Slides 12 - Behavioral Finance and Technical Analysis

1. a. Which are types of information processing errors?

    Check all that apply:

    - ☑ Conservatism bias
    - ☑ Forecasting errors
    - ☑ Overconfidence
    - ☐ Regret avoidance
    - ☑ Representativeness bias

    Regret avoidance is a behavioral bias, not an information processing error.

2. a. Investors trading a lot is an example of _____.

    - ○ conservatism bias
    - ○ forecasting errors
    - ◉ overconfidence
    - ○ representativeness bias

    Investors trading a lot is an example of overconfidence, as evidenced by the fact that the most active portfolios have much lower returns than the least active portfolios.

3. a. Which of the below scenarios best describes mental accounting?

    - ○ Buying more of a certain stock because you are pleased with the company's recent performance.
    - ○ Deciding not to trade any stocks on a day when the S&P has remained stable.
    - ◉ Freely accessing and spending dividend returns, but refusing to sell a single stock that has a similar rate of return for the same purpose.
    - ○ The tendency for investors to assess investment decisions based on the manner that the choice is posed to the investor.

    This investor has segregated their investment decisions rather than view their portfolio as a whole.

4. a. Which of the following asset allocation decisions are typical regret avoidance behavior?

    Check all that apply:

    - ☑ Avoiding companies with high book-to-market ratios.
    - ☑ Buying Company A instead of Company B because Company A's share price has outperformed Company B's share price over the last 2 years.
    - ☐ Allocating 50% of one's portfolio to various graphite mining companies in the Mozambique that show high growth potential.
    - ☑ Focusing on well-known companies with sound financials.
    - ☑ Using diversification to minimize portfolio risk.

    Regret avoidance states that people are more likely to blame themselves for unconventional choices that turn out badly and, consequentially, avoid this regret by making conventional decisions. Allocating money to mining

companies in Africa is a very unusual investment decision, while all other options are common investment choices that are less risky.

5. a. Limits to arbitrage means that, under certain conditions, _____.

   ○ short sellers cannot make a profit

   ○ investors are influenced by behavioral biases

   ● rational traders cannot correct a mispricing

   ○ some securities are mispriced

   Limits to arbitrage means that even rational and big traders cannot always correct a mispricing by buying enough undervalued securities or short-selling enough overvalued securities.

6. a. The law of one price states that _____.

   ● in a perfectly efficient or rational market, identical assets should have identical prices

   ○ in the event of an equity carve-out, the new price of all new shares should be the same as they were prior to the equity carve-out

   ○ investors are willing to buy stocks with similar risk levels for similar prices

   ○ the price of a given asset will remain the same regardless of market sentiment

   The Law of One Price states that identical assets should have identical prices. In reality, asset pricing is made more complex due to the presence of behavioral factors.

7. a. In simplified terms, the TRIN statistic is a measurement describing _____.

   ○ future market movements

   ○ industry performance

   ○ long-term performance

   ● market volume

   ○ stock prices

   `TRIN = ("Volume of declining stocks"/"# of declining stocks") / ("Volume of advancing stocks"/"# of advancing stocks")`

   The equation creates a ratio of the average *volume* in declining stocks to the average *volume* in advancing stocks.

8. a. Short interest refers to the _____.

   ○ current rate of interest on margin loans for short selling shares

   ● total number of shares currently sold short in the market

   ○ total number of short sold shares in the market that are yet to be covered

   ○ total value of short-selling in the market

   Short interest refers to the number, rather than the dollar value, of stocks currently sold short.

9. a. The general purpose for using a moving average to analyze a stock is to _____.

   ○ discount the effects of momentum on stock prices.

   ● measure underlying movements in order to gather trends that cannot be seen by simply analyzing daily or short-term movements.

   ○ smooth out drastic falls in prices to demonstrate a more optimistic narrative to other investors.

○ understand a stock price on a particular day, relative to its performance in previous years.

The use of a moving average is to understand the underlying movements of a stock and identify trends.

An example of the measurement is a 50-day moving average, where the average price of the stock over the preceding 50 days is captured.

10. a. When understanding the put/call ratio as a sentiment indicator, which of the below is correct in relation to put options?

○ They perform well in falling markets as they give the buyer the right to buy the stock at a predetermined price.

◉ They perform well in falling markets as they give the buyer the right to sell the stock at a predetermined price.

○ They perform well in rising markets as they give the buyer the right to buy the stock at a predetermined price.

○ They perform well in rising markets as they give the buyer the right to sell the stock at a predetermined price.

Put options give the owner the right to sell a stock at a predetermined exercise price. Therefore, the owner is hoping for a reduction in the stock price so he/she can sell the stock above its actual market price.

