

Discussion of “Individual Investor Activity and Performance”

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* **Conflict of Interest: Magnus hosted me at SIFR this past week!**

Big Picture Summary

- This paper uses daily data on portfolios of investors in the Swedish Premium Pension System (PPS) to argue some investors benefit from design of the pension while others are harmed.
 - **Benefit:** Lack of trading costs allows trading on fund momentum.
 - **Cost:** Outflows reduce returns earned by passive investors.
- Vast majority of investors are passive; tolerate underperformance.
 - **Dahlquist and Martinez (2012)** show this with aggregate data.
- Most-active investors earn significant alphas, but are relatively rare.
 - **Perfectly consistent with Gruber (1996).**
- Trades by financial advisors are coordinated but less profitable.
- Conclude that monitoring is essential but that financial advisors, which trigger coordinated outflows, are imposing costs.

Big Picture Reaction

- If the authors retain their focus on investor activity and returns, I have some suggestions for revising the analysis...
 - ... which are unlikely to change their basic story.
- However, I believe the authors can tell a richer story by:
 - Exploring how fund behavior changes in response to a large influx of largely passive investors.
 - Exploring whether financial advisors act as monitors.
- These data also provide a wonderful laboratory to study financial advisors, which remains vastly understudied.
 - What explains demand for financial advisors?
 - What impact do financial advisors have on portfolio risk and return?
- I'll expand on these comments as we go...

Institutional Details

- Swedish Premium Pension System (**PPS**) was introduced in 2000.
- “Participation is mandatory and coverage is universal.”
- Employees contribute 16.0% to “notional DC” and **2.5% to PPS**.
- Those not choosing the default fund may invest in up to 5 funds.
 - *“The default fund has invested in stocks and bonds to achieve high long-term returns with low overall risk.”*
- Investment menu is **subset** of funds available to retail investors.
 - Equity funds in PPS represent 26% of equity funds available in the retail market but manage 58% of retail equity fund assets.
 - Approximately 1/3 of the total equity fund assets come via PPS.
 - *There is presumably cross-sectional dispersion in how important PPS assets are to each retail fund.*

Institutional Details (2)

- Fees are low: 0.31% for default; average of 0.53% for others.
- No transaction costs incurred when trading funds.
- Payments for financial advice come directly via investor rather than indirectly via fund → potentially helps to rule out “pay for flow” seen in **Christoffersen et al. (2012)** and **Chalmers & Reuter (2012)**.
- Observe daily account data for population of ~6 million but focus on random sample of 70,550 investors who are continually enrolled between 9/2000 and 5/2010.
 - Excludes not only those who retire at mandatory retirement age or die, but also those who enter PPS after 2000.
- Surprisingly limited demographic data (for Sweden):
 - Observe age, gender, and a proxy for income in 2000.

I. Active Investors

- Compare actual (and counterfactual) returns of more and less active investors who enter PPS in 9/2000, do not die/retire before 5/2010.
- **Main result: Mo' trading = mo' money.**

	%	BASELINE 3-FACTOR ALPHA FULL SAMPLE	CHANGE IN 3-FACTOR ALPHA FROM BASELINE CASE			
			EXCLUDING ALL FUND TRADES	EXCLUDING PURE TRADES ACROSS ASSET CLASSES	EXCLUDING PURE TRADES WITHIN ASSET CLASS	EXCLUDING TRADES ON FUND MOMENTUM
Default	30.2%	-0.42 (2.21)				
No Change	39.0%	-0.83 (1.92)				
1 change	16.0%	-0.71 (1.97)	-0.18 [0.64]	0.15 [0.39]	-0.28 [0.29]	-0.23 [0.49]
2-5 changes	9.2%	0.13 (2.23)	-0.83 [0.28]	0.18 [0.32]	-0.73 [0.13]	-0.74 [0.25]
6-20 changes	4.1%	1.85 (2.64)	-2.30 * [0.09]	-0.15 [0.74]	-1.24 * [0.08]	-1.51 * [0.09]
21-50 changes	1.2%	3.44 (2.91)	-3.61 ** [0.05]	-0.47 [0.45]	-1.18 * [0.08]	-2.06 [0.06]
51+ changes	0.3%	6.29 * (3.22)	-6.30 *** [0.00]	-0.52 [0.44]	-2.52 *** [0.00]	-3.70 *** [0.00]

- **Interpretation:** Most-active investors benefit from fund-level performance persistence and the lack of transaction costs.

