Whip Theory

With any changes in interest rates, long-term bonds change more in price than short-term. (If interest rates decline, investors with long term bonds have a high fixed coupon rate for several years. If interest rates increase, investors with long term bonds have a low fixed coupon rate for several years.)

Short-term bonds change in price more quickly (sharply) than long-term. (Short term bonds are more actively traded [liquid] than long term bonds. Investors who lend money prefer to get paid back as soon as possible.)

The whip theory relates to bond prices, not interest rates. The yield curves shown earlier demonstrate that short term interest rates change more and more quickly than long term interest rates.

EX: If the Fed raises reserve requirements, which of the following is true?

\[ \text{Rates } \uparrow \text{ Prices } \downarrow \]

a. Short term bonds increase more sharply in price than long term.
b. Long term bonds increase more in price than short term.
c. **Long term bonds decrease in price more than short term.**
d. Short term bonds decrease in price more than long term.

If interest rates increase, outstanding bond prices will fall. Long-term bond prices would decrease more than short-term.

EX: Which of the following bonds will change in price most sharply with a .06 change in basis?

a. **3 year bond @ 6%**
b. 4 year bond @ 9%
c. 4 ½ year bond @ 10%
d. Cannot be determined

The bonds with the shortest maturities change in price the quickest (sharpest).

56. If interest rates are decreasing, which of the following are true?

<table>
<thead>
<tr>
<th></th>
<th>I. Short-term bonds decrease in price more sharply than long-term bonds</th>
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<tbody>
<tr>
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<td>II. Long-term bonds decrease in price more than short-term bonds</td>
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<tr>
<td></td>
<td>III. Short-term bonds increase in price faster than long-term</td>
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<td>IV. Long-term bondholders would expect the price of their bonds to increase</td>
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A. I only     B. I and II     C. III and IV     D. IV only

For Explanations see Appendix A in the back of the book
TECHNICAL ANALYSIS

**Trendlines** - are graphs used by technical analysts to track the direction of a security. The price of a stock will usually follow its trendline.

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**Head and Shoulders** - indicates that the previous trend is *reversing*.

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**Saucer** - indicates that the previous trend is *reversing*.

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*To remember how to draw each graph, remember if the head in the middle and the shoulders to the side are facing up or down.*

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Long term analysts look for saucer patterns while short term analysts look for head and shoulders. Once again, the end of the graph indicates which way the price is going.
**Consolidation** - is when the price is moving *sideways*. When a price is moving back and forth, an analyst identifies the trading range of the security.

- **Resistance** - upper portion of the trading range.
- **Support** - lower portion of the trading range.

When jumping up and down, gravity provides resistance and the floor supports.

The area in-between the support and resistance is called a **trading channel**.

**Breakout** - occurs when the price breaks out of the normal trading range by at least 3% above resistance or below support

**Advance - Decline Ratio** - Indicates the *breadth* (momentum) of the market. This is something examined to measure if the majority of stocks are increasing or decreasing during the day.

- If more stocks go up than down - Bullish
- If more stocks go down than up - Bearish

**Odd Lot Theory** – States that the *small* investor is *usually wrong*. Smaller investors are usually last in hearing recommendations from brokerage firms.

- As odd lot volume increases - Bearish
- As odd lot volume decreases - Bullish

Reminder – a round lot is a trade of 100 shares and an odd lot is a trade of less than 100 shares.

**Short Interest Theory** - is based on the number of *short sales*. Short sellers must eventually buy the stock to close out their positions.

- If short interest increases - Bullish
- If short interest decreases - Bearish
Random Walk (Dartboard) Theory - assumes that the market is *perfectly efficient*.

A person who picks stocks randomly believes that any analysis of the company is already reflected in the prices of securities. These investors believe that undervalued securities and arbitrage situations do not exist. For this reason, the random walk theory is occasionally referred to as the *Efficient Market Theory*.

**Beta Coefficient**

Measures the *volatility* of a stock in relation to the overall market as measured by the S&P 500 stock index (mentioned later in this chapter)

- If beta = 1 - the stock is *equally volatile* as the market
- If beta > 1 - the stock is *more volatile* than the market
- If beta < 1 - the stock is *less volatile* than the market

**Alpha**

Alpha measures the *volatility* of a stock in relation to the *performance of that corporation’s industry*. A large alpha indicates that the security performed better than expected compared to its beta. Alpha is calculated by dividing the rate of return on the security by the beta. Therefore, the alpha is sometimes referred to as the risk reward ratio. The Alpha is also referred to as the Sharpe ratio occasionally.

**Accumulation/Distribution Line**

The Accumulation/Distribution line tracks the relationship between *stock prices* and *trading volume* and is used as a leading indicator of stock prices.

**Moving Average Chart**

A moving average chart is a line graph which represents an average of securities prices over a set period of time (i.e., 30 days, 200 days, etc.).

**Capital Asset Pricing Model (CAPM)**

An economic model that helps put a value to stocks by comparing risk to expected return.