Discussion of *Breaking the Feedback Loop: Macroprudential Regulation of Banks' Sovereign Exposures* by Jeorge Abad

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Highlights of the paper

- It sheds light on the **doom loop**: negative feedback loop between banking crises and sovereign default risk.
- Dynamic general equilibrium model that focuses on the interplay between **endogenous bank failure** and **endogenous sovereign default risk**.
- It **quantitatively** shows that the link between bank risk and sovereign risk is an **important source of systemic spillovers** with sizeable effects for economic activity.
- **Policy implication:** Introducing **regulatory capital requirements on banks sovereign debt holdings** might help mitigate the negative effects of the feedback loop on economic activity.
    - **welfare trade-off:** non-linear relationship between risk weight on banks sovereign exposure and higher government borrowing costs + contraction in credit supply.

Inspecting the loop

1. Banks failure risk + government bailout $\Rightarrow$ **risk shifting incentive** $\Rightarrow$ banks overexposure to sovereign risk.

2. **Possibility** of government default $\Rightarrow$ cost of bank funding increasing in banks' exposure to sovereign debt.

- A relatively small shock to a fraction of the banking system:
  - $\Uparrow$ probability of government default
  - $\Uparrow$ risk taking from banks
  - $\Uparrow$ banks funding costs $\circlearrowleft$

Contributions

- **Quantify** the dynamic general equilibrium effects of **both ways** of the loop.
- Study the implications of **capital requirements for banks' sovereign exposure**.

