Eight Principles of Finance Report: There are eight principles of finance. Knowledge of these eight principles is essential for understanding the field of finance. To demonstrate mastery of these eight principles, students will copy and paste a finance word problem from a previous assignment or other source for each principle as well as excerpts from a finance news article showing a real world application. See example below.

For example, principle 3 is time value of money.

Principle 3. Time Value of Money

Relevant Finance Problem:
Determine how much $500 invested today will grow to in four years if the investment earns 10 percent interest per year.

Real World Application: Return on CDs
Source Web Link:
http://money.cnn.com/2009/03/11/magazines/fortune/investor_daily.fortune/index.htm
Relevant Excerpt: With all those caveats, CDs still offer superior returns to most other secure investments. The highest yielding one-year CDs on bankrate.com - all of which are FDIC-backed - offer yields between 2% and 3%. While that's less than what it was last summer, it's still much higher than the 0.7% yields on one-year Treasury bill.

The 8 Principles of Finance

Knowledge of these eight principles is essential for understanding the field of finance. Make sure that you master each of them.

1. ***Risk-Return Tradeoff***

The higher the risk of an investment, the higher the expected return must be.

~~2. ***Leverage***~~

~~Leverage is a magnification of earnings that results from having **fixed costs** in the company. Simply put, leverage is a measure of the degree of sensitivity of earnings to some other measure.~~

~~(a) Operating leverage~~

~~A magnification of earnings (Net Operating Income or EBIT) that results from having **fixed operating costs** in the company. *(Examples of fixed operating expenses are salaries, utilities, depreciation, and property taxes.)*~~

~~*(b) Financial leverage*~~

~~A magnification of earnings (E.A.T.) that results from having **fixed financial costs** in the company. *(The only type of fixed financial cost considered here is interest expense.)*~~

~~*(c) Total or combined leverage*~~

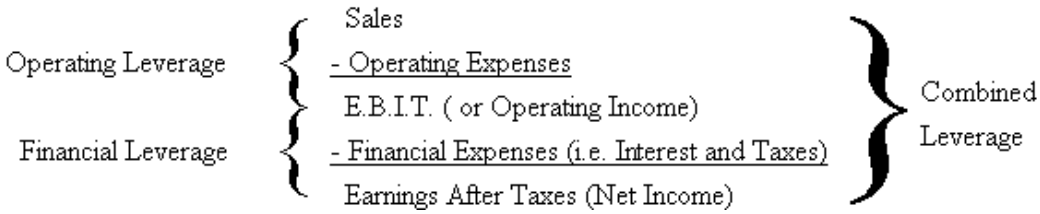
~~A magnification of earnings that results from having **fixed costs of any type** in the company.~~

~~Total Leverage = Operating Leverage x Financial Leverage~~

~~Formulas:~~

- ~~Operating leverage is equal to the percentage change in operating income divided by the percentage change in sales.~~
- ~~Financial leverage is equal to the percentage change in net income divided by the percentage change in operating income.~~

~~Total leverage measures the percentage change in net income divided by the percentage change in sales.~~



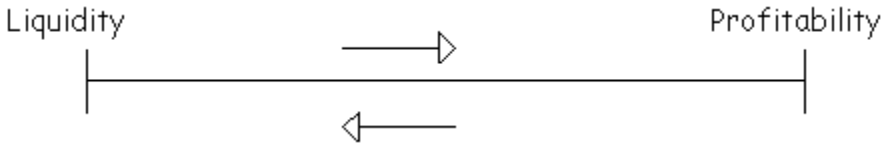
3. ***Time Value of Money***
Money has a time value. A rational person is not indifferent between having a dollar today or a dollar in the future. Regardless of inflation, a dollar today can be invested and will earn a return over a period of time.

4. ***Valuation***
The value of an asset is equal to the present value of its future cash flows. The rate used for the present value calculations (the *capitalization rate*) should be the minimum acceptable return, given the risk of the investment.

Value = Present Value of Future Cash Flows
or
Value = Future Cash Flows x Present Value Factor

5. ***Bond Price vs. Interest Rates***
There is an inverse relationship between market interest rates and the price of existing fixed income securities. E.g., as interest rates rise, prices of existing bonds will fall.

6. ***Liquidity vs. Profitability***
There is a trade-off between liquidity and profitability; gaining more of one ordinarily means giving up some of the other.



7. ***Matching Principle*** (or the ***Principle of Suitability***)
The maturity of a firm's assets should match the maturity of the firm's liabilities, i.e. short-term assets should be financed with short term liabilities; long-term assets should be financed with long-term sources of financing.
If you violate the matching principle, you create a problem either of too little liquidity or too little profitability.

8. ***Portfolio Effect (or Diversification)***
As assets are added to a group (portfolio), the risk of the total portfolio decreases. This will be true as long as the correlation of the asset being added and the portfolio is less than +1.0.
Source:
http://campus.murraystate.edu/academic/faculty/larry.guin/Principles/IndexPrin.htm