



Comments of “The Hunt for Duration: Not Waving but Drowning?”

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Comments on
“The hunt for duration: not waving but drowning?”
by Domanski, Shin, and Sushko

Sergio Schmukler



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Introduction

- Really enjoyed reading this paper
- Very interesting, with new insights
- Introduces a new topic
- Leads to much thinking and learning
 - Especially for readers with little knowledge of how financial intermediaries function
 - But for others, too
- Many questions for future work

Paper organization

- Life insurers and pension funds in the euro-area bond market
- Stylized example of duration matching
- Evidence from German insurance sector bond holdings

Main contributions

- Three main aspects covered in the paper
 1. Highlights how incentives in asset-liability managers can affect their demand for long-term bonds
 2. Introduces how duration mismatches can play a role in reaction to interest rates, and generate unexpected/perverse feedback loops
 3. Uses data from insurance companies and other investors in Germany to show evidence consistent with these mechanisms
- Although there is some analytical discussion, main contribution is on the empirical analysis
- Theoretical issues discussed in much more detail in book, Shin (2010)
 - How much new and self-contained material to show in this paper?
- The evidence presented is consistent and seems to support the main points discussed at the beginning of the paper, but more welcomed

Several related questions arise from the paper

- Comments organized in four broad areas, linked to both the analytical and empirical analyses
 1. Incentives for asset-liability managers
 2. Asset-liability managers vs. asset managers
 3. Identification
 4. Other issues related to the empirical analysis

1. Incentives for asset-liability managers

- Asset-liability managers want to immunize their balance sheets
 - Match assets and liabilities in duration (and other attributes)
 - Or , in attempt to keep duration gap roughly constant, match movements in assets and liabilities
 - Prevent deterioration from further shifts in interest rates
- Driven by regulation and/or risk management practices
- Given these incentives, how do portfolio holdings react to interest rate changes?

1. Incentives for asset-liability managers

- Key idea:
 - Non-monotonic, upward sloping demand curve
- For low yields, demand for bonds increases as yields fall
- Specifically, fall in long-term rates increases demand for long-term bonds, depressing long-term rates even further
 - Feedback loop
- Duration gap (liability duration > asset duration)
 - Liability convexity exceeds asset convexity
 - Duration gap widens at an increasing rate as interest rates fall
 - The value of liabilities increase more than the value of assets
 - Prompts higher demand for long-term bonds
 - If rates fall too much, insurance companies can become insolvent, and immunization no longer possible

1. Incentives for asset-liability managers

- Feedback loops
 - If asset-liability managers are important and feedback loops arise, what stops them?
 - Do they stop with firm insolvencies or with significantly wider duration gaps and mismatches?
 - Any evidence on this?
 - Is there a role for policy action?
- Regulation and risk management might drive investment practices
 - If regulation is key, any attempts to change it?
 - What are the tradeoffs?
 - If risk management is key, what are the costs of dynamic hedging?

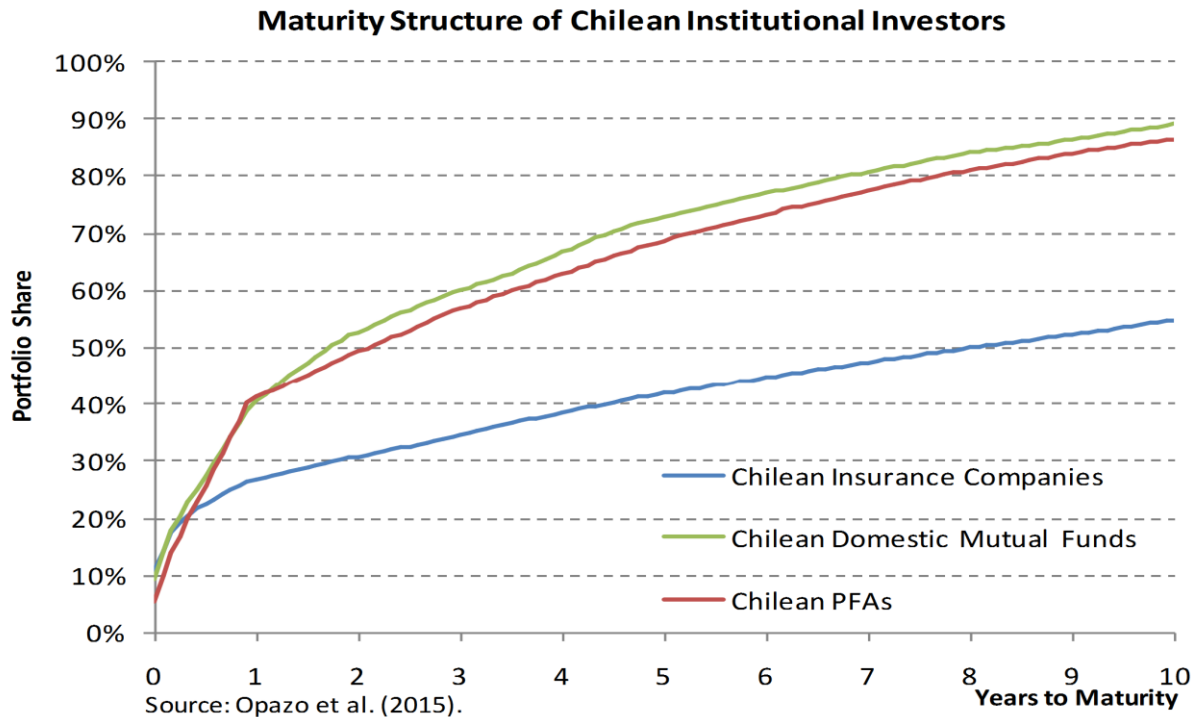
1. Incentives for asset-liability managers