Comments: (I) Empirical Evidence: Italian CDS

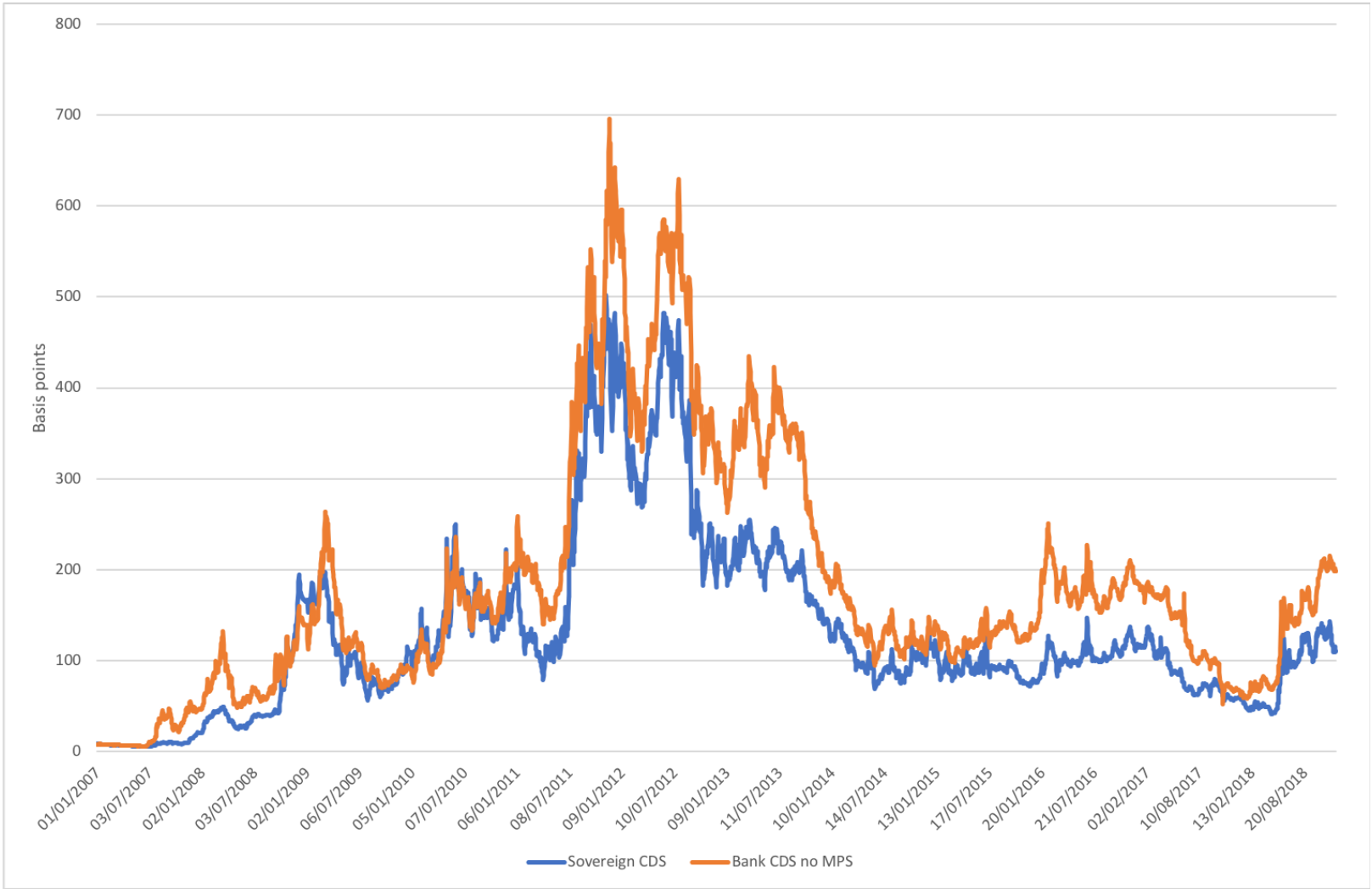


Figure: Sovereign CDS spreads and bank CDS spreads of Italy (5 years).
Bank CDS = average CDS spread of Banca Intesa and Unicredit.
Source: Markit CDS, Wharton Research Data Services.

