Non-bank financial intermediaries and financial stability by Sirio, Andreas, and Hyun

Discussion by Valentina Bruno

Summary of the paper

Sutyagin House,
circa 2007

Leverage enables greater leverage

Source: H.S. Shin (2015)

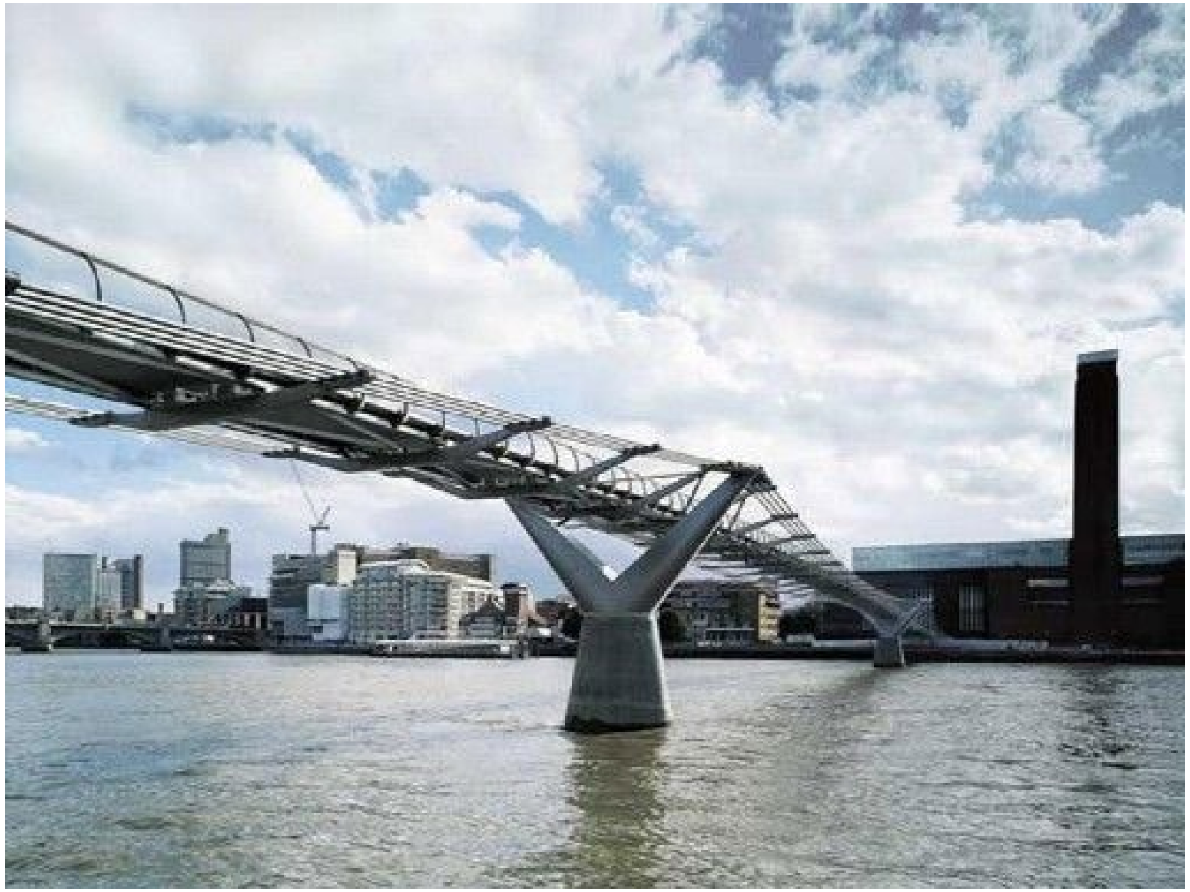
Summary of the paper

Sutyagin House,
circa 2008

Parable for excessive leverage

Source: H.S. Shin (2015)

