

Discussion of

Dollar Asset Holding and Hedging Around the Globe

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¹The views expressed here are those of the author and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.

This Paper

- Data collection
 - ▶ Deep dive into a large number of industry- and company-level filings of global institutional investors
 - ▶ Goal: understanding foreign investors' USD security holdings and currency hedging practices
- USD securities holding and hedging facts
 - ▶ Leverage their data to explore patterns in USD asset holdings and hedging
- Model
 - ▶ Compare empirical findings to predictions of a model with a mean-variance investor optimizing their portfolio between domestic bonds and US bonds (+ hedging)

Main Findings

● Holding Facts

- ▶ Fact 1: Foreign investors show increasing preference of USD securities
- ▶ Fact 2: Foreigners prefer holding USD bonds over USD equities
- ▶ Fact 3: A large fraction of foreign investors' holdings of USD bonds is issued by non-US issuers

● Hedging Facts

- ▶ Fact 1: There is a substantial amount of hedging in actively-managed industries, especially post-GFC
- ▶ Fact 2: Investors' hedging demand not deterred by rising hedging costs
- ▶ Fact 3: Hedging behaviors show persistence and heterogeneity across sectors, geographies, and security types

Comment 1 - Importance of the Exercise and Challenges

- Crucial and timely question

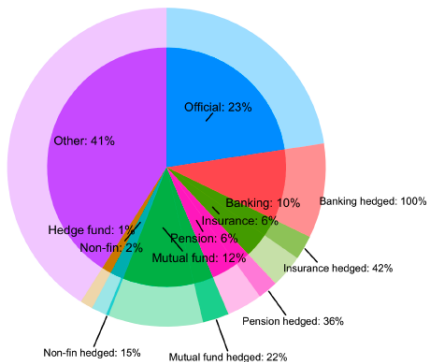
- ▶ Dominant role of the US dollar
- ▶ Differential behavior across different types of intermediaries/sectors of the economy
- ▶ Transmission of both US monetary policy and shocks to the dollar more generally depends on intermediary composition
- ▶ Granular understanding of who holds USD assets and hedging behavior is critical

- Challenges

- ▶ Reporting requirements and data availability vary across countries, sectors and time.
- ▶ This will inevitably lead to differences in coverage
 - ★ ~ 60 countries
 - ★ Company-level filings tilt towards larger firms

Comment 1 - Coverage and Representativeness

Figure 6: Foreign holding of USD by industry and hedging status, June 2020



- 'Hand-collected data account for over 60% of all foreign-held USD debt and equity.'
- Impressive coverage given the bottom-up approach.
- Important to keep in mind potential biases/heterogeneity when we discuss the facts they find.

Comment 2 - How do we think/understand their results?

Figure 3: Foreign USD holding by security type

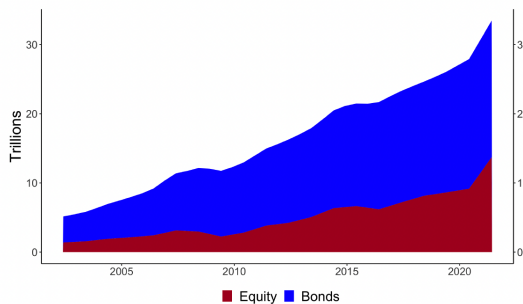
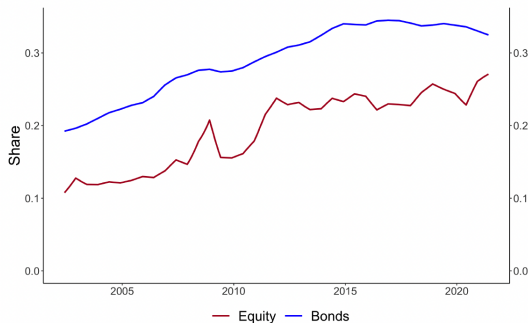
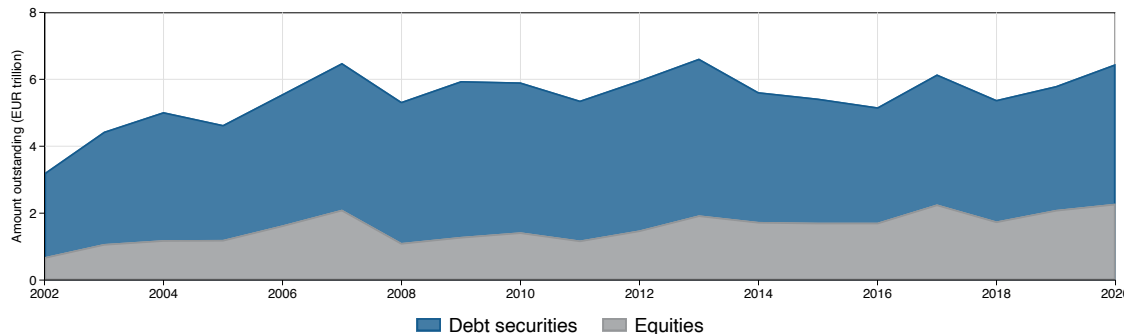


Figure 4: Foreign-held USD debt and equity as share of total outstanding



- Holdings Fact 2: Foreigners prefer holding USD bonds over USD equities
- Is this truly about the USD or representative of a preference for bonds over equity?

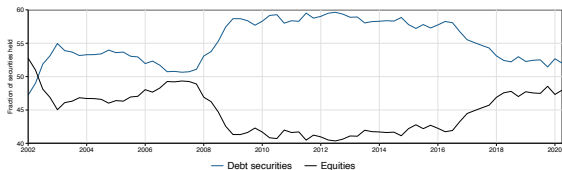
Comment 2 - How do we think/understand their results?