Comments: (I) Empirical Evidence: Italian CDS: including MPS

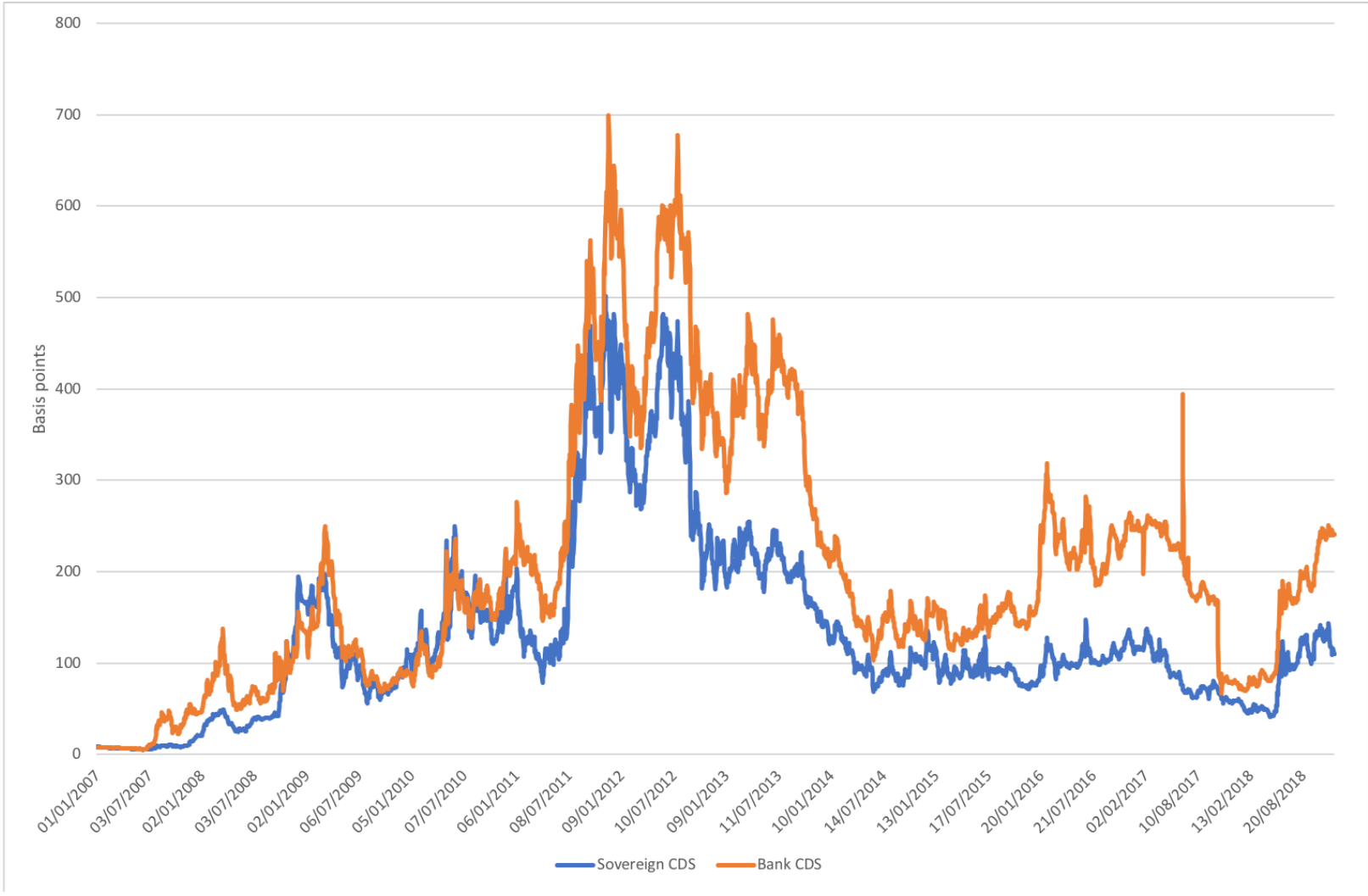


Figure: Sovereign CDS spreads and bank CDS spreads of Italy (5 years).
Bank CDS = average CDS spread of Banca Intesa, Unicredit and Monte dei Paschi.
Source: Markit CDS, Wharton Research Data Services.

Comments: (I) Non-linearities and Debt/GDP ratio

- Is the doom loop always at work?
- Do Banks have this risk shifting incentive for any value of Debt/GDP ratio? Or do bank stop having it over a threshold? (*non-linearities*)
- Is ▸ Fig. 3 in the paper produced matching Debt/GDP ratios of Spain and Italy?
- Does the amplification and propagation change with higher steady state debt to GDP ratio?

Comments: (II) Reverse dynamics: Shock to Fiscal Policy

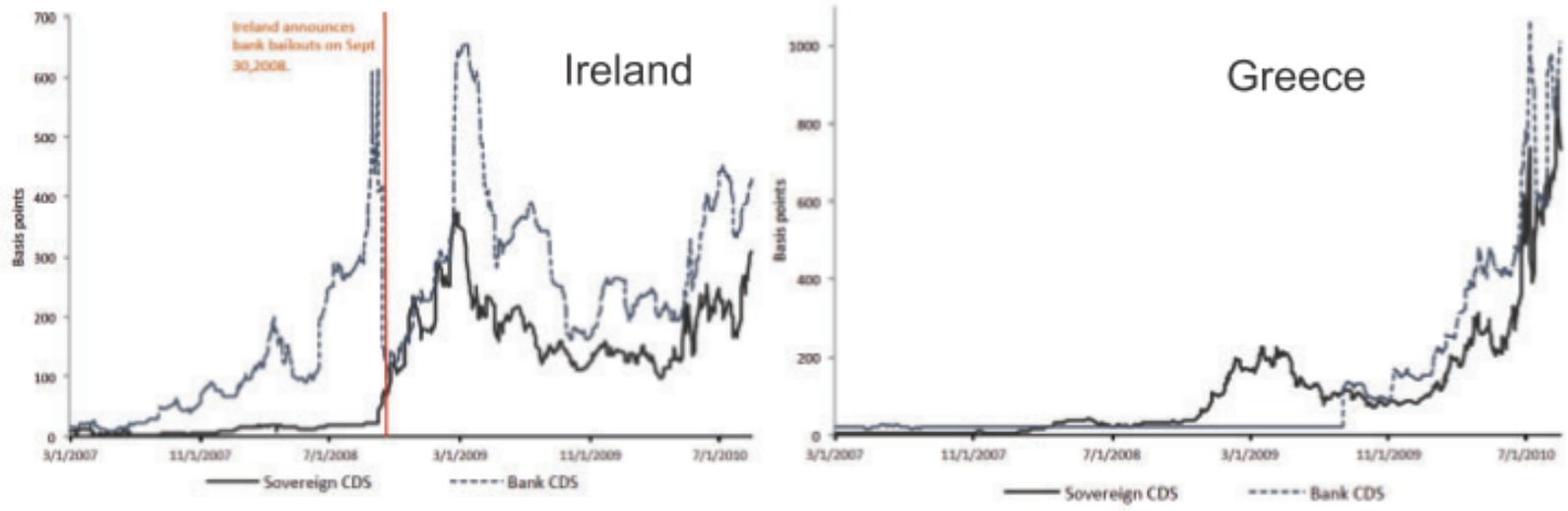


Figure: Sovereign CDS spreads and bank CDS spreads of Ireland and Greece.
Source Farhi and Tirole (ReStud 2018)

Comments: (II) Fiscal Policy shock and International Investors

- Why not looking at a shock originating from the public finances and feeding into the banking system?
- [Broner et al., 2018] recently showed that the size of fiscal multipliers is increasing in the share of public debt held by foreigners.
- Complementary story to yours. Another reason why banks should not overexpose to domestic debt!