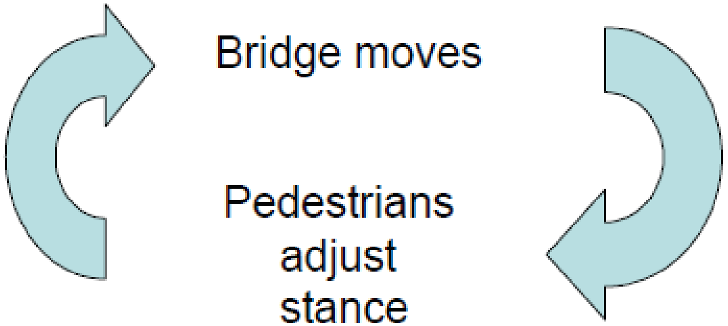
Summary of the paper

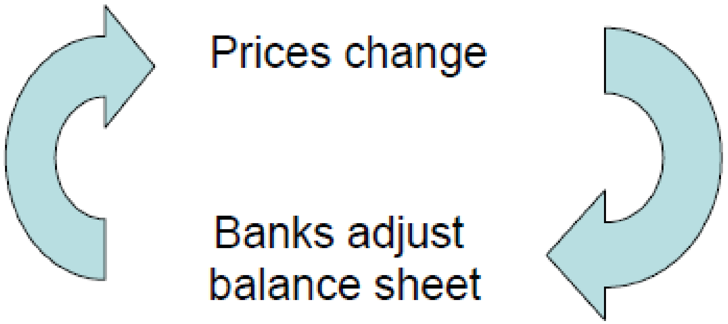


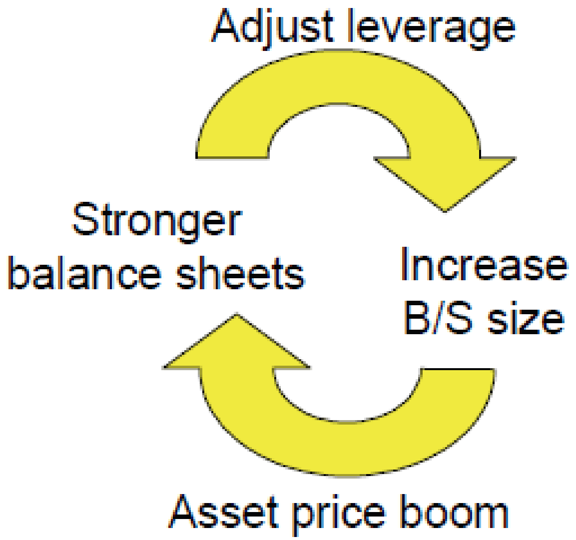
Dual role of prices

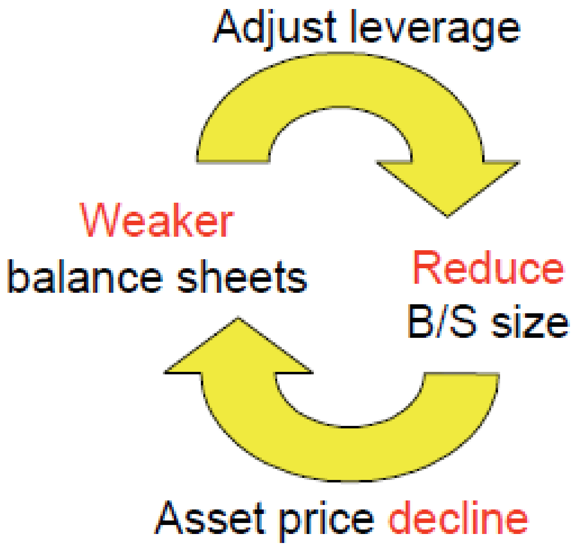
Source: H.S. Shin, 2010,
Clarendon Lectures in Finance.

