Choosing an Investment

Passive vs. Active Investing

Passive Investing:

Total Actual Return = risk-free rate (+) risk premium

Buy and hold with the goal to track a benchmark. Indexing is a common approach to passive investing. Use Index Funds and Exchange-Traded Funds (ETFs).

Active Investing:

Total Actual Return = risk-free rate (+) risk premium (+) Alpha

Form a portfolio with the goal to outperform a benchmark. Involves stock-picking and tactical adjustments in sector allocation (sector rotation).

Model-Building vs. Use of an Investment Service

Top-down Analysis vs. Bottom-up Analysis

Top-down Analysis:

An investment approach that involves looking at the "big picture" in the economy and financial world and then breaking those components down into finer details. After looking at the big picture conditions around the world, the different industrial sectors are analyzed in order to select those that are forecasted to outperform the market. From this point, the stocks of specific companies are further analyzed and those that are believed to be successful are chosen as investments.

Bottom-up Analysis:

An investment approach that de-emphasizes the significance of economic and market cycles. This approach focuses on the analysis of individual stocks. In bottom-up investing, therefore, the investor focuses his or her attention on a specific company rather than on the industry in which that company operates or on the economy as a whole.

Using Top-down Analysis:

Analyzing the Economy - looking at cyclical indicators

There are three major categories of economic indicators, (1) leading indicators, (2) coincident indicators, and (3) lagging indicators. Leading indicators are those that precede the business cycle, coincident indicators are those that rise and fall with the business cycle, and lagging indicators are those that come after the business cycle.
indicators, and (3) lagging indicators.

(1) **Leading Indicators** - includes economic indicators that usually reach a peak or trough before a corresponding peak or trough in the general economy.

<table>
<thead>
<tr>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Average weekly hours of manufacturing workers</td>
</tr>
<tr>
<td>Average weekly initial claims of unemployment insurance</td>
</tr>
<tr>
<td>Real value of manufacturers’ new orders for consumer goods and materials</td>
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<tr>
<td>Index of consumer expectations</td>
</tr>
<tr>
<td>Index of common stock prices</td>
</tr>
<tr>
<td>Manufacturers’ new orders, nondefense capital goods</td>
</tr>
<tr>
<td>Index of new housing starts</td>
</tr>
<tr>
<td>Real money supply (M2)</td>
</tr>
<tr>
<td>Interest rate spread, 10-year Treasury bonds less federal funds rate</td>
</tr>
<tr>
<td>Composite leading indicator index</td>
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</tbody>
</table>

(2) **Coincident Indicators** - includes economic indicators that usually reach a peak or trough that coincide with the peak or trough in the general economy.

<table>
<thead>
<tr>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Number of employees on nonagricultural payrolls</td>
</tr>
<tr>
<td>Personal income less transfer payments</td>
</tr>
<tr>
<td>Index of industrial production</td>
</tr>
<tr>
<td>manufacturing and trade sales</td>
</tr>
</tbody>
</table>

(3) **Lagging Indicators** - includes economic indicators that usually reach a peak or trough after the peak or trough in the general economy.

<table>
<thead>
<tr>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Average duration of unemployment</td>
</tr>
<tr>
<td>Ratio of manufacturing and trade inventories to sales</td>
</tr>
<tr>
<td>Percentage change in the labor cost per unit of output in manufacturing</td>
</tr>
<tr>
<td>Average prime rate charged by banks</td>
</tr>
<tr>
<td>Commercial and industrial loans outstanding</td>
</tr>
<tr>
<td>Ratio of consumer installment credit outstanding to personal income</td>
</tr>
<tr>
<td>Change in the consumer price index (inflation rate) for services</td>
</tr>
</tbody>
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**The Business Cycle and Industry Sectors**
Early stage of recession - **Utilities**

Late stage of recession - **Consumer Discretionary, Financials**

Early stage of expansion - **Technology**

Mid-term of expansion - **Industrials, Materials**

Late stage of expansion - **Consumer Staples, Energy, Health Care**

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**Industry Analysis**

Compare an industry valuation ratio to historical trend and to other industries.

