Team Overview

**Fund Manager**

Jerry Zhang

**Fund Analysts**

Michael Calabro
Nicholas DeSantangilo
Yanni Dong
Abbas Haider
Lukas Stogsdill
Li Yang
Isaac Zolot
Investment Thesis
Jegadeesh & Titman (1993) find that trading strategies that buy past winners (stocks that perform well) and sell past losers (stocks that perform poorly) experience abnormal returns.
Momentum theory posits that past winners will continue to win while past losers will continue to lose.

Source: Kenneth R. French Data Library
Explanations of Momentum Phenomenon

Bearing Undiversifiable Risk: this theory posits that momentum investors experience outsized average returns as compensation for bearing undiversifiable risk.

Underreaction: this theory posits that information slowly leaks into prices due to slow reactions to news.
Our fund’s investment thesis is derived from Da, Gurun, & Warachka’s (2014) analysis on momentum investing conditioned on information discreteness.

**Implication:** Investors are less attentive to information arriving continuously in small amounts than to information that arrives in large amounts at discrete time points.
Continuous vs. Discrete Returns

Source: Da, Gurun, & Warachka (2014)
Calculating Information Discreteness

Our fund’s investment thesis is derived from Da, Gurun, & Warachka’s (2014) analysis on momentum investing conditioned on information discreteness.

To calculate information discreteness:

\[ ID = \text{sign(Annual Return)} \times [%\text{neg} - %\text{pos}] \]

Source: Da, Gurun, & Warachka (2014)
Continuous Momentum Alpha

Momentum profit conditioned on continuous information persists for ten months; discrete profits ends after five months. Continuous information also lacks a long-term return reversal.

Source: Da, Gurun, & Warachka (2014)
Portfolio Implementation
Discussion on Investment Quintiles

Russell 3k
Quintiles sorted on annual returns

Quintile 1
Quintiles sorted on ID

\[ ID = \text{sign}(\text{Annual Return}) \times [\%\text{neg} - \%\text{pos}] \]
Security Selection

Russell 3k index
- Tracks the performance of the 3,000 largest U.S.-traded stocks

Sort on prior annual returns
- Select highest returning securities over past 12-month period

Sort on information discreteness
- Select securities exhibiting lowest information discreteness

Market cap limits
- Exclude securities with market cap of < $500 million or > $17.5 billion

Charter constraints
- Constraints set forth by the ASU endowment regarding security characteristics

News checks
- Exclude companies undergoing litigation and M&A

Investable Universe

231 Stocks
Cumulative market cap with respect to target portfolio: Consumer Discretionary.

**Target Portfolio Characteristics**
- # of securities: 70
- Average Market Cap: $5B

**Example: Consumer Discretionary**
- Single Security Market Cap
- Target Portfolio Market Cap
- Security contribution to portfolio sector weighting

**Portfolio Construction Process**

Total Mkt. Cap $350B
X # of Securities
### Portfolio Construction Process

Cumulative market cap with respect to target portfolio: Consumer Discretionary.

<table>
<thead>
<tr>
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<th>Market Cap ($B)</th>
<th>Market Cap Weighting</th>
<th>ID Rank</th>
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<tbody>
<tr>
<td>A</td>
<td>6.84</td>
<td>2.00%</td>
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<td>B</td>
<td>5.59</td>
<td>1.60%</td>
<td>2</td>
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<tr>
<td>C</td>
<td>9.64</td>
<td>2.75%</td>
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<td>D</td>
<td>13.26</td>
<td>3.79%</td>
<td>4</td>
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Target Sector Weighting

![Target Sector Weighting Chart]

0.0  2.0  4.0  6.0  8.0  10.0  12.0
Portfolio Construction Process

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Cumulative market cap with respect to target portfolio: Consumer Discretionary.
Portfolio Construction Process

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Asset Allocation

Russell 3k Weights

- Real Estate: 14%
- Industrials: 12%
- Communication Services: 9%
- Financials: 8%
- Energy: 7%
- Materials: 5%
- Consumer Staples: 4%
- Health Care: 2%
- Consumer Discretionary: 3%
- Information Technology: 2%
- Utilities: 3%
- Energy: 4%

5% 7% 4% 3% 2% 10%

Portfolio Weights

- Real Estate: 19%
- Industrials: 14%
- Communication Services: 12%
- Financials: 11%
- Energy: 10%
- Materials: 9%
- Consumer Staples: 8%
- Health Care: 7%
- Consumer Discretionary: 6%
- Information Technology: 4%
- Utilities: 3%

4% 3% 2% 10%

66 Stocks
Total Mkt. Cap $337B

19% 12% 14% 14% 9% 10% 8% 11%
Returns

Our Return: 1.72%
R3K Return: -0.34%
Rebalancing

Q5  Q4  Q3  Q2  Q1

ID

Q4  Q3  Q2  Q1

Annual Return

Buy
Hold
Sell

Hold Range
Buy Range
Thank you. Questions?