Feedback in Financial Systems









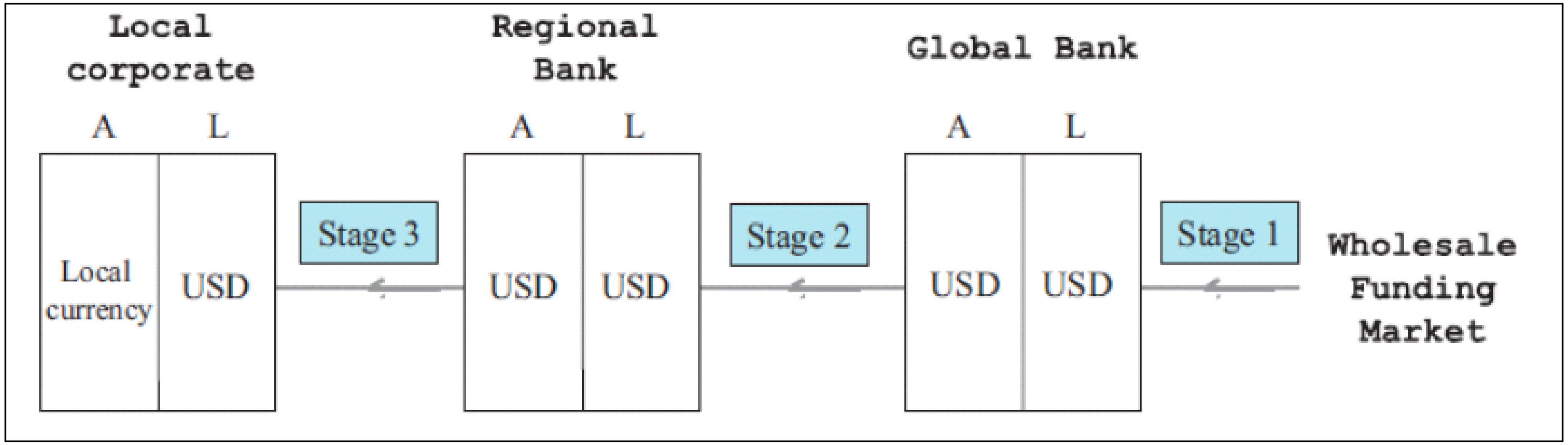
Leitmotiv – Prices as imperative to action

- The action-inducing nature of market prices are the most dramatic during crisis episodes, but they are the most damaging in boom times

The received wisdom is that risk increases in recessions and falls in booms. In contrast, it may be more helpful to think of risk as increasing during upswings, as financial imbalances build up, and materialising in recessions.

Andrew Crockett -- General Manager of the BIS and Chairman of the Financial Stability Forum (2000)