1. Earnings Multiple (PE Ratio)
2. Price / Cash Flow Ratio
3. Price / Sales Ratio
4. Price / Book Ratio

**Value vs. Growth Investing**

**Growth Investing** - focus on growth in EPS. The assumption is that the PE Ratio will remain constant, so that, if EPS grows, price will increase.

Thomas Rowe Price, Jr. has been called "the father of growth investing"

Anatomy of a growth stock - Peter Lynch

A quick introduction to one of the great growth investors of all time, Peter Lynch.

Lynch became manager of Fidelity's Magellan fund in 1977 when it was worth $20m and grew it to $14bn by the time he retired in 1990. Anyone who went along for the ride would have seen their money increase 30-fold in that time.

Lynch was never exclusively a growth stock investor, but 'fast growers' had a firm place in his portfolio, and he was keen on finding 'tenbaggers' - stocks that rise in value ten times. In picking fast growers he observed the following rules:

* Fast growers are small aggressive enterprises growing at 20%-25% a year.

* They don't have to be in a growth industry, but they do need a winning repeatable formula that has proven itself in more than one location and still has room to grow.

* They need a reasonably healthy balance sheet and, ideally, are making healthy profits (Body...
Shop was a good example in its heyday).

* They need to be simple businesses that anyone can run.

* Ideally they should not be in 'hot' industries which everyone is following. The less fashionable the industry the better.

* You need to get in on the ground floor, and be first to sell when growth slows.

* The P/E should be at, or near, the growth rate, which ought to be accelerating. i.e. EPS rising 20% p.a. and a P/E ratio of 20.

**Growth Investing**

What Does Momentum Investing Mean?
An investment strategy that aims to capitalize on the continuance of existing trends in the market. The momentum investor believes that large increases in the price of a security will be followed by additional gains and vice versa for declining values.

This strategy looks to capture gains by riding "hot" stocks and selling "cold" ones. To participate in momentum investing, a trader will take a long position in an asset, which has shown an upward trending price, or short sell a security that has been in a downtrend. The basic idea is that once a trend is established, it is more likely to continue in that direction than to move against the trend.

**Value Investing** - focus on the acquisition of “cheap” stocks. Look for low PE stocks under the assumption that price will correct and there will be a return to a normal PE Ratio.

**What Does Value Investing Mean?**

The strategy of selecting stocks that trade for less than their intrinsic values. Value investors actively seek stocks of companies that they believe the market has undervalued. They believe the market overreacts to good and bad news, resulting in stock price movements that do not correspond with the company's long-term fundamentals. The result is an opportunity for value investors to profit by buying when the price is deflated.

Typically, value investors select stocks with lower-than-average price-to-book or price-to-earnings ratios and/or high dividend yields.

**Contrarian Investing**

Contrarian investing is related to value investing in that the contrarian is also looking for mispriced investments and buying those that appear to be undervalued by the market. Some well-known value investors such as John Neff have questioned whether there is a such thing as a "contrarian", seeing it as essentially synonymous with value investing. One possible distinction is...
that a value stock, in finance theory, can be identified by financial metrics such as the book value or P/E ratio. A contrarian investor may look at those metrics, but is also interested in measures of "sentiment" regarding the stock among other investors, such as sell-side analyst coverage and earnings forecasts, trading volume, and media commentary about the company and its business prospects.

In the example of a stock that has dropped because of excessive pessimism, one can see similarities to the "margin of safety" that value investor Benjamin Graham sought when purchasing stocks -- essentially, being able to buy shares at a discount to their intrinsic value. Arguably that margin of safety is more likely to exist when a stock has fallen a great deal, and that type of drop is usually accompanied by negative news and general pessimism.

Along with this, although more dangerous, is shorting overvalued stocks. This requires 'deep pockets' in that an overvalued security may continue to rise, due to over-optimism, for quite some time. Eventually, the short-seller believes, the stock will 'crash and burn'.

Contrarians are attempting to exploit some of the principles of behavioral finance, and there is significant overlap between these fields. For example, studies in behavioral finance have demonstrated that investors as a group tend to overweight recent trends when predicting the future; a poorly-performing stock will remain bad, and a strong performer will remain strong. This lends credence to the contrarian's belief that investments may drop "too low" during periods of negative news, due to incorrect assumptions by other investors regarding the long-term prospects for the company.

