Undergraduate Student Investment Management Fund

Semi-Annual Presentation
Friday December 6th, 2013
Fund Members

**Fund Managers**
- Clayton Jenners
- Adrian Reiter
- Andrew Farber
- Dylan King
- James Hert
- Jasmine Anglen
- Logan Hurst
- Justin Eastman
- Kyle Heck

**Fund Analysts**
- Dakota Boyd
- Paul Farrington
- Sean Gormley
- Tro Panosian
- Alex Green
- Alasandro Fenston
- Vikas Bhagavatula
- Marcus Schafer
Portfolio Strategy

**Insider transactions:**
- Continue to develop more automated implementation
- Develop more informative signal, adjust weighting scheme

**ADR Momentum:**
- Diversify to international
- Avoid Universe overlap and conflicting trade signals
- Implement completely new strategy
Portfolio Composition

- ADR Constituent 1: 10%
- ADR Constituent 2: 20%
- Insider Constituent 1: 20%
- Insider Constituent 2: 20%
- Insider Constituent 3: 20%
- Insider Constituent 4: 10%
Insider Transactions
Insider Research

• “Decoding Inside Information” – October 2010
  • By: Lauren Cohen, Christopher Malloy, & Lukasz Pomorski

• Data Parameters
  • Form 4 – filed within 2 days of trade
  • Open-market purchases and sales
  • Exclude options exercises and private transactions
  • “Opportunistic” vs. “routine” traders

• Excess monthly returns
  • Opportunistic buys: 1.58%
  • Routine buys: 0.87%
Classifying Insiders

December

2010

2011

2012

X = Routine Trader
X = Opportunistic Trader
Sorting & Filtering

Classify Insiders

IPO Filter – 3 Years

Current Week’s Transaction

Market Capitalization Filter >$1.1bn

Rank: Net Buyers – Net Sellers
### Portfolio Strategy

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ADR Momentum
What is Momentum?

- Jegadeesh and Titman
- Buy past winners, short past losers
- Time period: 1965 to 1989
- Calculated monthly returns for a variety of portfolios

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International Momentum

- **Rouwenhorst**
- **Time period: 1980-1995**
- **International Momentum:**
  - 12 developed countries
  - Ex. Austria, U.K, France, Germany, Spain
- **Emerging Market Momentum:**
  - 20 emerging countries
- Showed that momentum existed in International Equity

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<th>Ranking Period (J)</th>
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<th>Holding Period (K)</th>
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<td>Winner-Loser (t-stat)</td>
<td>(4.50) (4.36) (3.77) (2.83)</td>
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<td>Winner-Loser (t-stat)</td>
<td>(4.03) (3.48) (2.30) (1.98)</td>
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Portfolio Strategy

• Lookback period: 12 months
  • -12 to -2
• Rank ADR’s based on returns
• Invest in top decile
• Holding period: 2 months
• 2 rolling portfolios
• Any repeat signals will trigger a rebuy
Backtest

• Monthly return data for all ADR’s
• Time period: 1980 – 2012
• Sample size: 396 months
• Outperformed Benchmark by:
  • .35% monthly
  • 4.31% yearly
ADR Universe

Over 2,500 ADR’s on Bloomberg

Exchange Filter:
• NYSE, AMEX, NASDAQ

Market Cap Filter:
• Over $1.1 Billion

Volume Filter:
• Over 150,000 shares average daily trading

Investable Universe:
• 149 ADR’s
Bloomberg Web Scraper

Retrieve daily price data for the last year for each ADR

Calculates Momentum Returns.

Ranks universe based on momentum returns

Outputs the top decile (14 ADR’s)
Filtering the Top Decile

• Country of Origin Cap
  • \( \left\lceil \frac{\text{# of ADRs for x country}}{\text{total # of ADRs}} \right\rceil \)
  • Capped most of our countries at 1 security
  • 35% filter
    • No country could make up more than 35% of our portfolios
    • Max of 5 stocks per country per portfolio

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<th>Ticker</th>
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Holdings
Portfolio Holdings – P/E Ratio Analysis

- ADR Momentum: 52.99
- Insider Trading: 21.92
- Aggregate: 25.24
- Russell 3000: 18.24
Portfolio Holdings - Size

ADR Momentum
- Large Cap: 71%
- Mid Cap: 15%
- Small Cap: 14%

Insider Transactions
- Large Cap: 42%
- Mid Cap: 30%
- Small Cap: 28%

Aggregate
- Large Cap: 47%
- Mid Cap: 27%
- Small Cap: 26%
Portfolio Holdings - Sector

**ADR Momentum**
- Information Technology: 34%
- Financials: 7%
- Telecommunication Services: 20%
- Consumer Discretionary: 30%
- Health Care: 27%
- Energy: 9%
- Consumer Staples: 3%

**Insider Transactions**
- Information Technology: 27%
- Financials: 14%
- Consumer Discretionary: 6%
- Health Care: 11%
- An industrials: 17%
- Energy: 3%
- Consumer Staples: 3%

**Aggregate Portfolio**
- Information Technology: 19%
- Financials: 27%
- Telecommunication Services: 17%
- Consumer Discretionary: 6%
- Health Care: 7%
- Consumer Staples: 3%
- Energy: 3%
- Industrials: 14%

**Russell 3000**
- Information Technology: 15%
- Financials: 19%
- Consumer Discretionary: 13%
- Telecommunication Services: 12%
- Health Care: 9%
- Consumer Staples: 13%
- Energy: 8%
- Industrials: 4%
# Conclusion
## Portfolio Performance

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<th>Portfolio</th>
<th>Returns</th>
<th>Benchmark Returns</th>
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<td>ADR</td>
<td>1.87%</td>
<td>-0.0002% (Custom)</td>
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<tr>
<td>Insider</td>
<td>1.06%</td>
<td>0.35% (Russell 3000)</td>
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<tr>
<td>Aggregate</td>
<td>0.81%</td>
<td>0.35% (Russell 3000)</td>
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Case Study: Moog Incorporated

- MOG.A – Moog Incorporated
  - Designs control systems for Aerospace and Defense Industries
- Week of 11/11/2013 through 11/15/2013 Insider Transactions generate buy signal
- Purchase order Submitted by SIM Fund on 11/18/2013
- 11/19/2013 Moog Announces call back of $200MM, 7.25% Senior Subordinated Notes
Future Plans

• Continue weekly tracking of performance, attribution and holdings
• Long/Short simulation for Insider and ADR portfolios
• Signal Strength optimization for Insider
• Continue to automate as much of the seeding process as possible
Questions?