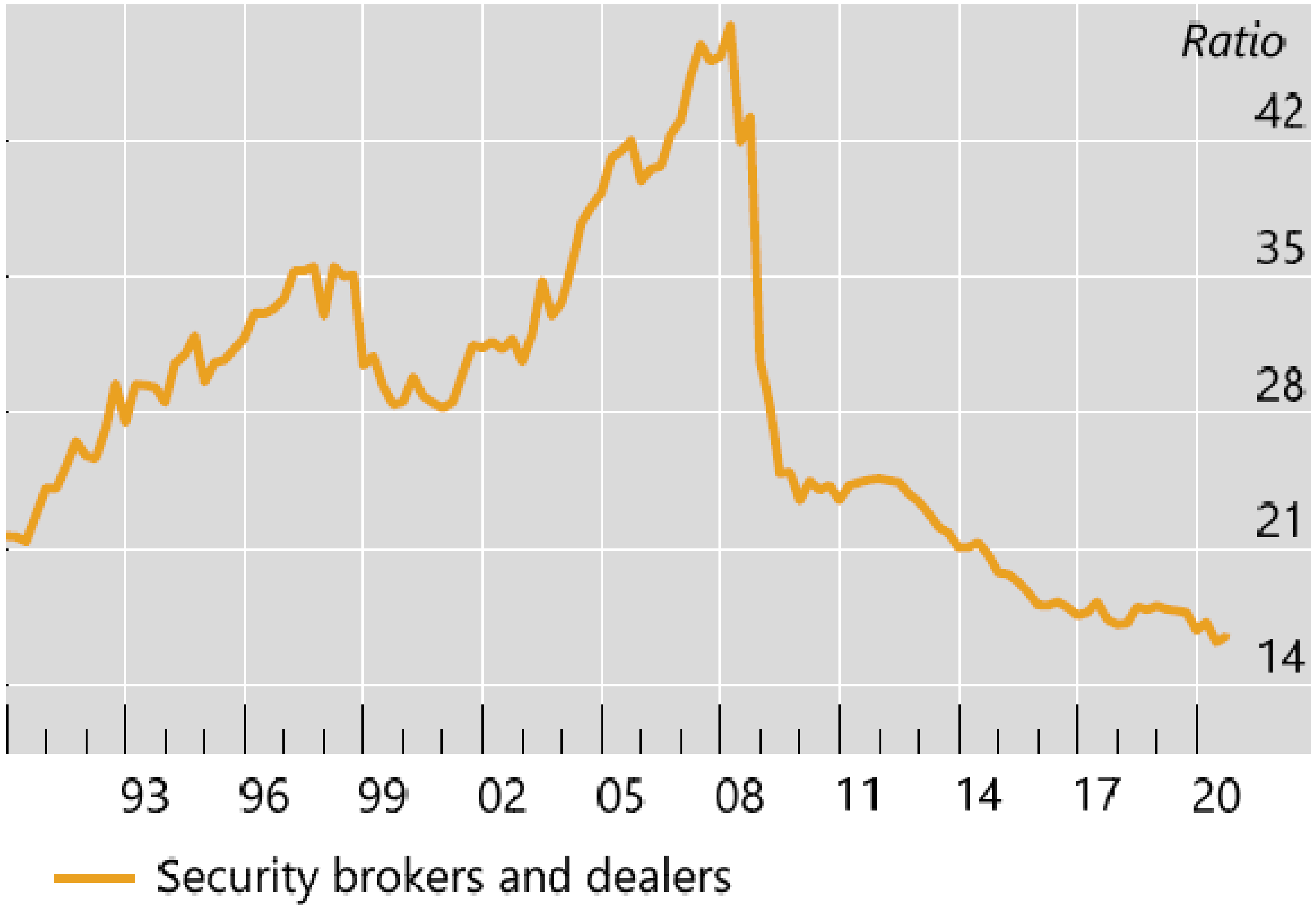
Elements of a VaR model



- ➢ ***Supply of credit channel (Bruno and Shin, 2015, REStud)***
- ➢ Borrowers with currency mismatch, lenders with no mismatch
  - ○ Weak dollar reduces credit tail risk, Bank's lending capacity ↑ in presence of VaR constraints, dollar funding ↑, leverage ↑, credit supply ↑, financing conditions loosen
  - ○ Reversed when dollar strengthens – tighter dollar credit conditions

Broker-Dealers

Leverage (=assets/equity)



Risk doesn’t disappear, it evolves

- Market-based intermediation has migrated elsewhere:

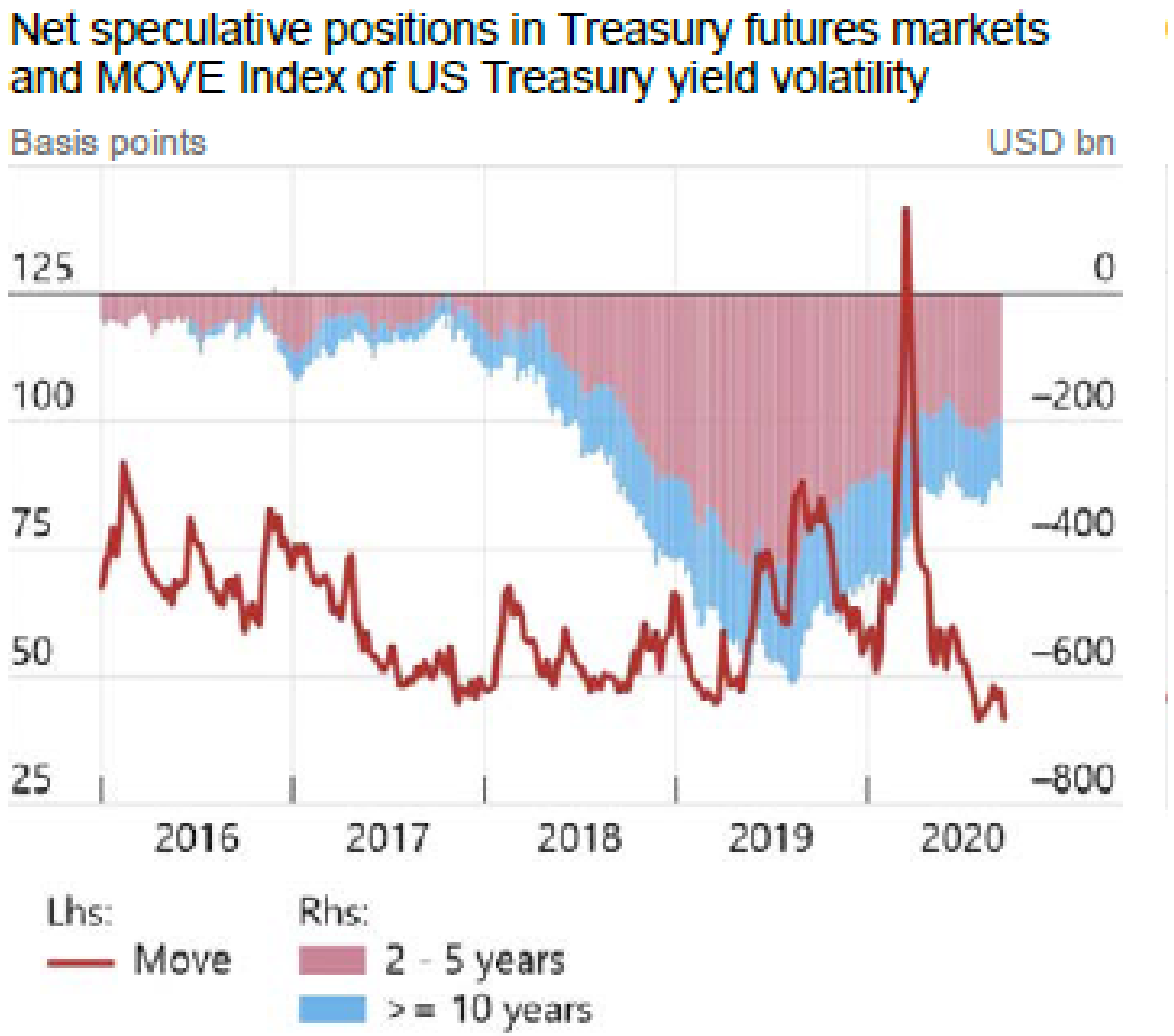
  1. Hedge Funds and the March 2020 “Dash for cash”

