Technical Analysis

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California
Investment
Association

Technical Analysis

- a.k.a. charting
- method of evaluating securities by analyzing statistics generated by the market (supply and demand)

- Based on 3 assumptions: (1) the market discounts everything, (2) price moves in trends, (3) history tends to repeat itself

Technical Analysis

USING CHARTS FOR BUYING

Invest with the Market

- 75% of stocks follow the direction of the market
- The market makes up 50% of a stock's move

- Don't go against Mr. Market; let him guide you
  - Restructure your portfolio depending on whether the market is in an uptrend or a downtrend

Market Bottoms

- Market reaches a low point in its downtrend and turns upward for a period of time

- Rally: upturn attempt after a period of decline
    - Follow-Through Day: at least one of the major market indices rises 1.7% or more on higher volume than the previous day

- Leaders of the new bull market will rally with the market and advance quickly, so catch them early

Example of Market Bottom

S&P 500: October, 2002

Support and Resistance

- ◆ Support: trendline connecting lows
  - ▪ Price level through which a stock or the market seldom falls

- ◆ Resistance: trendline connecting highs
  - ▪ Price level that a stock or the market seldom surpasses

- ◆ Buy when the stock pulls back on light volume and bounces off support, or when it breaks through resistance on heavy volume

Volume | Moving Average

- Volume: number of shares/contracts trading hands between buyers and sellers (shows demand)
  - Price movements are more significant when volume is above average

- Moving average: plots the average closing price over a number of days (DMA) or weeks (WMA)
  - Can act as support
  - Bullish crossover: a short-term DMA/WMA crossing above a longer-term DMA/WMA signals upward momentum

Example of Support and Resistance

Diageo plc (DEO)

Chart Patterns

- ◆ Bases: periods of consolidation
  - ▪ Catch stocks in their early stages (low base count)
    - • 80% of stocks fail to hold an uptrend after reaching their 4th base
    - • Stock splits or severe corrections can reset base count

  - ▪ Continuation Pattern: prior trend continues upon completion of the pattern
  - ▪ Reversal Pattern: prior trend reverses upon completion of the pattern

Chart Patterns

- ◆ Cup and Handle: bullish continuation pattern
  - ▪ At least 7 weeks long
  - ▪ Typically corrects 20-30% from the recent high and forms a "U"-shaped bottom
  - ▪ Volume should fall as a downward/sideways handle is formed
  - ▪ Buy when the price breaks the resistance line of the handle on heavy volume

Example of Cup and Handle

Suntech Power Holdings Co. Ltd. (STP)

Chart Patterns

- ◆ Double Bottom: bullish reversal pattern
  - ▪ Shaped like a "W"
  - ▪ Advance of first bottom should be 10-20%
  - ▪ Second bottom should undercut the first (ideally by no more than 4%)
  - ▪ Volume on the second advance should increase
  - ▪ Buy when the price pushes beyond the middle of the "W" on heavy volume

Example of Double Bottom

NVIDIA Corp. (NVDA)

68% gain in 5 months

Breakout on heavy volume

Chart Patterns

- ◆ Ascending/Symmetrical Triangle: ascending triangle is bullish, symmetrical triangle can go either way
  - ▪ Anywhere from a couple weeks to several months long
  - ▪ Triangle shape formed by drawing to converging trendlines along a price range that gets narrower over time
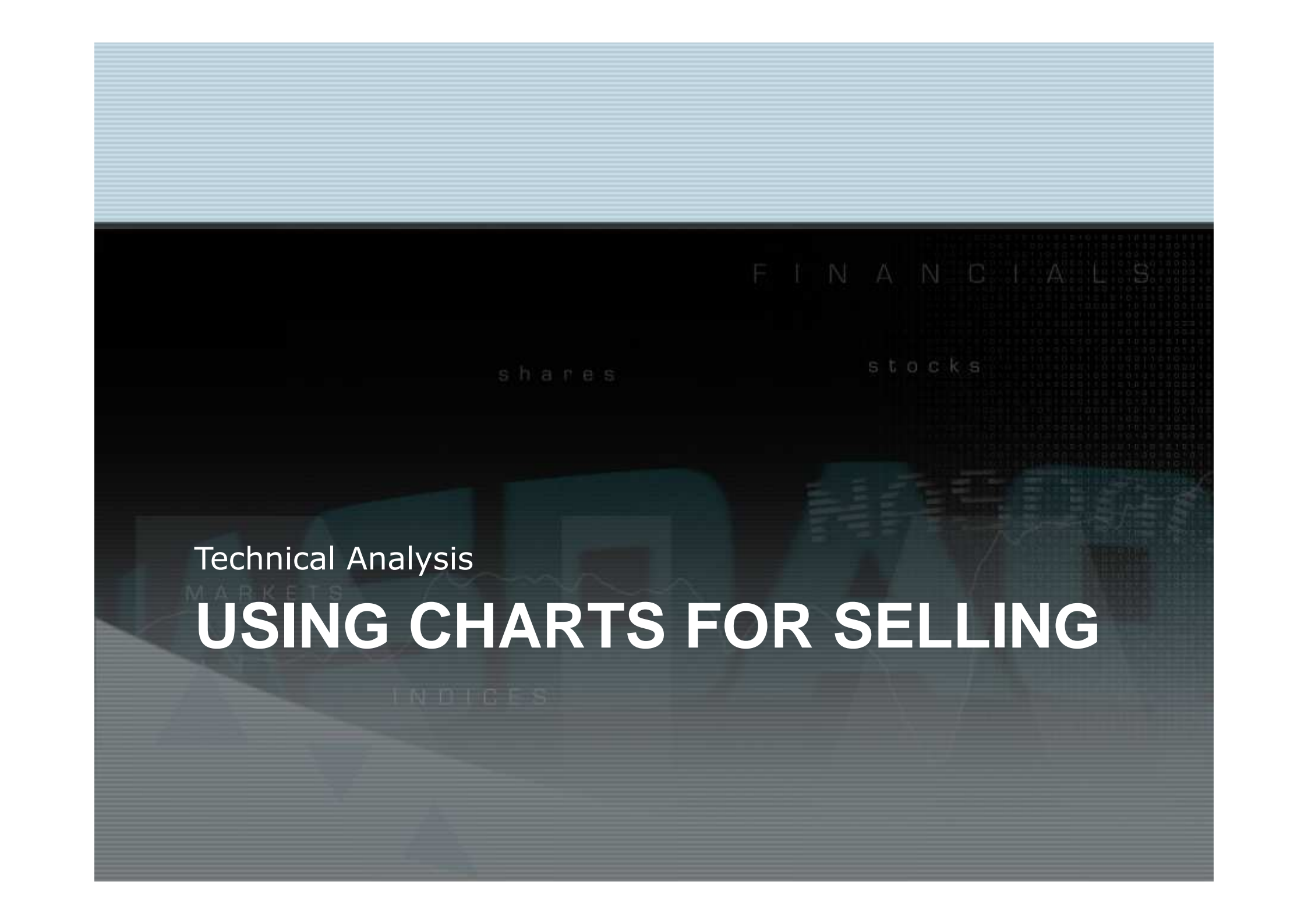 - ▪ Buy if the price breaks out past the upper trendline on heavy volume

