EVENT STUDIES

WHAT WILL YOU LEARN?

- What is an event study?
  - A powerful technique to assess the impact of an event on a firm's stock price

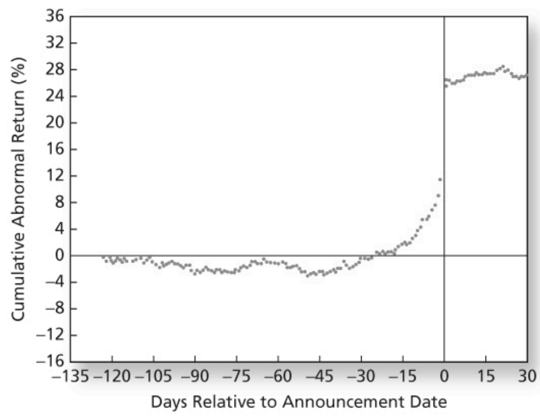
MEASURING THE 'UNEXPECTED' RETURN

- What is the 'abnormal return' ?

ABNORMAL RETURN AROUND AN EVENT

- Event studies estimate the abnormal return around the date that new information is released to the market and attribute the abnormal return to the new information.

EXAMPLE FROM TAKEOVER ATTEMPTS



SUMMARY

- Event study methodology is a widely used tool to measure the impact of wide range of events on security prices.

ANOMALIES

WHAT WILL YOU LEARN?

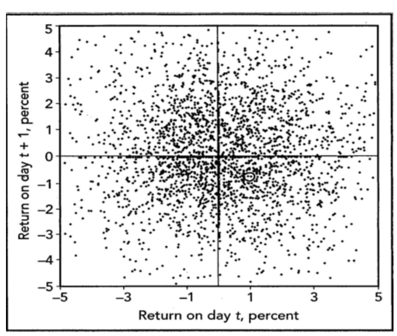
- What is the evidence on efficient markets hypothesis?
  - Anomalies – patterns that are hard to reconcile with the efficient market hypothesis and traditional finance paradigm

RETURN PATTERNS

- Early studies showed that, over daily, weekly and monthly horizon, stock returns are almost uncorrelated.
  - This means that whether a stock's price went up yesterday has no bearing on whether it will go up tomorrow.

TECHNICAL ANALYSIS

- This figure shows pairs of returns for Microsoft stocks from March 1990 to July 2001.
  - Buying on the basis of high (or low) return on the previous day wouldn't have been a successful strategy.



MOMENTUM

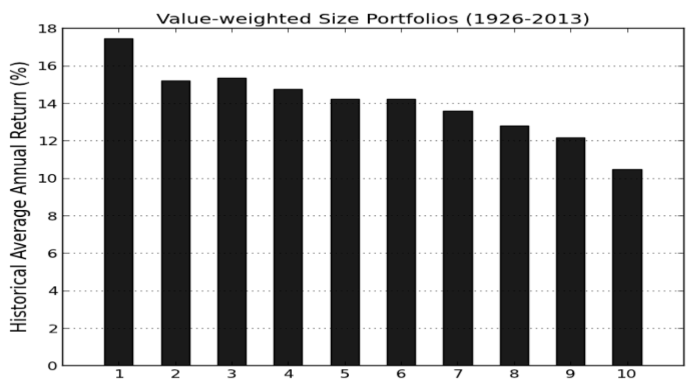
- Jegadeesh and Titman (1993): Trading on the basis of longer horizon past returns can yield higher returns without higher systematic risk
  - Past 6-12 month returns exhibit MOMENTUM.
    - Buying a portfolio of high past one-year return stocks (WINNERS) and shorting low past return stocks (LOSERS) yield high future returns without extra risk.

REVERSAL

- Trading on the basis of longer horizon past returns can yield higher returns without higher systematic risk
  - Past 3-5 year returns exhibit REVERSAL
    - Selling high past 3-5 year return stocks (WINNERS), and buying low past 3-5 year stocks (LOSERS) have been a profitable strategy.