  2. Pension Funds and the September 2022 stress in UK gilts

  3. Mutual Funds and Local Currency Sovereign Debt

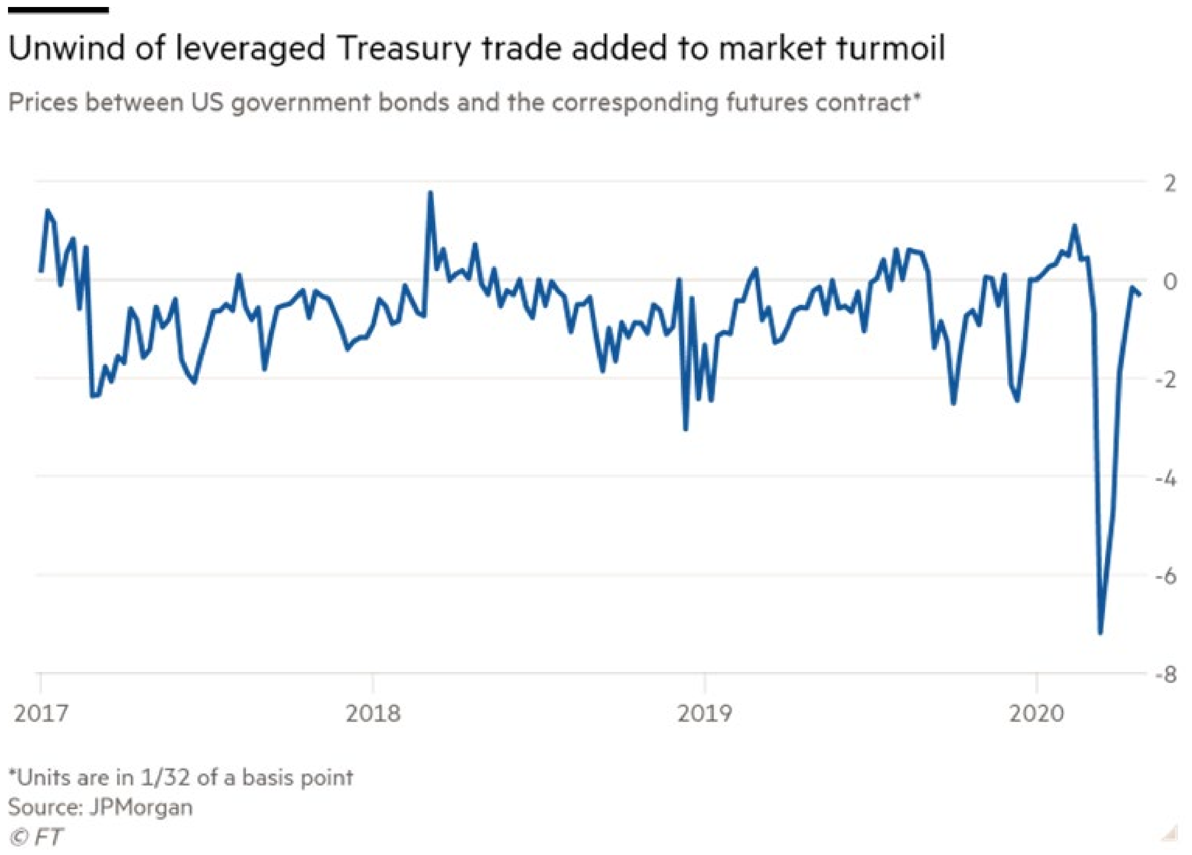
Three different contexts, one common theme: Market Risk

