

Brain teaser

Problem:

- Suppose you're in a hallway lined with 100 closed lockers. You begin by opening every locker. Then you close every second locker. Then you go to every third locker and open it (if it's closed) or close it (if it's open). Let's call this action toggling a locker. Continue toggling every n th locker on pass number n . After 100 passes, where you toggle only locker #100, which lockers are open?

Solution

- The only way a locker could be left open is if it is toggled an odd number of times. The only numbers with an odd number of factors are the perfect squares. Thus, the perfect squares are left open.

Intro to Short Selling

The Dark Side of Value Investing

Announcements

General Updates

- **Poker Tournament!**
 - Raised \$1,100, most we've ever raised by over 3x
- Central Park Picnic – Sunday at 1PM. Most likely in North Lawn, will keep info posted
- Alumni AmA event towards end of this month – keep your eyes out for it

Shorting – How do you actually short?

A Few Basics

- Borrowing Stock & Selling in the Market
 - Technical Issues – Rates?
 - Locked Borrow & Pulling Borrow
 - Alternatives?
- Shorting across different asset classes:
 - Equities / Credits / FX
 - Futures / Options / Rate Products
- Why is short-selling so difficult?
 - Catalysts
 - Asymmetry of Payoff

Types of Shorts

Broad Categories:

- Fads
- Structural Shifts
- Frauds
- One-time overearning

Fads

Sensationalist names that are overvalued

- Things that become extremely topical for various reasons, so they go up a lot and trade at high valuations
 - Popular companies (TWTR, SNAP(?)) – these are harder to short
 - Popular trends (TASR, 3D Printing Stocks)
 - Hype created around short term products (BDSI)
- Signs of Fads:
 - Promotional management teams
 - Large upwards movements in stock prices, predominantly driven by non-company related news
 - Crazy expectations / valuations...unjustifiable ones

Structural Shifts

Businesses that are in demand today and won't be tomorrow

- Structural shifts are forward thinking shorts – things that will go away and are not priced that way because analysts attach perpetuity growth rates to them
 - Xerox (XRX)
 - Coal Power Plants
 - The US Postal Service
 - Traditional in-store retailers
 - Auto Rental Companies, Medallion Finance Companies
 - Anything you guys can think of?
- Signs of Structural Decliners:
 - New technology that is disruptive has to replace something

Frauds

Donuts

- Fake companies made by sketchy people
 - Pump & Dumps
 - CYNK
 - Quindell
 - Any small biotech company like... ever
 - Accounting Frauds
 - Harder to find without a lot of accounting technical skill but they all share the same sketchy auditors
 - Enron / MCI are classic examples
 - Bernie Madoff
 - LINN Energy
- Signs of Frauds:
 - Insider selling (aggressively)
 - Sketchy auditors / involved parties
 - Historically sketchy management (discussed later)

One Time / Temporary Over-earning

Companies Whose Economics Can't Make Sense

- Companies that face impending competition (going off patent, weak barriers to entry)
 - Indivior
 - ATM Companies (CATM)
- One-Time Overearning
 - Benefits to cash flow that are going away (STRT)
- Unsustainable economics / business models
 - Price hiking drug companies (MYL / VRX?)

How to Find Good Shorts

Telltale signs

- Management Actions / History
 - Aggressive insider selling instead of buying
 - Their past transgressions (history of fraud / sketchy companies, personal background, dirt, etc)
 - Whether or not they call out short-sellers
- Big Changes in Management
- Things that are Craig-Hallum “buys” (or Rob Stone from Cowen & Company)
- Underfollowed companies (little analyst coverage / no conference calls, small market caps)
- Sketchy auditors, sketchy investors

Common Pitfalls

Mistakes to Avoid

- Catalyst-less shorts
 - Think about asymmetry of payoff if you are wrong
- Not checking borrow on shorts and feasibility of execution!
- Margin Requirements
- Not knowing when to quit
- Sizing