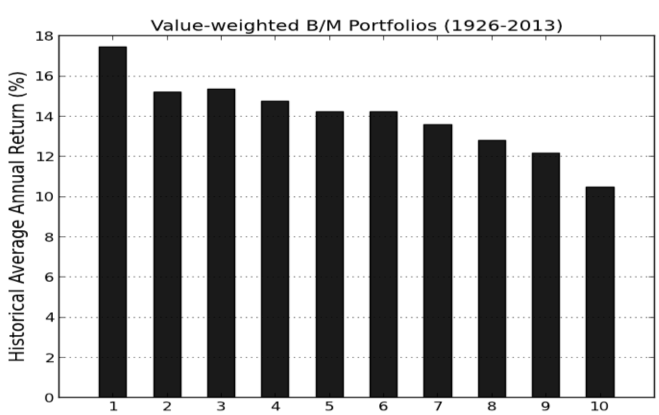
SMALL FIRM EFFECT

- Studies have shown that small-firms (low market capitalization) have historically high returns relative to their systematic risk.



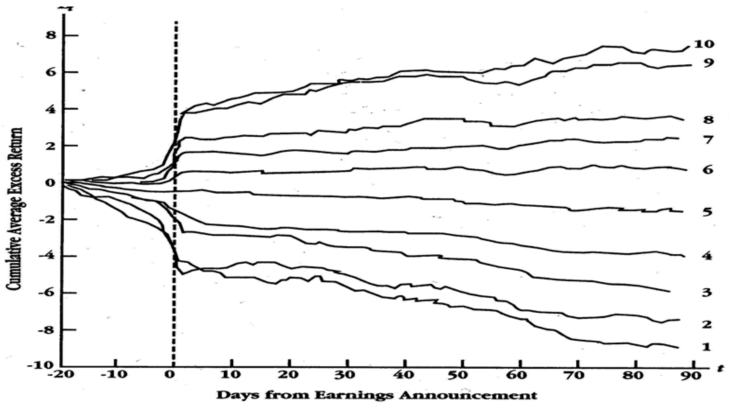
VALUE EFFECT

- Studies have shown that value firms (low market to book) have historically high returns relative to their systematic risk.



POST-EARNINGS ANNOUNCEMENT DRIFT

- A strategy of buying stocks with positive earnings surprises yields fairly strong returns going forward.



POST-ANNOUNCEMENT DRIFT

- Long-run abnormal performance of the same sign as the initial price reaction
  - Seasonal Offerings
  - Repurchase Announcements
  - Public Announcement of Insider Trades
  - Analysts Buy and Sell Recommendations
  - Stock Splits
  - Dividend Initiations and Omissions

SUMMARY

- Earlier evidence suggest market efficiency.
- More recent evidence suggests longer horizon return predictability (momentum, size, value...)
- Inefficiencies or risk premiums?

MUTUAL FUND AND ANALYST PERFORMANCE

WHAT WILL YOU LEARN?

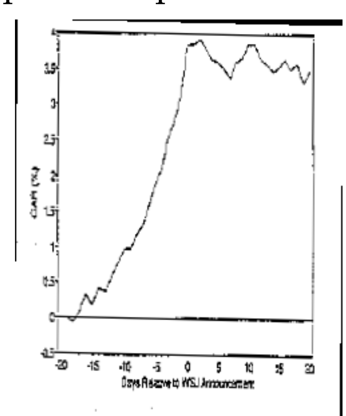
- Can skilled professionals make consistent abnormal trading profits?
  - Stock market analysts who recommend investment positions
  - Mutual fund managers who manage portfolios

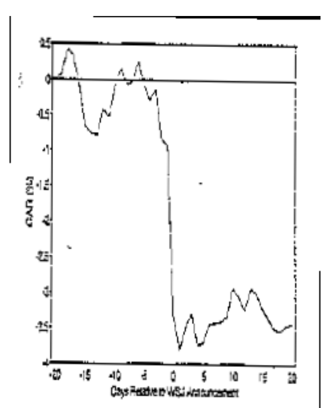
ANALYST RECOMMENDATIONS

- Buy-side analysts make recommendations based on whether securities are ‘good investments’ or not.
  - Typical recommendations are (1) strong buy, (2) buy, (3) hold, (4) sell, and (5) strong sell.