11. a. The confidence index uses yield data from the _____ in an attempt to reveal future trends in the _____ market.

○ bond market, housing

◉ bond market, stock

○ housing market, stock

○ retail industry, stock

○ stock market, bond

The confidence index captures the ratio of yields on top-rated corporate bonds to those on intermediate-grade bonds. This metric is used to predict sentiment-driven stock market movements. A higher confidence index signal optimism within the bond market.

12. Below is the market diary for a particular day's trading.

Issues	NYSE	Nasdaq
Advancing	2,319	2,169
Declining	654	529
Unchanged	215	115

a. What is the breadth for the **NYSE?**

Market Breadth = Total Advancing Stocks - Total Declining Stocks
= 2,319 - 654
= **1,665**

13. The table below shows the average 10-year yield of top-rated corporate bonds along with the corresponding yields for intermediate-grade corporate bonds:

Month	Top rated	Intermediate grade
1	0.033	0.08182
2	0.039	0.08738
3	0.025	0.099
4	0.033	0.08182
5	0.03	0.09

Month	Top rated	Intermediate grade
6	0.02727	0.108

    a. What is the confidence index in **month 5**?

      Confidence Index = Yield of top-rated bonds / Yield of intermediate-grade bonds
      = 0.03 / 0.09
      = **0.3333**

14. Below is the market diary for a particular day's trading.

Issues	NYSE	Nasdaq
Number advancing	1,118	941
Volume advancing	974,575,345	953,575,000
Number declining	2,200	2,067
Volume declining	1,504,600,876	1,501,500,000

    a. What was the trin statistic for the **Nasdaq** on this day?

      Trin statistic = (Vol. declining/# declining) / (Vol. advancing/# advancing)
      = (1,501,500,000 / 2,067) / (953,575,000 / 941)
      = **0.7168**

15. Market data for the index and the stock price of GoldMiners Inc is given below:

Day	S&P	GoldMiners Inc
1	68	38
2	66	37.7
3	65	38.5
4	61.7	39
5	63.7	40.2

    a. GoldMiners Inc _____.

      ○ does neither show nor not show relative strength

      ○ does not provide enough information about relative strength

      ○ does not show relative strength

      ◉ shows relative strength

      An increasing ratio of stock price to index indicates relative strength:
      Day 1: 38 / 68 = 0.5588
      Day 2: 37.7 / 66 = 0.5712
      Day 3: 38.5 / 65 = 0.5923
      Day 4: 39 / 61.7 = 0.6321
      Day 5: 40.2 / 63.7 = 0.6311

      4: As this ratio is increasing over time, *GoldMiners Inc* shows relative strength.

16. The table below contains information about a stock market, the level of the relevant index, stock prices for BigBox.com, and the yields on top-rated and intermediate grade corporate bonds.

Day	# Adv.	Vol. Adv. (1,000)	# Decl.	Vol. Decl. (1,000)	Index	BigBox	Top Rated	Interm. Grade

Day	# Adv.	Vol. Adv. (1,000)	# Decl.	Vol. Decl. (1,000)	Index	BigBox	Top Rated	Interm. Grade
1	1,429	2,029,800	1,520	2,017,330	56.1	20.72	0.043	0.076
2	1,829	1,765,043	1,120	2,420,796	56.25	21.5	0.043	0.076
3	1,929	2,334,270	1,020	1,260,831	51	21.9	0.043	0.076
4	2,429	4,262,580	520	1,215,259	51	23	0.044	0.076
5	829	699,931	2,120	6,495,803	49.04	27.6	0.042	0.08

a. What is the **breadth of the market** on **day 1**?

Breadth = # advancing - # declining

= 1,429 - 1,520

= **-91**

b. What is the the **trin statistic** on **day 1**?

Trin = (Vol. declining / # declining) / (Vol. advancing / # advancing)

= (2,017,330 / 1,520) / (2,029,800 / 1,429)

= **0.9344**

c. What is the **confidence index** on **day 5**?

Confidence Index = Yield of top-rated bonds / Yield of intermediate grade bonds

= 0.042 / 0.08

= **0.525**

d. BigBox.com _____.

○ does neither show nor not show relative strength

○ does not provide enough information about relative strength

○ does not show relative strength

◉ shows relative strength

An increasing ratio of stock price to index indicates relative strength:

Day 1: 20.72 / 56.1 = 0.3694

Day 2: 21.5 / 56.25 = 0.3821

Day 3: 21.9 / 51 = 0.4295

Day 4: 23 / 51 = 0.451

Day 5: 27.6 / 49.04 = 0.5628

4: As this ratio is increasing over time, *BigBox.com* shows relative strength.