

## Lecture 3 – SALES, TRADING & RESEARCH

### Sales & Trading

- Buying and Selling securities on behalf of itself and clients.
- Sales component refers to the investment bank's sales force, whose primary job is to call on institutional and high-net-worth investors to suggest trading ideas and take orders.
- Sales desks then communicate their clients' orders to the appropriate trading desks, who can price and execute trades, or structure new products that fit a specific need.
- Structuring has been a relatively recent activity as derivatives have come into play, with highly technical and numerate employees working on creating complex structured products which typically offer much greater margins and returns than underlying cash securities.
- Strategists advise external as well as internal clients on the strategies that can be adopted in various markets.
- This strategy often affects the way the firm will operate in the market, the direction it would like to take in terms of its proprietary and flow positions, the suggestions salespersons give to clients, as well as the way structures create new products.
- Investment Banks also undertake risk through proprietary trading, done by a special set of traders who do not interface with clients and through "principal risk", risk undertaken by a trader after he buys or sells a product to a client and does not hedge his total exposure.
- Banks seek to maximize profitability for a given amount of risk on their balance sheet. The necessity for numerical ability in sales and trading has created jobs for physics, math and engineering Ph.D.s who act as quantitative analysts.
  
- **Secondary Yields / Returns** drive the price of new primary issuance
  - Bonds (Sensitive to interest rates / Credit Risk)
  - Equity/IPO (sensitive to valuation methods – see example)
  - Trading levels / comparative analysis

### Research

- Sell-side Equity/Bond research analysts typically follow, analyze and advise investors between one and two weeks each month visiting the offices of the buy-side clients to pitch their latest investment ideas.

- Produce equity / bond research reports that include buy/sell recommendations, target prices and earnings forecasts.
- Analysts model and project the financial statements of the companies they cover to determine the fair value of those companies equity securities.

➤ **EFH concept - information**

### Random Walks and the Efficient Market Hypothesis

Example - \$100, predicting the stock will go to \$110 in 3 days - if everyone uses the same model, no one is willing to sell – the net effect would be that the stock jumps to \$110.

The theory of movement of the stock is that it moves on new information, which by definition should be unpredictable, therefore the movements of the stock should be unpredictable – this is the essence of the argument that stock prices should follow a **RANDOM WALK** – that is, that price changes should be random and unpredictable.

The notions that all stocks already reflect all available information is referred to as the **EFFICIENT MARKET HYPOTHESIS (EMH)**.

Example: “found a \$20 bill on the ground” story – someone would have picked it up

**COMPETITION AS A SOURCE OF EFFICIENCY** – models created, gathering information, go to investor’s conferences, read the body language..... Picking a horse on the track – examining the way the horse before it runs – the OTC example (the bum)

“Information is Power” – “behind the hand – 50/50 - Spend money on information – seeking the Alpha

**VERSIONS OF THE EFFICIENT MARKET HYPOTHESIS**

| <b>Weak-form Hypothesis</b>   | <b>Semi strong-form Hypothesis</b>   | <b>Strong form Hypothesis</b>   |
|---|--|---|
| <p>Asserts that all information that can be derived by examining market trading data such as the history of past prices, trading volume, or short interest.</p> <p><u>PATTERNS IN STOCK RETURNS</u></p> <ul style="list-style-type: none"> <li>• Returns over a short period of time (patents in historic data) – correlation to market/movements... momentum effect</li> <li>• Returns over long horizons – cycles, negative / positive news – EXAMPLE (FATHER-IN-LAW, THE ONES IN RECESSIONS)</li> <li>•</li> </ul> | <p>States that all publicly available information regarding the prospects of a firm already must be reflected in the stock price. Company performance, guidance &amp; outlook, management strength...etc.</p> <p><u>MARKET ANOMALIES</u></p> <ul style="list-style-type: none"> <li>• Fundamental Analysis uses a much wider range of information than does technical analysis. Price-Earning/EBITDA Multiple – us the Starwood example.</li> <li>• Use CAPM to adjust for risk (Starwood DCF analysis) and Betas</li> <li>• Small firm premiums (the table I gave you)</li> <li>• Book to Market ratios (Fema &amp; French)</li> <li>• Post earnings announcements</li> </ul> | <p>States that stock prices reflect all information relevant to the firm, even including information available only to company insiders. SEC rules of insiders – Rule 10b-5 Act of 1934 sets limits on trading by corporate officers.</p> <p><u>INSIDE INFORMATION</u></p> <ul style="list-style-type: none"> <li>• A lot of studies were made on insiders trade the stock (buy/sell) – WSJ reports such transactions</li> <li>• SEC requirements – 13D for 5% holdings... Warren Buffet announcements – Burlington Railroad</li> </ul> |

# Investment Banking

Prof. Droussiotis

---

## Efficient Market Hypothesis (EMH) – Implications

- Technical Analysis (patterns in the stocks) –
  - Support Levels / Resistance Levels – example on page 236 (8.2) \$72 and then decline to \$65.... If it begins to climb, the expected resistance level could be at 72 where \$72-holders want to recover their investment.
  - Chartists – study chart for patterns.
- Fundamental Analysis (Earnings/Dividends/ financial analysis)

Reviewed before (Passive Vs Active Portfolio Management)

## ARE MARKETS EFFICIENT?

Few topics:

- Size / magnitude
- Selection Bias Issues (investment scheme – i.e. Leverage) – “Donkey” example
- Dart throwing
- Lucky Event Issue – always read about some investor made a lot of profit (50/50 coin toss , but if 10,000 participate in the coin toss, it won't be surprise that one has a 75%/25% - lucky on the day of the event)
- “Serial Correlation” of stock – lucky streaks
- Looking for behavioral motivations for buying/selling:
  - High Exposure
  - Risk Appetite
  - Tax motivation
  - Resource allocation
- Buy and Hold strategy - despite volatility – upward movement

Deleted: EXAMPLE – STARWOOD SPREADSHEET