Measurement Issues

- **# trades** is defined using the full sample period.
- **Reverse causation?** Trade more when early trades are successful.
- It would be better to predict abnormal returns in period **t** using the number of funds trades over some prior period.
 - It would also be interesting to see results annually, and for the 2000-2003 and 2004-2010 subperiods.
- Alternatively, the authors could switch the unit of observation to trade **i** by individual **j** on day **t**.
- For each trade from fund **l** to fund **k**, follow **Goyal & Wahal (2008)** and compare returns of fund **l** and **k** over the next **t** months.
- Test whether (Return_**l** - Return_**k**) is positive or positive and increasing in the number of trades made over some prior period.
- **Aside:** Over what horizon are Swedish fund returns predictable?

Investment Menu

- Investment menu is quite large, and has grown over time.

	<u>2000</u>	<u>2006</u>	<u>2009</u>	<u>2010</u>
# Funds	~460	~750	~750	~780

- Investment options have changed over time.

1230 unique funds → considerable turnover in investment menu.

- Authors should be more explicit about how they handle situations in which funds are replaced or dropped. Being notified that a fund is soon to be dropped has the potential to trigger a trade.
- Authors should say more about why funds are added or dropped. Who is the decision maker? The PPS? The fund? Both?

Economic Significance

- Fraction of active investors who earn positive alpha is fairly small.
- And, fraction of passive investors who could be harmed by bad funds and/or active investors is falling.
- **Cronquist (2006)**: Massive advertising campaign by both PPS and mutual funds to encourage active choice in 2000.
- **Palme, Sundén, Söderlind (2007)**: demand for the default fund increased sharply between 2000 and 2006.

	DEFAULT	ACTIVE	
2000	32%	68%	
		54%	have zero trades through 2005
		14%	make at least one trade
2006	90%	10%	

- Since default is efficiently managed and cheap, this trend reduces concerns about the cost associated with inertia. Nevertheless, lots of passive investors are sitting in underperforming active funds.

Incentives

- “Irrespective of the ultimate source of the observed difference in performance, our key result is that active investors would not outperform less active investors without making fund changes.”
- This quote raises interesting questions about the incentives that mutual funds and investors face within PPS.
- Poor performance of (*ex post*) passive investors may reflect the fact that they were drawn to low-quality funds by advertising.
- Or, poor performance of initial selections may reflect the fact that funds that receive the largest flows from the introduction of PPS optimally change their fees and investment strategies to extract rents from investors they expect to be passive.
 - **Christoffersen & Musto ('02), Del Guercio & Reuter ('12).**
- **Aside:** It is difficult to interpret quality of initial choices by (*ex post*) active investors given the free option to exploit fund momentum.

II. Financial Advisors

- Financial advisors first enter the market in 2004.
- Charge an annual fee of 1% to 2% per year.
- Fee is **not** reflected in PPS portfolio returns.
- Place trades on client's behalf through PPS' web-based platform.
 - According to PPS, 10 IP addresses account for ~90% of all coordinated trades.
- Authors classify an investor as **coordinated** if he makes the same trade on day t as 999+ other investors (*within the full population of 6 million investors*).
 - Classify 8115 of 70550 investors (11.5%) as **coordinated**.
 - To validate their algorithm, authors have requested data on the IP addresses through which investors traded for 1-month period.

II. Financial Advisors (*cont.*)

- **Coordinated** investors are responsible for many of the trades.
- Relation between # trades and annualized alphas is weaker.

	NON-COORDINATED		COORDINATED	
	%	3-FACTOR ALPHA	%	3-FACTOR ALPHA
Default	26.7%	-0.42 (2.21)		
No Change	34.5%	-0.83 (1.92)		
1 change	14.2%	-0.71 (1.97)		
2-5 changes	8.1%	0.13 (2.23)	2.5%	-0.73 (2.20)
6-20 changes	3.6%	1.85 (2.64)	5.2%	-0.60 (2.22)
21-50 changes	1.1%	3.44 (2.91)	3.5%	0.40 (2.24)
51+ changes	0.3%	6.29 (3.22) *	0.3%	3.64 (2.93)

- It is difficult to interpret these differences because authors exclude trades during years before investors are classified as **coordinated**.
- It may be more enlightening to focus on **# trades** over past year...
- ... or to test for differences in (Return_new_fund - Return_old_fund) for **coordinated** and **non-coordinated** trades.

