The Determinants of Mutual Fund Starts: Is Real Estate Different?

David H. Downs ¹  Steffen Sebastian ²  René Woltering ²

¹Virginia Commonwealth University

²University of Regensburg

20th Annual ERES Conference in Vienna, 3rd-6th July 2013
Why so few Real Estate Fund Openings?

![Graph showing fund openings vs. assets under management in € billions as of 2010. The categories include: Real Estate, Money Market, Capital Protected, Fixed Income, Equity, and Balanced Funds. The graph indicates that Real Estate Fund Openings are relatively few compared to other categories.]
What Determines Real Estate Fund Openings?

- Which factors affect the fund family’s decision to open a new real estate fund?
- Is this decision different from other mutual fund openings?
- What role play specifics of real estate as an asset class?
What Determines Real Estate Fund Openings?

- Which factors affect the fund family’s decision to open a new real estate fund?
- Is this decision different from other mutual fund openings?
- What role play specifics of real estate as an asset class?
What Determines Real Estate Fund Openings?

- Which factors affect the fund family’s decision to open a new real estate fund?
- Is this decision different from other mutual fund openings?
- What role play specifics of real estate as an asset class?
Why (not) open new mutual funds?

- Increasing the likelihood of having a top performer, Goetzmann and Ibbotson, 1993; Evans, 2010.
- Window dressing the poor performance of existing funds, Khorana and Servaes, 1999; Berzins, 2005.
- Existing funds becoming too large, Chen et al., 2004, Zhao, 2004.
- Cannibalization, Khorana and Servaes, 2011.
Why (not) open new mutual funds?

- Increasing the likelihood of having a top performer, Goetzmann and Ibbotson, 1993; Evans, 2010.
- Window dressing the poor performance of existing funds, Khorana and Servaes, 1999; Berzins, 2005.
- Existing funds becoming too large, Chen et al., 2004, Zhao, 2004.
- Cannibalization, Khorana and Servaes, 2011.
Why (not) open new mutual funds?

- Increasing the likelihood of having a top performer, Goetzmann and Ibbotson, 1993; Evans, 2010.
- Window dressing the poor performance of existing funds, Khorana and Servaes, 1999; Berzins, 2005.
- Existing funds becoming too large, Chen et al., 2004, Zhao, 2004.
- Cannibalization, Khorana and Servaes, 2011.
Why (not) open new mutual funds?

- Increasing the likelihood of having a top performer, Goetzmann and Ibbotson, 1993; Evans, 2010.
- Window dressing the poor performance of existing funds, Khorana and Servaes, 1999; Berzins, 2005.
- Existing funds becoming too large, Chen et al., 2004, Zhao, 2004.
- Cannibalization, Khorana and Servaes, 2011.
Why (not) open new mutual funds?

- Increasing the likelihood of having a top performer, Goetzmann and Ibbotson, 1993; Evans, 2010.
- Window dressing the poor performance of existing funds, Khorana and Servaes, 1999; Berzins, 2005.
- Existing funds becoming too large, Chen et al., 2004, Zhao, 2004.
- Cannibalization, Khorana and Servaes, 2011.
Real Estate Specific Hypotheses

Hypothesis 1

The real estate fund opening decision is particularly sensitive to fund flows into existing real estate funds of the family.

- Illiquidity of direct property
- Vulnerability of German open property funds to negative cash flow shocks, Bannier et al., 2008
- Channeling of excess demand into the new real estate fund?
Real Estate Specific Hypotheses

Hypothesis 1
The real estate fund opening decision is particularly sensitive to fund flows into existing real estate funds of the family.

- Illiquidity of direct property
- Vulnerability of German open property funds to negative cash flow shocks, Bannier et al., 2008
- Channeling of excess demand into the new real estate fund?
Real Estate Specific Hypotheses

Hypothesis 1

The real estate fund opening decision is particularly sensitive to fund flows into existing real estate funds of the family.

- Illiquidity of direct property
- Vulnerability of German open property funds to negative cash flow shocks, Bannier et al., 2008
- Channeling of excess demand into the new real estate fund?
Hypothesis 2

Real Estate fund openings are more responsive to fund flows at the aggregate industry level than other fund openings.

- Bank run risks at the aggregate industry level
- Attenuation of the cannibalization risk during times of high industry inflows
Hypothesis 2

Real Estate fund openings are more responsive to fund flows at the aggregate industry level than other fund openings.

- Bank run risks at the aggregate industry level
- Attenuation of the cannibalization risk during times of high industry inflows
Real Estate Specific Hypotheses

Hypothesis 3

Larger fund families are less inclined to open new real estate funds because economies of scale and scope achieved from fund openings are less pronounced for real estate funds.