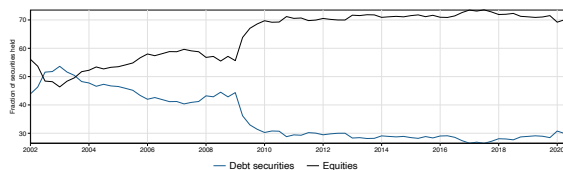
- Chart: Market Cap and amount outstanding of German securities
- Shows 'preference' for holding bonds over stocks in general, not USD specific.

Comment 2 - How do we think/understand their results?

Insurance



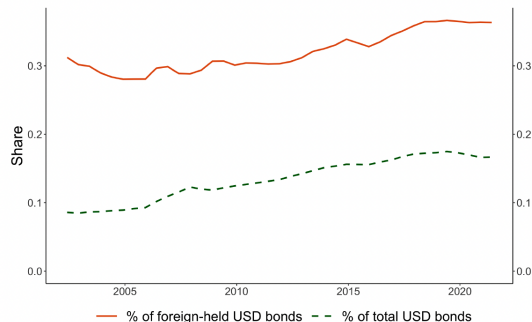
Pension funds



- Chart: fraction of securities held in debt vs equities by EU insurance companies and pension funds
- Shows insurance prefer debt securities vs pension funds prefer equities in general, not USD specific

Comment 2 - How do we think/understand their results?

Figure 5: Importance of USD debt issued outside of U.S.

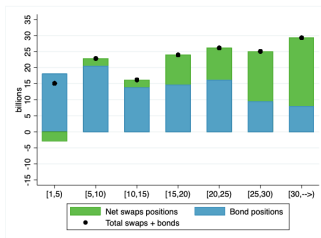


- Holdings Fact 3: A large fraction of foreign investors' holdings of USD bonds is issued by non-US issuers
- '... suggest that increasing foreign issuance goes hand-in-hand with increasing demand from foreign investors for USD bonds.'
- Does it reflect investors' demand for USD bonds or simply issuers' preferences for issuing in USD (+ home bias on the investors' side)?

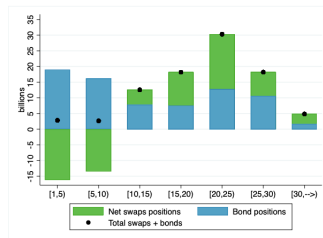
Comment 3 - Sample Representativeness

- Bottom-up approach \Rightarrow work with data from small sample of firms
- \Rightarrow Extrapolate behavior of few firms for entire sector/of few countries for sectors in other countries
- One particular example:
 - ▶ Coverage of pension funds in the Netherlands is limited to the two largest funds
 - ▶ 'manage assets equivalent to 1.5 times those of the next 15 biggest combined, or 50% of assets in all Dutch pension funds.'
- Does large share of AUM covered imply that have enough information to characterize behavior for the whole industry?
 - ▶ Not if economies of scale in e.g. investment costs: Broeders et al. (2016)
 - ▶ Not if differential hedging incentives across constraints

Comment 3 - Heterogeneity and Sample Representativeness



(b) Unconstrained P&Is



(c) Constrained P&Is

- Jansen (2021): regulatory data on insurance and pension funds in the Netherlands, with granular cash and derivatives holdings information
- Focuses on interest rate risk hedging
- Key findings
 - ▶ Substantial heterogeneity in hedging behavior for different institutions within the pension fund and insurance industry (e.g. by level of constraint)
 - ▶ And substantial heterogeneity across maturities: unclear if portfolio-wide hedging ratios representative of hedging ratios for particular securities

Comment 3 - Heterogeneity and Sample Representativeness

Figure 2: Portfolio allocation to USD across industries

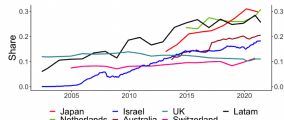
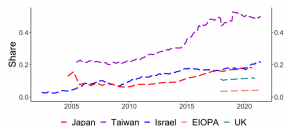
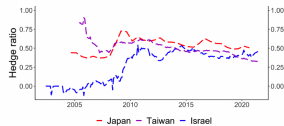


Figure 11: USD hedging across industries



- Paper notes that hedging by Dutch pension funds outsized relative to pension funds in UK and CH, insurance firms in EU
- Jansen (2021) finds $\approx 50\%$ of interest rate risk hedged by Dutch insurance and pension funds: in line with pension funds in UK and CH, insurance firms in EU
- Suggests that the 2 PFs used in the paper unlikely to be representative of the industry

Comment 4 - Discussing Assumptions

- Paper (and reader) would benefit from a more thorough discussion of some of the assumptions
- 'For the non-financial sector, we estimate hedging by non-financial firms to be at the level studied in specific contexts... We assume that foreign non-financial firms hedge their USD securities in a similar manner as Korean firms hedge their export revenue; see Jung (2022).'
- ▶ Is it reasonable to expect non-financial firms in other countries/sectors to hedge in a similar manner as Korean firms hedge their export revenues?
- ▶ Paper uses a 15% hedge ratio for non-financial firms, where does that number come from?

Conclusion

- Very ambitious exercise on a crucial, timely topic.
 - ▶ Anyone interested in International Finance/Macro, the role of the dollar, spillovers from US monetary policy, the dollar as a global factor, should be very excited about this paper
- That being said, and especially because of how important this topic is, better contextualizing would make the paper more impactful
 - ▶ USD-specific facts vs general debt/equity preferences?
 - ▶ Coverage of securities vs hedging information?
 - ▶ Representativeness of the bottom-up approach?
- Looking forward to seeing the next version of the paper!