1. Hedge Funds



Source: FSB, November 2020, Holistic Review of the March Market Turmoil

Price declines may beget more sales



Source: FT, 17 November 2020

"The repo market ructions of September 2019 appear to have been a canary in the coal mine for March 2020 turmoil" (BIS Bulletin #2)

History repeating - LTCM Redux

Long-short strategy of hedge funds

Borrow $99 by pledging $100 worth of Treasury

Need only $1 of own funds to hold Treasuries worth $100

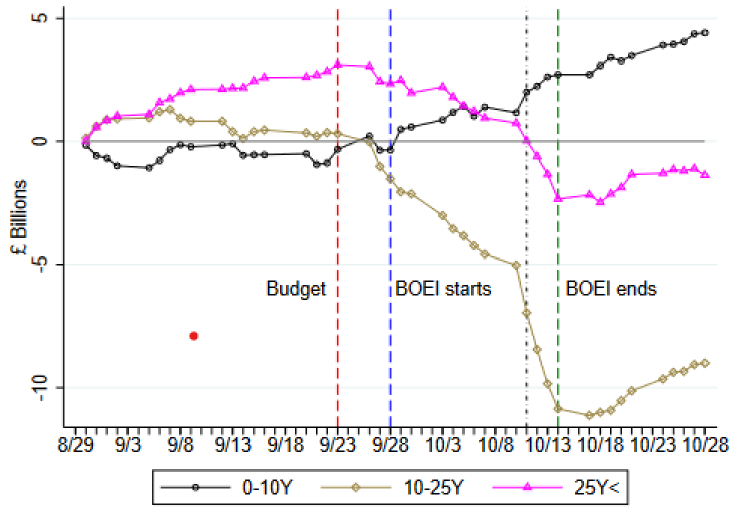
$100-fold leverage

When Russia defaulted, volatility picked up and margins surged. LTCM was no longer able to meet margin calls.

Margin Spiral – Analogy of the Millennium Bridge

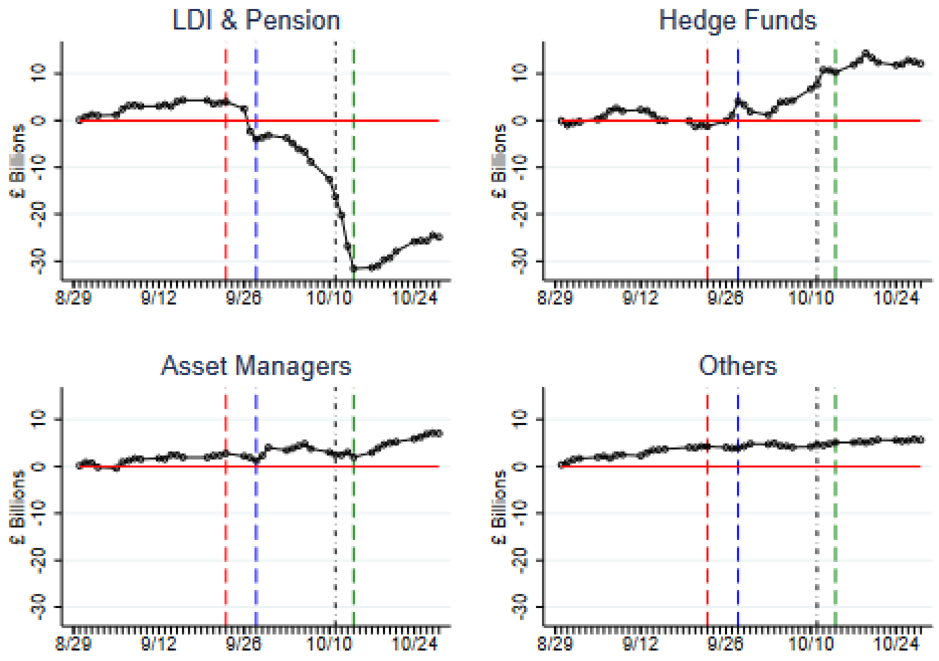
2. Another canary in the coal mine

Figure 9: Cumulative Orderflow of the LDI-PI Sector: Nominal Bonds of Different Maturities