- REITs: Economies of scale (Ambrose, Highfield, and Linneman (2005))
- Equity Funds: Diseconomies of scale (Chen et al. (2004))
- Barriers of entry for fund families which consider entering the real estate fund business
Hypothesis 3

Larger fund families are less inclined to open new real estate funds because economies of scale and scope achieved from fund openings are less pronounced for real estate funds.

- REITs: Economies of scale (Ambrose, Highfield, and Linneman (2005))
- Equity Funds: Diseconomies of scale (Chen et al. (2004))
- Barriers of entry for fund families which consider entering the real estate fund business
Hypothesis 3

Larger fund families are less inclined to open new real estate funds because economies of scale and scope achieved from fund openings are less pronounced for real estate funds.

- REITs: Economies of scale (Ambrose, Highfield, and Linneman (2005))
- Equity Funds: Diseconomies of scale (Chen et al. (2004))
- Barriers of entry for fund families which consider entering the real estate fund business
The (Real Estate) Fund Opening Decision

\[
\text{Fund opening}_{ij,t} = \alpha_0 + \alpha_1 \text{real estate} \\
+ \beta_1 \text{objective inflow}_{j,t-1} + \beta_2 \text{objective inflow}_{j,t-1} \times \text{re} \\
+ \beta_3 \text{objective-family inflow}_{ij,t-1} + \beta_4 \text{objfaminf}_{ij,t-1} \times \text{re} \\
+ \beta_5 \text{objective size}_{j,t-1} \\
+ \beta_6 \text{objective return}_{j,t-1} + \beta_7 \text{objective return}_{j,t-1} \times \text{re} \\
+ \beta_8 \text{objective-family excess return}_{ij,t-1} \\
+ \beta_9 \text{family assets in objective (\%)}_{ij,t-1} \\
+ \beta_{10} \text{large family opens}_{j,t-1} \\
+ \beta_{11} \text{family size}_{i,t-1} + \beta_{12} \text{family size}_{i,t-1} \times \text{re} \\
+ \beta_{13} \text{number of funds opened in prior year}_{i,t-1}
\] (1)
### Flow Measures

<table>
<thead>
<tr>
<th></th>
<th>Model (i)</th>
<th>Model (ii)</th>
<th>Model (iii)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>-6.381***</td>
<td>-6.226***</td>
<td>-6.255***</td>
</tr>
<tr>
<td></td>
<td>(-18.29)</td>
<td>(-17.94)</td>
<td>(-18.11)</td>
</tr>
<tr>
<td><strong>Real estate</strong></td>
<td>-</td>
<td>-2.009</td>
<td>0.233</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-1.59)</td>
<td>(0.13)</td>
</tr>
<tr>
<td><strong>Flow measures and objective size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective-family inflow</td>
<td>0.097 (1.34)</td>
<td>0.095 (1.23)</td>
<td>0.095 (1.23)</td>
</tr>
<tr>
<td>Objective-family inflow*re</td>
<td>-</td>
<td>0.440* (1.87)</td>
<td>0.471* (1.88)</td>
</tr>
<tr>
<td>Objective inflow</td>
<td>0.013*** (3.23)</td>
<td>0.013*** (3.18)</td>
<td>0.013*** (3.19)</td>
</tr>
<tr>
<td>Objective inflow*re</td>
<td>-</td>
<td>0.050* (1.74)</td>
<td>0.061 (1.62)</td>
</tr>
<tr>
<td>Objective size(total assets)</td>
<td>0.004*** (5.22)</td>
<td>0.005*** (5.28)</td>
<td>0.004*** (5.24)</td>
</tr>
<tr>
<td>Objective size(total assets)*re</td>
<td>-</td>
<td>-</td>
<td>-0.014 (-1.00)</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>17328</td>
<td>17328</td>
<td>17328</td>
</tr>
<tr>
<td><strong>Pseudo $R^2$</strong></td>
<td>0.271</td>
<td>0.278</td>
<td>0.278</td>
</tr>
</tbody>
</table>
Effects of the Objective-Family Inflow

![Graph showing the relationship between family-objective inflow and fund opening probability for real estate and all other categories. The graph demonstrates a positive correlation with increasing inflow, indicating higher fund opening probabilities.]
Effects of the Objective Inflow

- Real estate
- All other

Fund opening probability vs. Objective inflow.
### Economies of Scale and Scope Measures