Comments: (III) International Investors, sensitivity and Long term bonds

- Counter-intuitive that foreign investors increase absolute bond holdings after a shock to the banking system. Any evidence on that?
- Sensitivity of calibration:
  - relative risk aversion between home and foreigners investors.
  - Write off parameter of sovereign debt.
  - Bankers exit rate and bankruptcy costs
- Introducing Long term bonds?

Comments: (IV) Heterogeneous Banks exposure to Sovereigns

- Do different Banks have the same risk shifting incentive?
- Data on individual banks exposure to Sovereigns available from the European Banking Authority for 2011-2014-2016.
- 2018 detailed data not yet published (?).
- Evidence of substantial heterogeneity in the Banks exposure to sovereigns.

Comments: (IV) Heterogeneous Banks exposure to Sovereigns

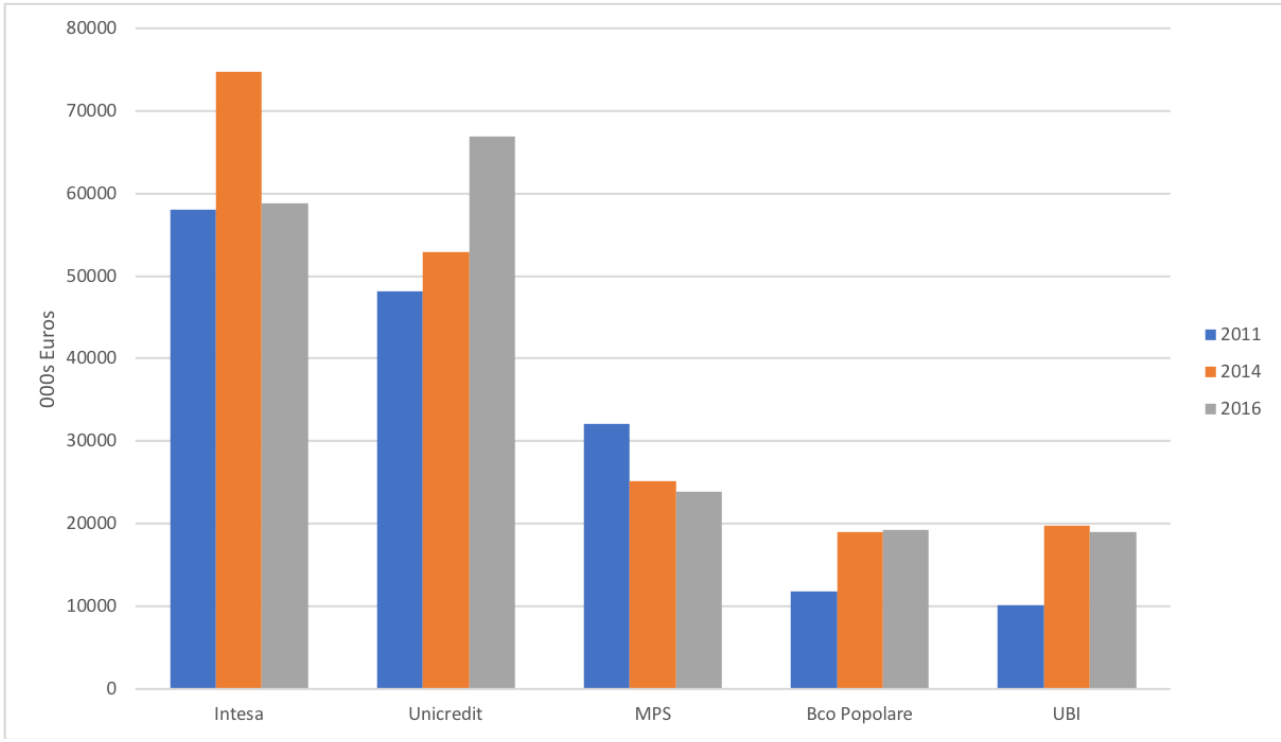


Figure: Banks exposure to the Italian government. Source www.eba.europa.eu Following Boccola (JPE 2016) Exposure for each bank = net direct long exposure + direct sovereign exposure in derivatives (all maturities).