**Notable contrarian investors**

Warren Buffett is a famous contrarian, who believes that best time to invest in a stock is when shortsightedness of the market has beaten down the price.

David Dreman is a money manager often associated with contrarian investing. He has authored several books on the topic and writes the "Contrarian" column in Forbes magazine.

John Neff, who managed the Vanguard Windsor fund for many years, is also considered a contrarian, though he has described himself as a value investor (and questioned the distinction).

Mark Ripple is a money manager often described as a contrarian. He has authored a book which covers the topic in detail.

Although it is often said that growth investing and value investing are diametrically opposed, a better way to view these two strategies is to consider a quote by Warren Buffett: "growth and value investing are joined at the hip". Another very famous investor, Peter Lynch, pioneered a hybrid of growth and value investing with what is now commonly referred to as a "growth at a reasonable price (GARP)" strategy.
Asset Allocation

An investment strategy that aims to balance risk and reward by apportioning a portfolio's assets according to an individual's goals, risk tolerance and investment horizon.

The three main asset classes - equities, fixed-income, and cash and equivalents - have different levels of risk and return, so each will behave differently over time.

The amount of an investor’s total portfolio placed into each class is determined by an asset allocation model. These models are designed to reflect the personal goals and risk tolerance of the investor. Furthermore, individual asset classes can be sub-divided into sectors (for example, if the asset allocation model calls for 70% of the total portfolio to be invested in stocks, the portfolio manager may recommend different allocations within the field of stocks, such as recommending a certain percentage in large-cap, mid-cap, banking, manufacturing, etc.)

Asset Allocation Models

Most asset allocation models fall somewhere between four objectives: preservation of capital, income, balanced, or growth.

Model 1 - Preservation of Capital
Asset allocation models designed for preservation of capital are largely for those who expect to use their cash within the next twelve months and do not wish to risk losing even a small percentage of principal value for the possibility of capital gains. Investors that plan on paying for college, purchasing a house or acquiring a business are examples of those that would seek this type of allocation model. Cash and cash equivalents such as money markets, treasuries and commercial paper often compose upwards of eighty-percent of these portfolios. The biggest danger is that the return earned may not keep pace with inflation, eroding purchasing power in real terms.

Model 2 – Income
Portfolios that are designed to generate income for their owners often consist of investment-grade, fixed income obligations of large, profitable corporations, real estate (most often in the form of Real Estate Investment Trusts, or REITs), treasury notes, and, to a lesser extent, shares of blue chip companies with long histories of continuous dividend payments. The typical income-oriented investor is one that is nearing retirement. Another example would be a young widow with small children receiving a lump-sum settlement from her husband’s life insurance policy and cannot risk losing the principal; although growth would be nice, the need for cash in hand for living expenses is of primary importance.

Model 3 – Balanced
Halfway between the income and growth asset allocation models is a compromise known as the balanced portfolio. For most people, the balanced portfolio is the best option not for financial reasons, but for emotional. Portfolios based on this model attempt to strike a compromise
between long-term growth and current income. The ideal result is a mix of assets that generates cash as well as appreciates over time with smaller fluctuations in quoted principal value than the all-growth portfolio. Balanced portfolios tend to divide assets between medium-term investment-grade fixed income obligations and shares of common stocks in leading corporations, many of which may pay cash dividends. Real estate holdings via REITs are often a component as well. For the most part, a balanced portfolio is always vested (meaning very little is held in cash or cash equivalents unless the portfolio manager is absolutely convinced there are no attractive opportunities demonstrating an acceptable level of risk.)

Model 4 – Growth
The growth asset allocation model is designed for those that are just beginning their careers and are interested in building long-term wealth. The assets are not required to generate current income because the owner is actively employed, living off his or her salary for required expenses. Unlike an income portfolio, the investor is likely to increase his or her position each year by depositing additional funds. In bull markets, growth portfolios tend to significantly outperform their counterparts; in bear markets, they are the hardest hit. For the most part, up to one hundred percent of a growth modeled portfolio can be invested in common stocks, a substantial portion of which may not pay dividends and are relatively young. Portfolio managers often like to include an international equity component to expose the investor to economies other than the United States.

The portfolio should be re-balanced from time to time to bring the allocation back in line.