<table>
<thead>
<tr>
<th></th>
<th>Model (i)</th>
<th>Model (ii)</th>
<th>Model (iii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>... Follow-the-leader measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large family opens</td>
<td>1.849***</td>
<td>1.634***</td>
<td>1.662***</td>
</tr>
<tr>
<td></td>
<td>(15.84)</td>
<td>(12.33)</td>
<td>(11.46)</td>
</tr>
<tr>
<td>Large family opens*re</td>
<td>-</td>
<td>-</td>
<td>-0.608</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-0.80)</td>
</tr>
<tr>
<td>Economies of scale and scope measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family size(total assets)</td>
<td>0.209***</td>
<td>0.214***</td>
<td>0.213***</td>
</tr>
<tr>
<td></td>
<td>(6.23)</td>
<td>(6.36)</td>
<td>(6.26)</td>
</tr>
<tr>
<td>Family size(total assets)*re</td>
<td>-</td>
<td>-0.096***</td>
<td>-0.059</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-2.91)</td>
<td>(-0.86)</td>
</tr>
<tr>
<td>Number of funds opened in prior year</td>
<td>0.048*</td>
<td>0.048*</td>
<td>0.049*</td>
</tr>
<tr>
<td></td>
<td>(1.93)</td>
<td>(1.92)</td>
<td>(1.93)</td>
</tr>
<tr>
<td>Number of funds opened in prior year*re</td>
<td>-</td>
<td>-</td>
<td>-0.037</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-0.94)</td>
</tr>
<tr>
<td>Observations</td>
<td>17328</td>
<td>17328</td>
<td>17328</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.271</td>
<td>0.278</td>
<td>0.278</td>
</tr>
</tbody>
</table>

Downs, Sebastian, and Woltering

Real Estate Fund Openings
Effects of the Size of the Fund Family

![Graph showing the relationship between family size and fund opening probability for real estate and other asset classes. The graph illustrates that as family size increases, the fund opening probability also increases, with a steeper curve for other asset classes compared to real estate.]

Downs, Sebastian, and Woltering
Real Estate Fund Openings
What are the Consequences of (Real Estate) Fund Openings?

Hypothesis 5
The overall effect of fund openings is positive.

Hypothesis 6
Fund openings negatively affect flows into existing funds of the family.
Modeling the Ex-Post Effects of Fund Openings

Objective-family inflow_{ij,t} = \alpha_0 + \alpha_1 \text{re} \\
+ \beta_1 \text{number of funds started}_{ij,t-1} \\
+ \beta_2 \text{number of funds started}_{ij,t-1} \times \text{re} \\
+ \beta_3 \text{objective-family inflow}_{ij,t-1} \\
+ \beta_4 \text{objective-family excess return}_{ij,t-1} \\
(2)
### Regression Results on the Ex-Post Effects

<table>
<thead>
<tr>
<th></th>
<th>Overall effect (flows into all funds)</th>
<th>Cannibalization effect (flows into old funds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model (i)</td>
<td>Model (ii)</td>
<td>Model (iii)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.033</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>(0.67)</td>
<td>(0.24)</td>
</tr>
<tr>
<td>Real estate</td>
<td>-</td>
<td>0.236***</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(3.65)</td>
</tr>
<tr>
<td>Number of funds started&lt;sub&gt;t−1&lt;/sub&gt;</td>
<td>0.056***</td>
<td>0.057***</td>
</tr>
<tr>
<td></td>
<td>(7.29)</td>
<td>(7.48)</td>
</tr>
<tr>
<td>Number of funds started&lt;sub&gt;t−1&lt;/sub&gt; * re</td>
<td>-</td>
<td>0.113</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.50)</td>
</tr>
<tr>
<td>Objective-family inflow&lt;sub&gt;t−1&lt;/sub&gt;</td>
<td>0.371***</td>
<td>0.365***</td>
</tr>
<tr>
<td></td>
<td>(23.09)</td>
<td>(22.64)</td>
</tr>
<tr>
<td>Objective-family excess return&lt;sub&gt;t−1&lt;/sub&gt;</td>
<td>0.004</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(1.46)</td>
<td>(1.45)</td>
</tr>
<tr>
<td>Wald Chi&lt;sup&gt;2&lt;/sup&gt;</td>
<td>683.65</td>
<td>699.32</td>
</tr>
<tr>
<td>Prob &gt;Chi&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Observations</td>
<td>3580</td>
<td>3580</td>
</tr>
</tbody>
</table>

- - indicates coefficient is not significant at the 10% level.
Summary

• The real estate fund openings decision is different:
  • Particularly sensitive to fund flows.
  • Less driven by economies of scale and scope.

• However, there are also similarities:
  • Objective Size (+), follow-the leader (+).
  • Specialization (+), experience (+).

• Outlook
  • Transferability to other real estate investment vehicles?
  • German property fund crisis?
The real estate fund openings decision is different:
- Particularly sensitive to fund flows.
- Less driven by economies of scale and scope.

However, there are also similarities:
- Objective Size (+), follow-the leader (+).
- Specialization (+), experience (+).

Outlook
- Transferability to other real estate investment vehicles?
- German property fund crisis?
The real estate fund openings decision is different:
- Particularly sensitive to fund flows.
- Less driven by economies of scale and scope.

However, there are also similarities:
- Objective Size (+), follow-the leader (+).
- Specialization (+), experience (+).

Outlook
- Transferability to other real estate investment vehicles?
- German property fund crisis?