Example of Bullish Symmetrical Triangle

Pride International Inc. (PDE)

Characteristics of Strong Bases

- More accumulation (closes up on above-average volume) than distribution (closes down on above-average volume)

- Gaps-up on heavy volume

- Support weeks on heavy volume: weeks that close near the highs of the price range

Technical Analysis

USING CHARTS FOR SELLING

Selling at a Loss

Cut losses early!

- Set a maximum loss rule and stick to it
  - Typically 7-10% from buy point, depending on risk tolerance
  - Use stop-loss orders if necessary

Selling for a Profit

- Set a plan to take profits after a certain amount of gain
  - According to William O'Neil, most uptrending stocks achieve gains of 20-25% between bases, so taking profits after 20-25% gains is a good plan
    - Note: If a stock rises 20% or more within 4 weeks on heavy volume, hold for another 8 weeks and then reevaluate whether or not to sell

Market Tops

- Market reaches a high point in its uptrend and turns downward for a period of time

- A market index has 4 or more distribution days (close down on heavier volume than previous day) within 4 weeks
  - Leaders of the current bull market will also peak and start to fall

- When the market shows signs of peaking, shift your portfolio to cash and safer investments

Example of Market Top

S&P 500: October, 2007

Market Top

11 Distribution Days within 4 Weeks

Support and Resistance | MA

- Sell when the stock reaches a high on light volume and bounces off resistance, or when it falls through support on heavy volume

- Moving averages can act as support/resistance
  - Bearish crossover: a short-term DMA/WMA crossing below a longer-term DMA/WMA signals downward momentum

Chart Patterns

- Head and Shoulders: bearish reversal pattern
  - The price rises to a peak and declines, forming a shoulder
  - The price then rises above the first peak and declines again, forming a head
  - The price rises once more, but not as high as the second peak, and declines again, forming another shoulder
  - Sell if the price breaks through the support of the neckline on heavy volume

Example of Head and Shoulders

Ceragon Networks Ltd. (CRNT)

Falls below neckline support on heavy volume

Avoid 51% drop

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Volume 858,900   , MA(13) 736,950

Chart Patterns

- **Descending/Symmetrical Triangle: descending triangle is bearish, symmetrical triangle can go either way**
  - Anywhere from a couple weeks to several months long
  - Triangle shape formed by drawing to converging trendlines along a price range that gets narrower over time
  - Buy if the price breaks through the lower trendline on heavy volume

Example of Head and Shoulders
Advanced Micro Devices Inc. (AMD)

Climax Top

- 25-50% price run-up in 3 weeks or less at the end of an uptrend
  - 30% of leading stocks peak with climax tops

- Common characteristics of climax tops:
  - Exhaustion gaps
  - Stock extended 100% or more above the 200-DMA
  - Stock splits

Example of Climax Top

PetroChina Co. Ltd. (PTR)

Secondary Red Flags

- **Churning: several days of heavy volume activity with little price movement**

- **New highs made on light volume**

- **Reversal weeks: weeks that close near the low of the week's price range**

- **Largest one-day drop in price**

- **200-DMA turns downward**

Example of Multiple Sell Signals

Cerner Corp. (CERN)

Bearish crossover (50-DMA crosses below 200-DMA) and 200-DMA turns downward

Gap-down below 200-DMA on heavy volume

Price falls through lower trendline of symmetrical triangle on heavy volume

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Don't Rely on Technical Analysis Alone!

◆ **Use fundamental analysis to pick stocks, and use technical analysis for buy/sell points**

- ▪ Don't let gains turn into losses
- ▪ Sell based on technical analysis, which will show a stock is peaking even before fundamentals start to break down