RESPONSE TO ANALYST RECOMMENDATIONS

- Response to positive and negative recommendations





ANALYST RECOMMENDATIONS

- Some value is added by analysts.
  - Revelation of new information?
  - Changes in investor demand?
  - Are these patterns exploitable after trading costs?

MUTUAL FUND PERFORMANCE

- Do fund managers earn abnormal returns?
  - Skill or luck?
  - Higher risk investments earn higher returns – need to look at risk-adjusted performance

AVERAGE FUND PERFORMANCE

- Mutual fund managers slightly beat (or equal) the market before costs, but on net underperform the market.
  - The average fund alpha is NEGATIVE.
- However, there *are* mutual fund managers that do add value; finding these managers is hard because there is little persistence.
- The average mutual fund underperforms the market after fees.

FUND PERFORMANCE PERSISTENCE

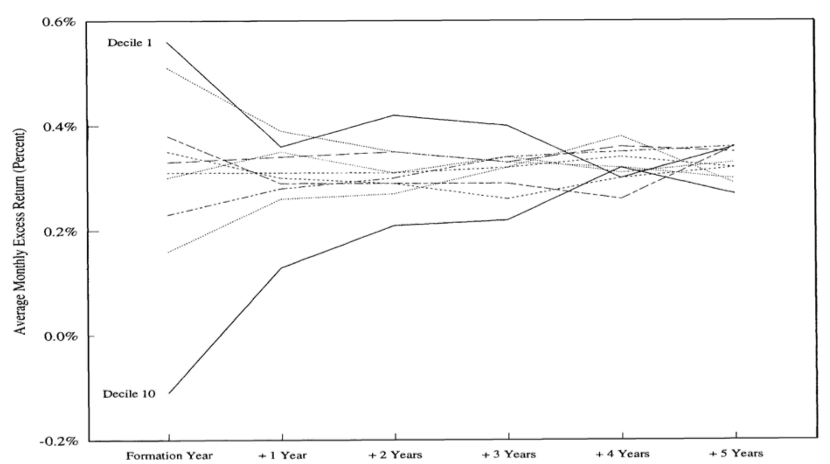
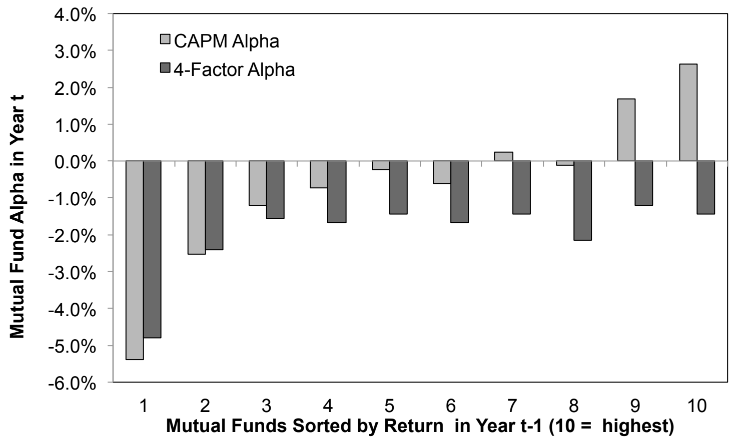


Figure 2. Post-formation returns on portfolios of mutual funds sorted on lagged one-

FUND PERFORMANCE PERSISTENCE



SUPERSTAR FUND MANAGERS?

- What about Peter Lynch (formerly of Fidelity's Magellan Fund), Warren Buffett (of Berkshire Hathaway), John Templeton (of Templeton Funds), and Mario Gabelli (of GAMCO)?

ACTIVE VS. PASSIVE FUNDS

- The popularity of low-expense passive or index funds has increased dramatically, largely because of the evidence we discuss here.
- Active funds have considerably higher fees than passive funds.

SUMMARY

- So, are markets efficient?
- Any supposedly superior investment strategy should be taken with many grains of salt. The market is competitive *enough* that only differentially superior information or insight will earn money.