Conclusions

- Really enjoyed reading the paper.
- Extremely relevant for current policy discussion on financial stability.
- Step forward our understanding of the negative feedback loop between banking crises and sovereign default risk.

1. Empirical evidence.
2. Non-linearities between the feedback loop and steady state Debt to GDP ratio.
3. Why looking only at a shock originating from one side of the loop?

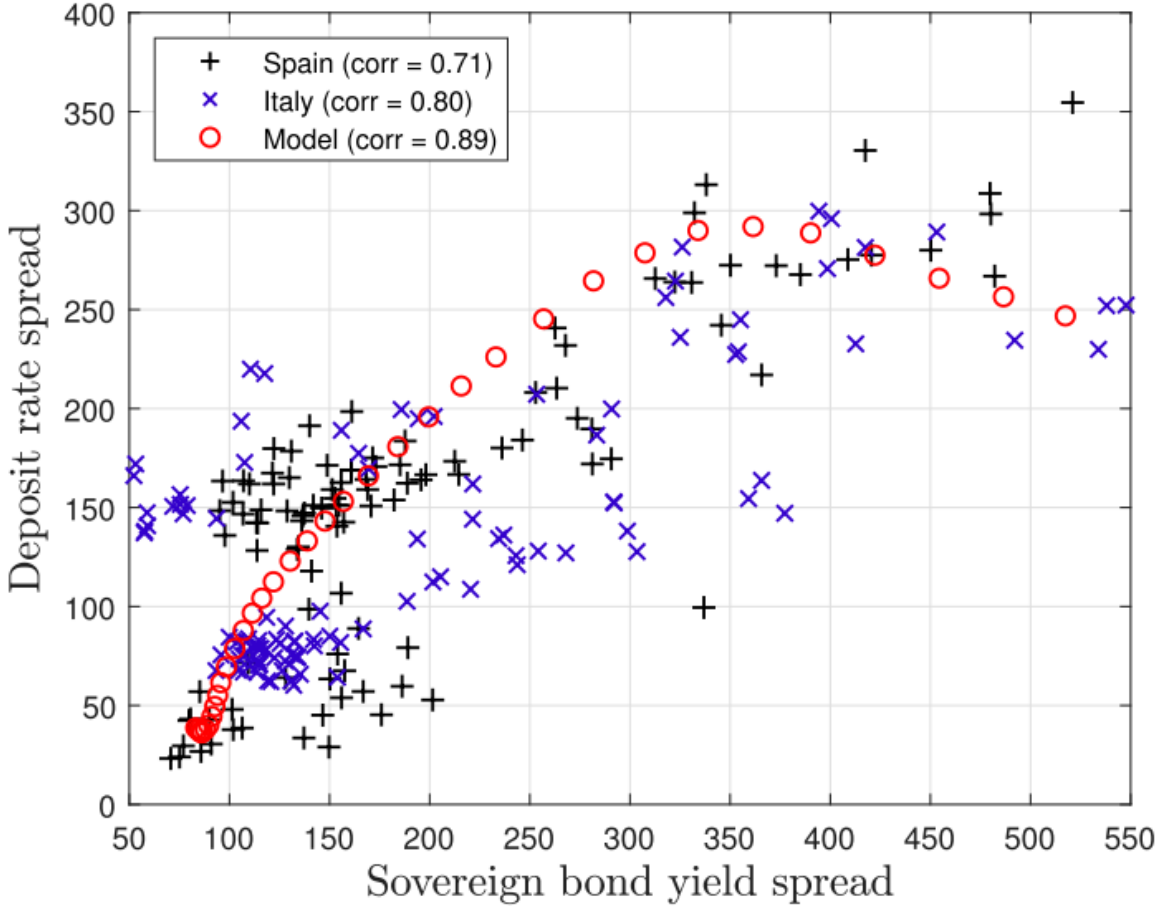
Broner, F., Clancy, D., Erce, A., and Martin, A. (2018). Fiscal Multipliers and Foreign Holdings of Public Debt.

Extra: (V) Minor points/extra comments

- Why do you need x_t if you assume it =1 throughout?
- It would be good to see the difference between a 2nd/3rd order approximation of the model with your solution and compare them in an appendix.
- Are you excluding debt held by domestic agents other than banks? what about countries with high private savings?
- Can you relax the assumption of perfect competition amongst banks?

Comments: (I) Non-linearities and Debt/GDP ratio

Figure 3: Sovereign yield and deposit rate spreads: model vs. data



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