

Discussion  
“Identifying the Portfolio Balance Mechanism”  
by J. Duarte and T. Umar

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Southern Finance Association, November 2024

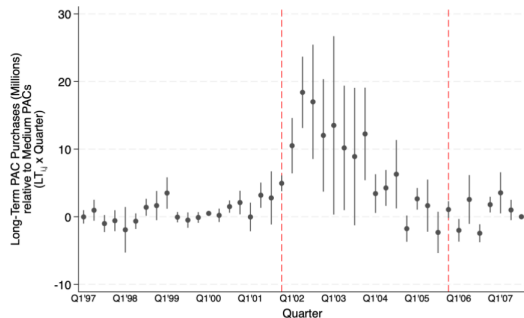
# Summary

- ▶ Does the Portfolio Balance Mechanism (PBM) hold empirically? Answer by looking at the 30-year UST bond auctions suspension, between 10/31/2001-5/4/2005.
- ▶ Data: UST and all agency-CMO issued between 1997-2007, plus life insurance companies' bond portfolios.
- ▶ Strategy: diff-in-diff.
  - ▶ Treatment: suspension announcement.
  - ▶ Control group: shorter-term UST, PACs; riskier CMOs.
- ▶ Validation of two hypotheses:
  - ▶ Issuance of LT PACs increases when the excess supply of LT USTs decreases.
  - ▶ Price of LT bonds (USTs and PACs) increases in response to negative supply shocks to LT USTs.
- ▶ Contribution: (1) granularity of the data, (2) control groups and falsification tests.

## Comment 1: Diff-in-diff

- ▶ Expected vs. unexpected announcement: authors address this concern.
- ▶ Parallel trends: Figure 3 addresses this for PACs of different maturities.
- ▶ What about UST vs PACs: are their trends parallel? What is the right parallelism to test?
- ▶ Table 3, Column 2: low significance result.

# Figures



	$PACs_{i,j,q}$	$UST_{i,j,q}$	$SEQs_{i,j,q}$	$\frac{PACs_{i,j,q}}{AUM_{j,y-1}}$	$\frac{UST_{i,j,q}}{AUM_{j,y-1}}$	$\frac{SEQs_{i,j,q}}{AUM_{j,y-1}}$
	(1)	(2)	(3)	(4)	(5)	(6)
$1(LT)_{i,j} \times 1(\text{No Auction})_q$	6.99** (3.32)	-12.45* (7.09)	-1.50 (1.60)	0.06*** (0.02)	-0.07* (0.04)	-0.01 (0.01)
$1(LT)_{i,j} \times 1(\text{Post Period})_q$	0.24 (0.95)	-1.91 (2.56)	-0.28 (0.60)	-0.01 (0.01)	0.00 (0.02)	-0.01 (0.01)
$1(LT)_{i,j}$	0.21 (0.50)	-4.31*** (1.29)	1.55** (0.62)	0.01 (0.01)	-0.08*** (0.02)	0.02*** (0.01)
$SEQs_{i,j,q}$	0.45*** (0.16)					
$\frac{SEQs_{i,j,q}}{AUM_{j,y-1}} \times 100$				0.29*** (0.04)		
Constant	1.62 (0.97)	11.13*** (1.34)	2.96*** (0.45)	0.05*** (0.01)	0.12*** (0.01)	0.04*** (0.00)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
% Adjusted R <sup>2</sup>	23.51	12.29	19.68	12.20	11.81	9.59
# Insurers	250	250	250	250	250	250
# Quarters	44	44	44	44	44	44
# Observations	19960	19960	19960	19960	19960	19960

## Comment 2: Regression

- ▶ Regression:

$$\begin{aligned}\Delta PAC_{i,j,q} = & \beta_1 \times \mathbb{1}(\text{LT})_{i,j} \times \mathbb{1}(\text{No Auction})_q \\ & + \beta_2 \times \mathbb{1}(\text{LT})_{i,j} \times \mathbb{1}(\text{Post Period})_q \\ & + \beta_3 \times \mathbb{1}(\text{LT})_{i,j} + \mu_j + \eta_q + \text{Controls}_{i,j,q} + \epsilon_{i,j,q}\end{aligned}\tag{1}$$

- ▶ Not clear about the “Post Period” variable and its interpretation.
  - ▶ Takes the value one for 2006-2007.
  - ▶ Does it capture the pre-announcement period only?
- ▶ Is quarterly data the best to capture the effect of a one-day announcement?

## Comment 3: Contribution

- ▶ The PBM is much talked about in Macro and Finance.
- ▶ No other papers testing this theory? (besides Greenwood and Vayanos, 2010, and Badoer and James, 2016).
- ▶ They only look at life insurance companies...
- ▶ ...and only at the role of prepayment risk.
- ▶ Would be interesting to put this in context and delineate the future questions.

## To sum up

- ▶ This is a very good paper with new data and a clear identification strategy.
- ▶ Can make a significant contribution to macro, finance, and policy.
- ▶ Comments above should be viewed as a way to give context and help view future avenues for research on the PBM.