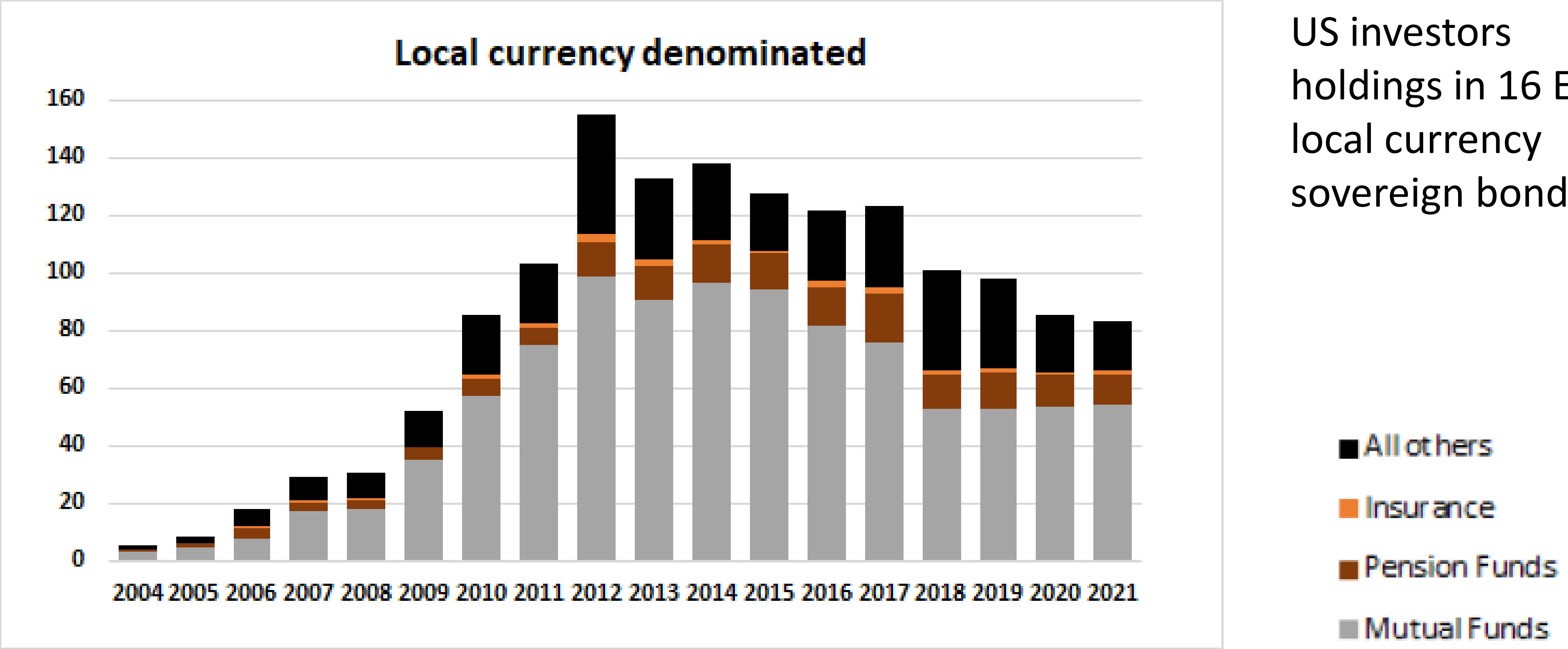
Notes: This figure shows the time-series of the cumulative orderflow (in £ billions) of the LDI-PI sector, across different maturities, in the UK nominal bond market. The black, brown and magenta lines correspond to maturities 0-10 years, 10-25 years and above 25 years, respectively. The sample covers 43 trading days from 30 Aug 2022 to 28 Oct 2022. The red, blue, black and green vertical lines mark the days of 23 Sep, 28 Sep, 11 October and 14 October, respectively. These days correspond to the government's announcement of the mini budget, the BoE's announcement regarding the 13-day gilt market intervention, the widening of the scope of the operations to purchase linkers and the end of the gilt market intervention.

