Mutual Fund Board Composition and Performance

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Introduction
This study contributes to the literature on mutual fund governance. In light of the recent market turmoil, there is anecdotal evidence that individual investors are becoming more gun-shy and are allocating more of their investment monies to passive investments (i.e., mutual funds). Thus, the relationship between mutual fund performance and governance is of increasing interest.

There is empirical evidence that mutual fund families strategically transfer performance across member funds to favor those funds that are more likely to increase overall family profits. Our research attempts to provide an empirical analysis on how this performance transfer is related to governance characteristics, such as board of directors composition, investment styles, and so on.

Governance in general
- No consistent relation between board size and board effectiveness; results vary by industry and time period studied
- An increasingly large fraction of directors are independent, and this is consistently associated with higher firm performance
- Board interlocks are decreasing in frequency, and are generally associated with lower corporate performance due to increased agency problems

Mutual Fund Governance
Mutual funds are investment companies owned by their customer, the investors. As owners, fund shareholders have voting rights and are represented by a board of directors.

The board of directors is responsible for:
- Approval of contracts with the fund management services (also referred to as fund sponsors, or advisory firms)
- Evaluation and approval of fees
- Determination of the method and timing for calculating the fund’s net asset value

The fund sponsors, also referred to as fund managers, trade (buy and sell) the fund’s investments in accordance with the fund’s investment objectives. However, fund managers might have their own objectives (e.g., risk-averse investment). Therefore, a board of directors helps align the objectives of managers and shareholders.

Independent directors, as opposed to affiliated directors or insiders, are not associated with or employed by the company, and therefore are believed to be more likely to act in shareholders’ interests.

Data
Our sources of mutual fund data are the Center for Research in Security Prices (CRSP) Mutual Fund database and the SEC Edgar database.

We use the SEC Edgar database to create a new database of mutual fund directors. Compilation of this dataset represents one of the key contributions of this research project. Detailed information about each member of their board of directors has been collected, including:
- Whether or not the director is independent, or is CEO
- The number of portfolios in the fund complex overseen
- The term of office and the length of time served
- Other directorships held in the past 5 years

The CRSP database contains monthly data on mutual funds net return and other fund characteristics.

Fund families: structure of board of directors
Virtually all U.S. mutual funds are affiliated with fund families. This implies that fund managers might be working for the fund family organization instead of an individual fund.

We observe three main structures of board of directors composition within the funds:
- Mutual fund family where one board serves all the funds.
- Mutual fund family where overlapping boards serve the funds.
- Mutual fund family where completely different boards serve each funds.

Each of these board member images may represent multiple people

Summary Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of directors</td>
<td>13,418</td>
<td>8.74</td>
<td>2.69</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>No. of insiders</td>
<td>13,418</td>
<td>1.46</td>
<td>0.81</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>CEO on board</td>
<td>13,418</td>
<td>0.53</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>CEO is the chairman</td>
<td>13,418</td>
<td>0.178</td>
<td>0.38</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>No. of funds overseen by individual director</td>
<td>3,908</td>
<td>70.01</td>
<td>58.31</td>
<td>1</td>
<td>248</td>
</tr>
<tr>
<td>Proportion of non-insiders on board</td>
<td>13,418</td>
<td>0.83</td>
<td>0.09</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Regression Structure and Hypothesis
We have three main hypotheses:

H0: No overall family strategy – the fund family does not coordinate strategies of its member funds
H1: Risk sharing – the fund family coordinates actions across member funds to smooth their performance by supporting any fund whose performance is lagging
H2: Strategic Cross-Fund Subsidization – the fund family coordinates actions so as to systematically boost the performance of the funds with high family value at the expense of the funds with low family value, independent of actual fund performance.

Regression Model:

\[
\text{Net return}_{t}^{\text{MAP}} = \text{Net return}_{t}^{\text{Low}} + \beta_0 + \beta_1 (\text{Board Overlap}) + \beta_2 (\text{Board Size}) + \beta_3 (\text{Proportion Outsider}) + \beta_4 (\text{CEO On Board}) + \beta_5 (\text{Same Family}) + \beta_6 (\text{Same Style}) + \epsilon_{t, t+1}
\]

Expected results

H0: No overall family strategy
\( \beta_1 = 0 \) and \( \beta_2 = 0 \)

H1: Risk sharing
\( \beta_1 = 0 \) and \( \beta_2 > 0 \)

H2: Strategic Cross-Fund Subsidization
\( \beta_1 > 0 \) and \( \beta_2 < 0 \)

In an extended model the focal variables will be conditional on whether the fund’s net-of-style excess returns are positive or negative. This will allow us to differentiate between H0 and H1.