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The case against active pension funds: Evidence from the Turkish Private Pension System

Umut Gökçen [a,1], Atakan Yalçın [b,*]

[a] Koç University, Rumelifeneri Yolu, Sarıyer, 34450 Istanbul, Turkey
[b] Ozyegin University, Alemdag, Cekmekoy, 34794 Istanbul, Turkey

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ABSTRACT

Using data on private Turkish pension funds we show that most active managers are not able to provide performance beyond what could be achieved by passive indexing. The average fund beats its benchmark by only 26 basis points, before fees. We also observe herding behavior among managers' asset allocation decisions which can potentially explain their lack of overperformance. Our results strongly support the need for low-cost index funds in emerging market countries that are reforming their pension schemes. We further recommend regulatory oversight on the "activeness" of funds and introduction of default plans with more balanced asset allocations.

1. Introduction

Despite mounting evidence that retail investors are no better off investing with active funds, the allure of active investing is enduring. In a recent *Wall Street Journal*[2] article, even Burton Malkiel, one of the most vocal proponents of passive investing, confides that he uses 10% of his investment portfolio to actively trade individual stocks. Nevertheless, he regards these focused bets as "a hobby" and states "For your serious retirement money, you don't gamble." We believe this to be sound advice and present empirical evidence on active pension funds in Turkey which supports this view. We hope that the results in this paper will prompt countries in the process of reforming their pension systems to tilt their product offerings toward passive alternatives.

Private pension funds are relatively new in Turkey and their structure allows many economic questions to be studied. Private plans are voluntary and set up as defined contributions as opposed to defined benefits which are the case for government provided pensions. As a result of these features, the money flowing into the private pension fund system represents the portfolio choices of the retail investor, and the fund manager

* Corresponding author Tel.: +90 216 564 9587; fax: +90 216 564 9045.
E-mail addresses: ugokcen@ku.edu.tr (U. Gökçen), atakan.yalcin@ozyegin.edu.tr (A. Yalçın).
[1] Tel.: +90 212 338 1672.
[2] http://online.wsj.com/news/articles/SB10001424052702304330904579137410675036086.

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focuses on performance without worrying about the asset/liability mismatch. The system has grown exponentially in assets under management since its inception in 2003 – with the new government subsidy introduced in 2013, the public's interest in private pension funds is greater than ever – yet ours is the first academic study on them. Other than the descriptive annual reports published by the "Pension Monitoring Center", a consortium of pension companies, there is very little information on the risk and return characteristics of individual funds. Hence how beneficial the private pension system has been and how it can further be improved are still open questions.

Using the complete universe of Turkish pension funds, we document that active funds, on average, do not overperform their self-declared benchmarks in a statistically, or economically significant way. For funds without self-declared benchmarks (categorized as "Flexible", "Mixed", or "Balanced"), the average return is below the average return on Turkish Government bonds. We perform time-series regressions with 11 asset class factors and find that fund style indexes (obtained from our data provider) do not deliver any statistically significant positive alphas, neither does the composite pension fund index representing the value-weighted portfolio of all existing funds. When we examine individual funds, a panel regression with both population and fund-specific coefficients reveals that the population alpha is not significantly different from zero (notwithstanding some funds with significantly positive alphas). Under the efficient market hypothesis this is, of course, to be expected. However, emerging markets such as Turkey are considered to be less informationally efficient than their developed counterparts in North America or Europe therefore it is surprising to find that "beating the market" is hard even for local experienced professionals.

A unique feature of our dataset due to the regulatory environment in Turkey is that it is not limited to just net asset values; we also have information on funds' portfolio composition at the asset class level. This allows us to substitute observed asset allocations in place of historical betas when we carry out a "style analysis" à la Sharpe (1992). We find 15 managers out of a total of 142 who are able to provide a positive selection return, and 9 managers who yield a negative selection return. On average, the tracking error of all funds is around 5%, a relatively low number which suggests that many active funds might secretly be following indexes instead of making active bets on individual securities. While we cannot observe their trades in individual securities, we still find compelling evidence of herding among fund managers at the asset class level. Specifically, managers tend to revert back to the average asset allocation of their style peers from one week to the next. This effect holds strongly in all major asset classes, while controlling for deviations from the fund's declared benchmark allocations, as well as lagged returns on indexes.

One goal of our study is to aid retail investors in making better informed decisions about their pension plans. Under the current system it is the retail investors' responsibility to pick a fund when they enter the system, or change to a different fund if they are not happy with its performance at some time in the future. There is no default option that provides a balanced portfolio of different asset classes which results in an overrepresentation of government bond funds and an underrepresentation of equity funds. There is also an incredible home bias: international funds make up only 0.5% of the total net asset value in the private pension system. It is our view that considering the low levels of financial literacy in emerging market countries, relinquishing all the control about their life savings to first-time pensioners may not be ideal. Default plans based on risk preferences and the investment horizons can be offered to individuals with the option to change to different plans if they so desire.

If the investor who opts into the system picks a fund at random, our previous results imply that he or she will earn (on average) about the same as some common indexes. But how about picking funds based on past performance? We consider the implications of one simple fund picking strategy. Our example is meant to be cautionary; it is not a strategy that we recommend to retail investors. We observe the ten best performing funds at the end of each year and re-invest 1/10th of our hypothetical portfolio with them. Assuming this equal-weighted portfolio of pension funds gets rebalanced once every year for the eight years of our sample period, we find that the terminal value that this strategy yields is extremely sensitive to how funds are ranked and ultimately chosen. If funds are ranked based on their benchmark-adjusted returns, then 1000 Turkish Liras invested with this strategy grows to 2788.12 liras over the course of eight years. If however, funds are ranked according to their absolute returns, then the same strategy with the same initial investment yields only 1038.09 liras at the end of the sample period. The reason for this substantial difference comes down to the futile attempt of chasing the best performing asset classes. Ranking funds on absolute returns favors the asset classes that have recently performed well, and there is simply no persistence in returns from one year to the next at the asset class level. In fact the dismal (hypothetical) performance outlined above is a direct result of equities outperforming