trading suspensions to attenuate overreaction can be counter-productive.

## Why is this important?

- Pervasive evidence of overreaction to news (e.g., Bordalo et al., 2019, Bordalo et al., 2022, de Bondt & Thaler, 1985), with important aggregate implications (Bordalo et al., 2022; Pedmonte et al., 2023)
- Many recent examples of runs on financial markets: Covid-19 mutual funds, MMMF runs during GFC, “circuit breakers”, Terra Luna, etc.

→ important to study overreaction and financial instability jointly

## Key Features:

- ➊ Strategic complementarities  $\longrightarrow$  financial market runs
- ➋ Diagnostic expectations  $\longrightarrow$  overreaction to news or signals (public signal  $y$  private signal  $x_i$  about fundamental  $\eta$ )
- ➌ Expectations become rational
- ➍ Common knowledge ex-ante returns  $z$ , common priors

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## First contribution, equilibrium uniqueness result:

- Typical threshold condition, ensures uniqueness of equilibrium
- Diagnostic expectations  $\theta > 0$  helps with uniqueness

Equilibrium cut-off strategy,

investor runs  $x_i < x^*$

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- Average investors become more optimistic about fundamental

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(partial) reversion to Rational Expectations:

- Average investors become more optimistic about fundamental
- Marginal investor revises expectations down

→ suspensions enabling reversion to RE amplify runs following arrival of bad news.

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- Thorough treatment - several discussions/extensions
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Points for discussion:

- ① Motivation contribution 2 - evidence suspensions and runs
- ② Clarify mechanism - public information
- ③ Extensions: mutual funds & swing pricing

# 1. Motivation for Application (contribution 2)

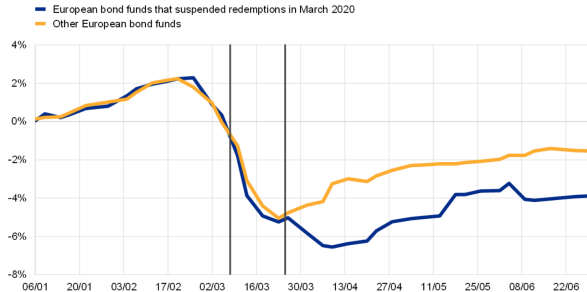
- Evidence of suspensions amplifying runs
- Empirical evidence effects of circuit breakers (see, Chen, Petukhov, Wang, & Xing, *forthcoming* JOF) - "magnet effect"
- ECB suspensions of redemptions during the COVID-19 crisis (Grill et al., 2021)

# 1. Motivation for Application (contribution 2) - MF Flows

**Chart 3**

Net flows for suspended and non-suspended bond funds before and after March 2020

(cumulative flows as a percentage of total assets)



Sources: Refinitiv Lipper, Morningstar, Financial Times, funds' prospectuses and annual reports, and ECB calculations.

Notes: The first vertical line denotes 9 March 2020 – the day that the first bond funds in the sample suspended redemptions. The second vertical line denotes 27 March 2020 – the day that the last fund in the sample reopened after suspending redemptions.

source: Grill et al., 2021

## 2. Clarify Mechanism - Role of Public Information

- Figure 3 - nice characterisation  $z^*$  and public signal, ex ante returns
- Characterisation of  $x^*$  less clear (outside limiting case)
- Public information - coordinate higher order beliefs interaction with  $\theta$ ? (formal treatment)
- Generalise more formally the publicity multiplier: compensation in  $x_i$  for  $y$  for  $x^*$  constant (Morris & Shin, 2003)

### 3. Extensions to Consider

- Open end collective investments like mutual funds particularly susceptible to redemptions (Jin et al., 2022; Coval & Stafford, 2007; Chen et al., 2010)
- Payoffs reflect swing pricing (e.g., Jin et al., 2022, Review of Fin. Stud.)
- Fund liquidity? (Grill et al., 2022, Chen et al., 2010)

- The uniqueness condition decreasing in  $\theta$ , intuition?
- Mention section B in appendix when introducing linear payoffs.
- Alternative mechanisms: see working paper version Bernardo, Welch (2004) QJE, conjecture their model: circuit-breakers counter-productive

- Great paper, very clean, focused, and concise!
- Exciting to think about applications, future work

Perhaps a bit more work on:

- Motivating empirically the application chosen
- Clarifying and characterising the role of public signal ( $x^*$ )
- Extensions studying role of swing pricing in open-end funds

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