III. Externalities

- Estimate relationship between daily alphas and daily **outflows**.
- Because daily returns decline more when more “fully invested investors” sell, they conclude **coordinated** outflows impose a negative externality on passive investors.
 - **Main result: No money = mo’ problems.**
 - Milder form of the negative externality “market timers” imposed on passive investors before redemption fees added in 2004.
- If findings are driven by fire sales, I would expect estimated costs to be higher among funds trading in less liquid assets.
- I would also expect the price impact from large inflows into funds trading less liquid assets to push up NAV.
- **Aside:** How does PPS handle inflows and outflows when one fund replaces another fund on the menu? Are flows lumpy or smooth?

Tension Regarding Monitoring

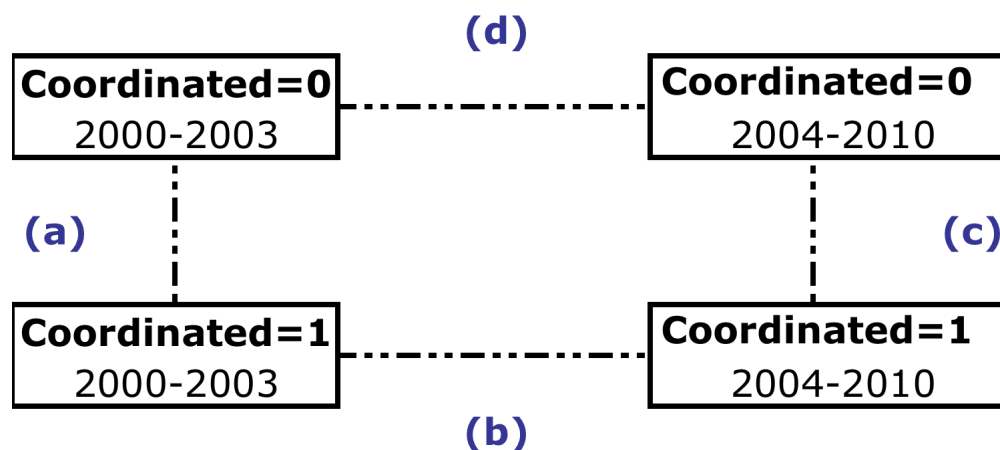
- On the one hand, the authors argue that investors should monitor their portfolios and sell underperforming funds.
 - Monitoring may be the only way to overcome the incentive that funds with inert pension investors face to raise fees and lower effort.
- On the other hand, the authors argue that coordinated outflows impose a negative externality on passive investors.
 - Are the coordinated outflows from underperforming funds?
 - If so, threat of coordinated outflows has potentially positive externality.
 - To shed more light on the value of financial advisors, the authors need to ask what role underperformance (raw or risk-adjusted) plays in explaining coordinated outflows.

Demand for Financial Advisors

- The ability to study demand for financial advice with (almost) the full population of a country is rare!
- What demographic data predict demand for financial advisors within this population?
 - Studies based on selected samples give different answers:
 - **Bhattacharya et al (2012)** vs. **Chalmers and Reuter (2012)**.
 - This will require much more detailed demographic data than the authors currently possess.
- Can individual trading behavior or realized returns between 2000-2003 be used to predict demand for financial advisors?

Impact of Financial Advisors

- The authors can exploit the introduction of financial advisors in 2004 to study differences in **risk and return**.
 - Better yet, they may be able to exploit geographic variation in year in which financial advisor becomes available.
- Four potentially interesting comparisons (two within investors and two across investors):



- Note: **Coordinate = 1** if investor is eventually hires advisor.

Conclusion

- Well-executed paper on behavior of mutual fund investors in a very interesting setting. Currently, it does two things:
 - Makes real, but modest, contribution to (vast) existing literature by documenting heterogeneity in investor outcomes.
 - Highlights an externality that active investments can impose on passive investors → potential implications for pension design.
- **Now, the authors face three divergent roads in a wood:**
 - **More traveled:** Tighten up the existing analysis and incorporate “Finnish-quality” data on investor characteristics.
 - **Less traveled:** Shift focus to the incentives and behavior of mutual funds and consider financial advisors as monitors.
 - **Even less traveled, but not for long:** Use rich empirical setting to study demand for and impact of financial advisors.

“I took the one less traveled by, And that has made all the difference.”