- Do other incentives beyond regulation and risk management play role?
- Asset side
 - What is profitable to do when interest rates drop?
 - Worth waiting until interest rates increase?
 - Are feedback loop, overshooting, and snap-backs taken into account?
 - If so, how?
- Liability side
 - Liabilities can be fixed
 - The increase in liabilities seems due to mark-to-market practices
 - How far is this from optimal behavior?
- More general equilibrium analysis would be welcomed, as authors say

2. Asset-liability managers vs. asset managers

- Differentiation between insurance companies and financial intermediaries very interesting
 - But need to understand how other institutions operate
 - Do so in a more systematic basis
 - How do asset managers differ from asset-liability managers?
 - Are investment funds following immunization practices?
 - How do they compare with banks and households?
 - What drives their behavior?
 - Link between DB pension funds and insurance companies not clear
- Key difference seems to be between
 - (i) asset-liability managers; (ii) asset managers
 - Manifested only partly in this paper's results

2. Asset-liability managers vs. asset managers



Average Maturity (years)	
Chilean Insurance Companies	9.77
Chilean Domestic Mutual Funds	3.97
Chilean PFAs	4.36

2. Asset-liability managers vs. asset managers

- Incentives play very different role
- Asset-liability managers
 - Long-term view, though still far away from optimal behavior
- Asset managers
 - Short-term view due to principal-agent problems linked to short-term monitoring by investors, investment companies, and regulators
 - Short-term positions not optimal, but do not have dynamic hedging motive due to immunization (asset-liability matching)
- Tradeoff between asset-liability managers and asset managers
 - Which ones closer to socially optimal portfolios?
 - How to balance stability and risk management vs. long-run returns?
 - Ways to avoid perverse incentives with financial intermediation?

3. Identification

- Evidence interesting and suggestive, but more on identification
 - Even when knowing how difficult this is, and sometimes not essential
- What kick starts the loop?
 - Life-insurance holdings as function of interest rates
 - Interest rates as function of life-insurance holdings
- Evidence based on portfolio allocations, reflecting equilibrium outcome
 - Supply and demand considerations
- More evidence welcomed to identify demand function
 - Use evidence from supply of bonds or stock of debt?
 - Bids in government auctions?
 - Other instruments?

4. Empirical analysis

- Non-linearity
 - Why is positive relation only relevant for long-term bonds?
 - Why not analyzing non-monotonicity in interest rates?
- Holdings
 - Analyze long- vs. short-term holdings more systematically, across instruments
 - Sovereign bonds vs. corporate bonds and other instruments
 - Direct vs. indirect holdings

4. Empirical analysis

- German data
 - Anything unique (good or bad) about them?
 - Nice data, but limited
 - Would be useful to extend time span, and perhaps frequency
 - Is the paper using all available data?
- Smaller points
 - How well is the duration of liabilities measured?
 - Any evidence of investors with matched assets and liabilities?

To conclude

- Learned a lot from the paper
- Recommend reading it
- Overall, suggestive evidence
- Look forward to much more work in this area
 - Both on the theoretical and empirical fronts

Thank you!