Figure 10: Cumulative Orderflow of Different Sectors



Source: Gabor Pintor, 2023, *An anatomy of the 2022 gilt market crisis*, BoE WP No. 1019

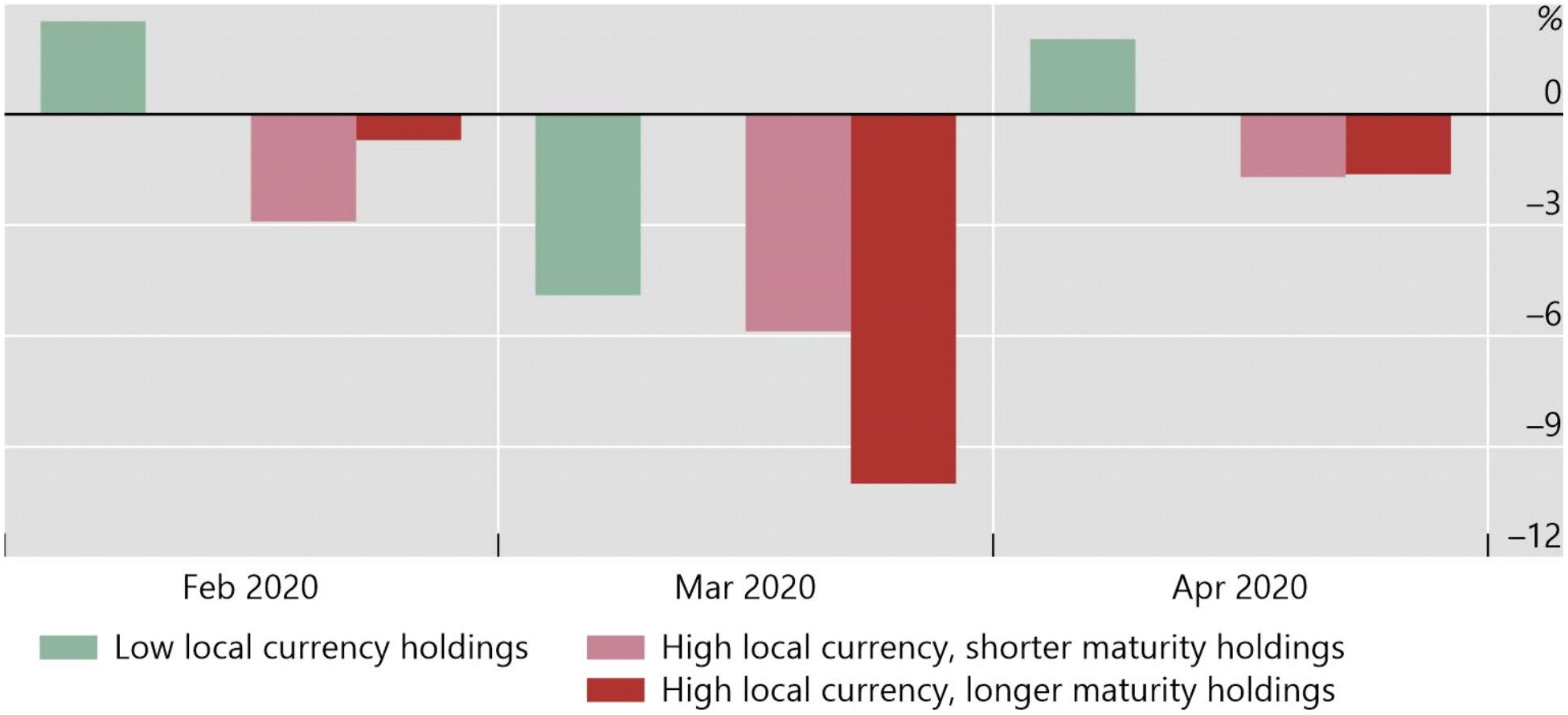
3. Original Sin Redux



US investors holdings in 16 EME local currency sovereign bonds.

Source: Bertaut, Bruno, and Shin, 2023, *Original Sin Redux: Role of Duration Risk*

Original Sin Redux: Role of Duration Risk



Source: Bertaut, Bruno, and Shin, 2023, *Original Sin Redux: Role of Duration Risk*

Rewriting the textbooks

Traditional way	**New Reality**
• Increase leverage by reducing equity	The power of leverage: Leverage enables greater leverage
• Credit/Default risk	Price risk even with safe assets *You should never try to catch a falling knife*
• Risk in the banking sector	Risk has moved to NBFI
• Currency/maturity mismatches	Market/duration risk Dual role of prices. *When central banks hit the brakes, someone flies out the window.*

Main References

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