Market Anomalies

Markets are fairly efficient, but not 100%

January Effect

- January returns > other months' returns (Rozeff and Kinney, Haugen and Lakonishok)
- Small Caps returns > Large Caps returns (Sidney Watchel)
- Recently effect fading or moving to December (Ziemba)
- Possible explanations: tax rebalancing, window dressing, investor optimism
- Strategies: long from end Dec to end Jan, +Russel - Dow

Day of the Week Effect

- Monday < other week days (Lakonishok, Sullivan)
- Possible explanations: investor sentiment, data announcements, short covering, data mining
- Strategies: short on Mondays, filter for other (long) strategies

End of Month Effect

- Last 4 days + first 3 = most the month's returns (Elfenbein, Ariel, Fosbak, Merril, Ziemba)
- Possible explanations: Salaries / pensions = inflows, window dressing,
- Strategies: go long 3-4 days before end of month and exit 7-8 days later

Holiday Effect

- Returns are larger after holidays (counterintuitive with Monday Effect)
- Possible explanations: catch up for lost day, investor sentiment, data mining
- Strategies: go long before holiday and exit next trading day

Time of Day Effect

- Volumes and returns peak at opening and close (Harris)
- Most of the returns are generated overnight
- Equity markets mean revert around opening and trend towards the close
- Possible explanations: data announcements, day traders go home squared
- Strategies: go long overnight, in particular if market has fallen

Christmas Rally

- Returns are higher during holiday season
- Possible explanation: combination of several market holidays, end of the month, end of the year, investor optimism
- Strategies: go long mid December and exit early January, best if market has fallen before

Sell in May and Go Away

- Most returns concentrated in O-N-D-J-F-M-A
- Possible explanation: earnings / dividends periods, combination of other anomalies
- Strategies: go long in October exit in April, mix with other factors

Momentum Effect

- Past winners tend to continue winners and past looser tend to continue losers over m/t (3-12 months) (Jegadeesh and Titman)
- Possible explanations: momentum in earnings / news; slow diffusion of information, investors herd behavior
- Strategies: buy 12m lookback winners / sell 12m losers, hold 1 month; better if lookback period is lagged 1 month (due to s/t mean reversion); rank 50dma/200dma and buy to decile sell bottom decile (Park)
- Note: different from Trend Following (>0), Dual Momentum = both

Mean Reversion

- Momentum tends to work better over the m/m; in the s/t and l/t markets tend to revert to the mean (De Bondt and Thaler, Dunis)
- Short term mean reversion – intraday, overnight, weak, month
- Long term mean reversion – 5+ years similar to value strategies (Asness)
- Possible explanations: investor sentiment, herd behavior
- Strategies: revert extreme / abnormal moves

Size Effect (SMB)

- Small cap stocks tend to outperform large cap stocks over the long run (Fama and French)
- Possible explanations: higher risk, more room to grow
- Effect seems concentrated in microcaps and in January (Damodaran)
- Strategies: buy small with value and / or momentum (Asness)

Value Effect (HML)

- Stocks with High Book-to-Price tend to outperform stocks with Low Book to Price (Graham, Basu, Titman, Fama and French)
- Possible explanations: high B/P = cheap, low B/P = expensive, investors overpay for growth momentum stocks and neglect value, very low P/B = high risk
- Strategies: buy HML, combine with other factors

Value Effect 2 (PE Ratio)

- Stocks with low PERs tend to outperform stocks with high PERs (Buffet, Greenblatt, Basu, Shiler)
- Possible explanations: low PER = cheap, high PER = expensive
- Strategies: buy stocks with low PER HIST, PER FWD, CAPE, mix with other factors

Closed-End Fund Discount

- Closed-end funds frequently trade at discount (sometimes premium) to their NAVs (Singal)
- Possible explanations: illiquidity, costs, difficulty to value NAV accurately
- Strategies: trade excesses with mean reversion rules, beware the discount / premium may persist overtime

Post Earnings Announcement Drift (PEAD)

- Big surprises are not instantaneously incorporated into prices; instead prices may drift upwards or downwards for up to 60 days (Brandt and Kishore)
- Possible explanations: investor underreaction to news
- Strategies: buy strong positive surprises and sell strong negative surprises

IPO Effect

- IPOs usually outperform on the first trading day (Mahjoub, Jenkinson and Ritter); afterwards they usually underperform (Ritter)
- Possible explanations: arrangers underprice issues to reduce risk, secondary offers / green shoes balance after-market
- Strategies: buy at issue and sell at opening, then short

Distressed Securities Effect

- Investing in bankruptcy companies, either Chapter 11 (protection) or even Chapter 7 (liquidation), may offer good opportunities
- Possible explanations: when companies get into serious difficulties many investors simply sell their shares and do not care for valuations
- Strategies: analyze balance sheets, annual reports and legislation

Stock Splits Effect

- Stock splits outperform the market while reverse splits underperform
- Possible explanations: splits occur in strong momentum periods, increased liquidity / investor base
- Strategies: buy before the split, hold for up to one year

Insider Trading Anomaly

- Increased buying / selling from Directors lead to excess positive / negative returns (Finnerty, Jeng)
- Possible explanations: Directors are better placed to evaluate the value of their business
- Strategies: buy after abnormal insiders buying; better for small caps

Accruals Anomaly

- Less / more accruals lead to excess positive / negative returns
- Possible explanations: Accruals introduce uncertainty in the earnings and many investors look at the earnings alone disregarding this uncertainty
- Strategies: buy stocks with small accruals / sell stocks with large; mix with other factors

Buyback / New Issuance Anomaly

- Companies that buyback more of their own share tend to outperform (Amini and Singal); in the opposite way companies that issue new stock tend to underperform
- Possible explanations: Directors are better placed to evaluate the value of their business, supply x demand
- Strategies: buy stocks with large buybacks, sell stocks with large secondary issues

Index Rebalancing Effect

- Companies that are included / excluded in the indexes tend to outperform / underperform in the days around the inclusion / exclusion; afterwards they tend to reverse this movement
- Possible explanations: Institutional investors are forced buyers / sellers
- Strategies: buy entrants, sell out-goers

Dogs of the Dow Strategy

- Each year the 10 higher dividend yielders od the Dow outperform the rest (O'Higgins, Auger)
- Possible explanations: Neglected value stocks
- Strategies: buy the 10 stocks with larger DY in the Dow and rebalance yearly

FOMC Drift Effect

- US stocks tend to go up in the run up to the FOMC meetings (NY FED)
- Possible explanations: FED aims to maintain market stability and acts as a liquidity provider; has performed better in the recent rate cutting environment
- Strategies: go long 24h before the meeting and exit before it starts

Other anomalies: Superbowl Effect, Tax Day Effect, Ramadan Effect, Moon Effect, Quadruple Witching Effect