

“Reaching for Yield: Evidence from Households”

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Discussion by:

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June 3, 2023

What does this paper do?

Studies how retail investors' risk attitude change given changing interest rates, and documents "reaching for yield":

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- ▶ **Why is this an interesting question?**

- ↳ It is a good attention and amount of work paid to understand how institutional investors respond to changing interest rates; but there is limited research on retail investors.

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- ▶ **Main empirical advantages of this paper**

- ↳ Account-level transaction data from a large national brokerage firm in China (2 million individual retail investors), 2006-2016. This potential allows researchers to study both balance and flows.

- ↳ Rich heterogeneities to exploit without losing testing power; tests can be done within a self-contained field environment

Main results

► Core model predictions:

1. Classic Merton: $\alpha = \frac{\mu-r}{\gamma\sigma^2}$, $\frac{\partial\alpha}{\partial r} < 0$
2. Merton with labor income: $\frac{\partial\alpha}{\partial r}$ more negative if PV of labor income/financial wealth is higher.
3. Merton with DRRA: $\frac{\partial\alpha}{\partial r}$ more negative if risk aversion is effectively higher.
4. Prospect theory: Landing in loss region due to heightened interest rate leads to more risk tolerance.

Main results

- **Mean effects:** $\Delta r_t \uparrow$, less risky investment (given share and flow measures), and more withdrawals from brokerage account in general.

$$y_{j,t+1} = \alpha + \beta \Delta r_t + \gamma X_{j,t} + f_j + u_{j,t+1}$$

Table 2: Results for baseline regression with account fixed effects

	ω^a		<i>NetFlow^{PP}</i>		<i>Withdr^{PP}</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
Δr_t	-0.0468*** (0.00156)		-0.199*** (0.00323)		0.145*** (0.00291)	
ε_t^r		-0.0911*** (0.00161)		-0.363*** (0.00338)		0.375*** (0.00312)
$\ln \Delta W^P$	-0.0660*** (0.0134)	-0.0663*** (0.0134)	-0.165*** (0.0242)	-0.166** (0.0243)	-0.0597*** (0.0250)	-0.0588** (0.0252)
Account FE	YES	YES	YES	YES	YES	YES
Wealth dummies	YES	YES	YES	YES	YES	YES
Observations	116,166,277	116,487,592	116,232,207	116,554,658	116,232,207	116,554,658
Adjusted R^2	0.010	0.010	0.017	0.017	0.048	0.048

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- **There is evidence for Prospect Theory too:** Investors trading at a loss become more risk-seeking after an interest rate drop.
- **Heterogeneous effects:** Stronger for younger and less wealthier investors.

Very nice paper!

- ▶ What I like:
 - ↪ There are clear simple model predictions, which helps bring asset pricing and behavioral literature together.
 - ↪ Data is amazingly granular, providing direct evidence.
 - ↪ Very well-written!
- ▶ **My extending thoughts (what an asset pricer could learn & say):**

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 1. Big picture messaging
 2. Suggestions on empirical work

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⇒ i_t for next month is determined at the beginning of month t , and its time-series behavioral is not a process that is exogenous from the pricing channels of risky assets. For instance, precautionary savings and/or utility smoothing channels can cause i_t to change based on expectations of future uncertainty or higher moments etc, and expected future uncertainty could enter the expected risky asset returns (μ) at various horizons — hence causing current and near future’s risky share to change.

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- ⇒ E.g., if a utility smoothing story dominates the real interest rate pricing:
 - (1) Higher uncertainty → but eventually uncertainty will go down → investors desire to borrow to smoth marginal utility → **higher i_t**
 - (2) Higher uncertainty → investors leave risky assets, in a persistent way → **lower risky share**

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↪ Imagine look at these big event dates, and see if (1) there are abnormal flow activities (i.e., a sign of attention validation), (2) whether you observe predicted directions (both the mean and the heterogeneity effects) during that week, which would be super cool!

Empirical work and delivering

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Changes in SP500	Coefficient on chg_FFR from this month
[-4m, -3m]	0.0007
[-4m, -2m]	0.0027
[-4m, -1m]	0.0012
[-4m, 0m]	-0.0022
[-4m, +1m]	-0.0067*
[-4m, +2m]	-0.0114***
[-4m, +3m]	-0.0117**
[-4m, +4m]	-0.0135***
[-4m, +5m]	-0.0151***
[-4m, +7m]	-0.0158***

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Suggestion: I would like to see some more horizons in months; if the coefficient of $w_{j,t}^a$ is highly persistent, this might suggest that the main explained effect is likely through P; if it is not persistent, this might support Quantity.

Empirical work and delivering (minor)

- ▶ I like the model motivation, but it could feel that it flows slow, and readers see the first empirical results on Page 27. Perhaps introduce one most-loaded model will be fine... (Where is the tension? More work on motivation.)
- ▶ Alternative interest rate variables. I don't think you need "AR(1)-cleansed model" as the main part of the paper – highly unit root anyways; AR(1) actually becomes harder to interpret. The "real interest rate" part in 4.3.1 also feel a little unready, as using nominal yield minus current inflation rate to construct real yield might backfire... Also, real yield would get very close to asset pricing models, where it is endogenously driven (see my first comment).

Conclusion

- ▶ **Highly recommend!**

- ▶ **My comments:**

1. Think about whether interest rate innovation are truly exogenous to investors (in the interpretations)
2. Several suggestions on the empirical work :)

Thank You!

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