Making Money

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Return Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock</td>
<td>Return = Capital Gains + Dividend Yield</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>Return = Change in Price + Coupon Yield</td>
</tr>
<tr>
<td>Government Bonds</td>
<td>Return = Change in Price + Coupon Yield</td>
</tr>
<tr>
<td>ETFs, Index Funds, Mutual Funds</td>
<td>Return = Based on underlying asset pool</td>
</tr>
<tr>
<td>Options</td>
<td>Return = Based on price movement of underlying asset</td>
</tr>
</tbody>
</table>

Valuation Models

1. Discounted Cash Flow Valuation Approach
2. Dividend Discount Valuation Approach

\[ V_i = \sum_{t=1}^{n} \frac{CF_t}{(1 + k)^t} \]

2. Dividend Discount Valuation Approach

\[ V_i = \sum_{t=1}^{n} \frac{D_t}{(1 + k)^t} \]

Relative Valuation Techniques

1. Earnings Multiple

PE Ratio = \( \frac{\text{Current Market Price}}{\text{Forward 12 Months Earnings}} \)

Note: PE Ratios are often reported based on TTM Earnings

2. Price / Cash Flow

P/CF = \( \frac{\text{Current Market Price}}{\text{Forward 12 Months Cash Flow}} \)

3. Price / Book Value

P/CF = \( \frac{\text{Current Market Price}}{\text{Estimated EOY Book Value}} \)

4. Price / Sales

P/Sales = \( \frac{\text{Current Market Price}}{\text{EOY Sales}} \)

5. Enterprise Value/Revenue

6. Enterprise Value/EBITDA
**Enterprise Value** - A measure of a company's value, often used as an alternative to straightforward market capitalization. Enterprise value is calculated as market cap plus debt, minority interest and preferred shares, minus total cash and cash equivalents. Think of enterprise value as the theoretical takeover price. In the event of a buyout, an acquirer would have to take on the company's debt, but would pocket its cash. EV differs significantly from simple market capitalization in several ways, and many consider it to be a more accurate representation of a firm's value. The value of a firm's debt, for example, would need to be paid by the buyer when taking over a company, thus EV provides a much more accurate takeover valuation because it includes debt in its value calculation.

Enterprise value is calculated by adding a corporation’s market capitalization, preferred stock, and outstanding debt together and then subtracting out the cash and cash equivalents found on the balance sheet. (In other words, enterprise value is what it would cost you to buy every single share of a company’s common stock, preferred stock, and outstanding debt. The reason the cash is subtracted is simple: once you have acquired complete ownership of the company, the cash becomes yours).

**Market Capitalization**: Frequently called “market cap”, market capitalization is calculated by taking the number of outstanding shares of common stock multiplied by the current price-per-share.

**Preferred Stock**: Although it is technically equity, preferred stock can actually act as either equity or debt, depending upon the nature of the individual issue. A preferred issue that must be redeemed at a certain date at a certain price is, for all intents and purposes, debt. In other cases, preferred stock may have the right to receive a fixed dividend plus share in a portion of the profits (this type is known as “participating”).

**Debt**: Once you’ve acquired a business, you’ve also acquired its debt. If you purchased all of the outstanding shares of a chain of ice cream stores for $10 million (the market capitalization), yet the business had $5 million in debt, you would actually have expended $15 million; $10 million may have come out of your pocket today, but you are now responsible for repaying the $5 million debt out of the cash flow of the business – cash flow that otherwise could have gone to other things.

**Cash and Cash Equivalents**: Once you’ve purchased a business, you own the cash that is sitting in the bank. After acquiring complete ownership, you can simply take this cash and put it in your pocket, replacing some of the money you expended to buy the business. In effect, it serves to reduce your acquisition price; for that reason, it is subtracted from the other components when calculating enterprise value.

