#### Discussion of

# Transmission of Quasi-Sovereign Default Risk: Evidence from Puerto Rico

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# This Paper

 Is a very interesting paper that uses a unique data set and provides a new empirical result on the effect of sovereign default risk

Background

- Detroit bankruptcy is a shock which causes a sudden increase in default premium on Puerto Rican government bonds
- Puerto Rico's unique status provides an ideal environment to isolate the sovereign default risk from currency and banking crises

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# This Paper

- Analyzes the effect of increased risk of sovereign default on domestic industry
  - Theoretically, by a stylized two-period model
  - Empirically, using industry-level employment data
- Provides new evidence that increased default risk disproportionately hurts industries that are more dependent on government demand.
  - Emphasis on the "government demand channel"

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#### Main Mechanism

- Increased sovereign default premium
  - $\rightarrow$  Limits government's borrowing capacity and reduces its spending
  - $\rightarrow$  Industries that are dependent on government demand hurt severely
- The model has a simple and clear linkage across
  - Default risk, government spending, and employment:

Pr(def) rises  $\rightarrow qB$  declines  $\rightarrow G_m$  falls  $\rightarrow h_m$  declines

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## Main Mechanism

#### • Empirically,

 $\log E_{it} = \alpha + \beta HighGOV_i \cdot PostDetroit_t + \rho \log E_{it-1} + \gamma_i + \gamma_t + \epsilon_{it}$ 

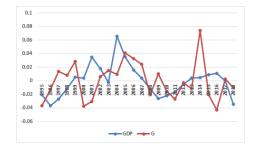
- Significantly negative estimate of β: Strong evidence on the effect of increased default risk on reduced employment in *HighGOV<sub>i</sub>* industries.
- It does not automatically guarantee that the channel is through "government demand"

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### Government Demand Channel

• Do we see evidence of decreased government spending?

Figure: Real GDP and Government Consumption



- Weak evidence from aggregate government consumption data (WDI)
- Make use of collected data on govt expenditure and primary balance
- Instrumenting government spending with the "PostDetroit" dummy?

### Other Possible Channels?

- Credit supply channel?
  - Addressed by including external finance dependence (Rajan and Zingales, 1998)
  - ► U.S. data used: What if Puerto Rican industries' dependence on external finance is different from the U.S.?
  - Utilize collected data on bank loans and bank exposure to government bonds

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# Other Possible Channels?

- Government ownership?
  - Puerto Rico has a large public sector (public sector employees account for 25% of total employees<sup>1</sup>)
  - If firms in HighGOV<sub>i</sub> industries are heavily government owned, reduced employment could reflect public sector layoffs rather than demand effect.
- Size of typical firms in each industry?
  - If firms in HighGOV<sub>i</sub> are disproportionately small, reduced employment could reflect size effect.
- Needs to document more characteristics of each industry