Agnostic Fundamental

MBA Student Investment Management Fund

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MBA SIM Fund Members

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Agnostic Fundamental is a statistical approach to traditional fundamental analysis. It uses the statistician’s viewpoint to determine mispricings.
Background Research

- The Original Paper by Söhnke M. Bartram and Mark Grinblatt sought to “assess stock market informational efficiency with minimal data snooping.”
- By using Statistical Methods, they found companies’ peer-implied values, and ranked the divergences from the peer-implied values.
- They found risk-adjusted returns of “up to 10% per year.”
- Fundamental analysis using statistics.
- More agnostic and less discretionary approach to fundamental-based equity valuation.
Regression Analysis

\[ Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_n x_n \]
## Backtesting Returns

<table>
<thead>
<tr>
<th>Panel A: Equally-weighted Portfolios</th>
<th>OLS</th>
<th>Signal Quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All Correlation</td>
</tr>
<tr>
<td>Return in Month $t+1$</td>
<td></td>
<td>0.9224 0.0050</td>
</tr>
<tr>
<td>Return in Month $t+1$ (1987-1999)</td>
<td></td>
<td>1.0575 0.0071</td>
</tr>
<tr>
<td>Return in Month $t+1$ (2000-2012)</td>
<td></td>
<td>0.7889 0.0030</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Value-weighted Portfolios</th>
<th></th>
<th>All Correlation</th>
<th>Q1 (Overvalued)</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5 (Undervalued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return in Month $t+1$</td>
<td></td>
<td>0.8669 0.0091</td>
<td>0.4753</td>
<td>0.8964</td>
<td>0.8971</td>
<td>1.0519</td>
<td>1.0217</td>
</tr>
<tr>
<td>Return in Month $t+1$ (1987-1999)</td>
<td></td>
<td>1.4113 0.0013</td>
<td>1.0979</td>
<td>1.4080</td>
<td>1.4248</td>
<td>1.3505</td>
<td>1.2417</td>
</tr>
<tr>
<td>Return in Month $t+1$ (2000-2012)</td>
<td></td>
<td>0.3294 0.0168</td>
<td>-0.1394</td>
<td>0.3914</td>
<td>0.3763</td>
<td>0.7571</td>
<td>0.8046</td>
</tr>
</tbody>
</table>
1. Accounting information obtained from WRDS
2. Market Caps obtained from Bloomberg Terminals
3. Ran regressions using Python
   ○ Two teams ran independent regressions to validate process
4. Narrowed down universe using constraints in charter
Constraints

- Long only, no shorting
- 90% of firms must have a market capitalization greater than $1B
- Investment in each sector must be 25% or less
- Investment in each firm must be 4% or less
Investable Universe

3000

2961

194

68
Constructing Our Portfolio

Achieving Sector Neutrality whilst conforming to our constraints.
Sector Neutrality
Composition of Our Portfolio

- 68 stocks
- each holding $\leq 4\%$
- all came from most underpriced decile
Portfolio Returns
Thank You!