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**Getting the information**

**What is available on Yahoo?**
Quotes
Summary: http://finance.yahoo.com/q?s=IBM
Real Time: http://finance.yahoo.com/q/ecn?s=IBM+Real+Time
Options: http://finance.yahoo.com/q/op?s=IBM+Options
Historical Prices: http://finance.yahoo.com/q/hp?s=IBM+Historical+Prices

Charts
Basic Chart: http://finance.yahoo.com/q/bc?s=IBM+Basic+Chart

News & Info
Headlines: http://finance.yahoo.com/q/h?s=IBM+Headlines
Company Events: http://finance.yahoo.com/q/ce?s=IBM+Company+Events
Message Boards: http://messages.finance.yahoo.com/mb/IBM

Company
Profile: http://finance.yahoo.com/q/pr?s=IBM+Profile
Key Statistics: http://finance.yahoo.com/q/ks?s=IBM+Key+Statistics
SEC Filings: http://finance.yahoo.com/q/sec?s=IBM+SEC+Filings
Competitors: http://finance.yahoo.com/q/co?s=IBM+Competitors

Analyst Coverage
Star Analysts http://finance.yahoo.com/q/sa?s=IBM+Star+Analysts

Ownership
Major Holders: http://finance.yahoo.com/q/mh?s=IBM+Major+Holders

Financials

What is available from Value Line?

Page 1 - SCREENS

Page 1 - Median of Estimated a) PE ratio, b) dividend yield, c) appreciation potential
Value Line’s Timeliness Ranking

** Ranked 1 - highest (best) ranking, given to the top 100 companies **

** Ranked 2 - above-average ranking, given to the next 300 companies **

** Ranked 3 - average ranking, given to the next 900 companies **

** Ranked 4 - below-average ranking, given to the next 300 companies **

** Ranked 5 - lowest ranked 100 companies **

Value Line’s Safety Ranking

In the Value Line Report the term Safety is used as a proxy for risk. Stocks are rated on a scale of 1 to 5 with 1 representing those securities that are financially strong and therefore less volatile. The lower the Safety score, the greater the short-term price movements the stock will experience.

Value Line’s Technical Ranking

Value Line's Technical rating is very similar to its Timeliness rating with one important difference. The Technical rating does not consider earnings per share projections - only the opportunity for a stock's price appreciation. Value Line encourages investors seeking short-term capital gains - in the three to six month timeframe - to purchase stocks with Technical ratings of either 1 or 2.

Value Line Beta

A stock's beta is a measure of a particular stock's price volatility relative to a broader measure of stock price movements such as a market index. Many stock beta calculations are performed relative to the S&P 500 however; the Value Line Beta calculation uses the New York Stock Exchange Composite Index.

In fact, Value Line's Beta values are derived using the movement of the stock's price each week relative to the movement of the NYSE Composite. Value Line uses five years worth of weekly data - over 250 data comparisons - to derive their beta values.

The most important thing to remember about beta is that it is a measure of a stock's volatility or price movement. A stock with a beta above 1.0 will experience more price movements (both up and down) than the comparative index while a stock with a beta of less than 1.0 will experience smaller price fluctuations.
Other Value Line Report Information

There are two other relatively important pieces of information in the Value Line Report and just how important that information is to the investor really depends on their investment strategy.

Investing for Price Appreciation

Investors looking for long or short term capital gains should focus on the stock's future price projections. These price projections can be found immediately below the advice box in the upper left hand corner of the report. There you will find not only price projections but also expected gains and total annual returns.

Investing for Income

If you're looking for stocks that will provide a consistent source of income then you'll want to take a closer look at dividend paying stocks. You can find this information on the Value Line report on the top line of the report. The value you'll want to look for is labeled as the dividend yield.

Generally investors looking for a steady source of income will want to buy stocks with a dividend yield that is 3% or higher. Dividend yield should be used as a secondary filter, meaning the investor should first look for top Timeliness scores then dividend yield.

How about a Value Line ETF?

PowerShares Value Line Timeliness Select Portfolio (PIV) - The Fund will normally invest at least 90% of its total assets in common stock that comprise the Value Line Timeliness Select Index. The Index seeks to identify a group of companies that have the potential to outperform the U.S. Equity Market. The Index uses three core Value Line Ranking Systems: Timeliness, Safety, and Technical. The equally-weighted portfolio is rebalanced and reconstituted quarterly.

Value Line - Online

How to Guide:

http://www.madisonpubliclibrary.org/ref/valueline/

Getting Ideas?

Money Magazine

Kiplinger's
Mad Money

Fast Money

Barron’s