Q

1. Q Ratio or Tobin's Q Ratio

Market value of firm's assets divided by replacement value of firm's assets. It can be approximated by marketbook ratio.

2. Quality Financial Statements

Analysts sometimes speak of the *quality* of a firm's earnings, or the quality of its balance sheet. In general, quality financial statements are those that accurately reflect reality; they lack accounting tricks and one-time changes designed to make the firm appear stronger than it really is. Financial statements reflect reality when accounting income is a good approximation to economic income.

The Balance Sheet

A quality balance sheet typically shows conservative use of debt or leverage, which keeps the potential of financial distress due to debt service quite low. Limited use of debt also implies the firm has unused borrowing capacity; should an attractive investment opportunity arise, it can draw upon that unused capacity to invest wisely for the shareholders' benefit.

A quality balance sheet shows assets whose market values exceed their book values. In general, inflation and historical cost accounting should keep book values below market values. Beyond these accounting effects, a capable management team and the existence of intangible assets, such as goodwill, trademarks, or patents, will make the market values of firm's assets exceed their book values. Situations that might reduce assets' market values below their book values include: use of outdated, technologically inferior assets; unwanted out-of-fashion inventory; and the presence of non-

performing assets on the firm's books (as when a bank writes off a nonperforming loan).

The presence of off-balance sheet liabilities also harms the quality of a balance sheet by hiding economically important information. Such liabilities may include joint ventures and loan commitments or guarantees to subsidiaries.

The Income Statement

High quality earnings are *recurring* earnings that arise from sales to the firm's regular stream of customers. One-time and nonrecurring effects, such as accounting changes, mergers, and asset sales, should be ignored when examining earnings. Also, costs must not appear artificially low as a result of unusual and short-lived input price reductions. Unexpected exchange rate fluctuations that work in the firm's favor to raise revenues or reduce costs also should be viewed as nonrecurring.

Quality earnings are revealed by conservative accounting principles that do not overstate revenues or understate costs. The quality of the income statement rises as its statement of earnings more closely approximates cash. Suppose that a firm sells furniture on credit, allowing customers to make monthly payments. A high-quality income statement should recognize this revenue using the installment principle (i.e., the statement of sales revenue should reflect only the cash collected from sales each month during the year). A low-quality sheet would recognize 100 percent of the revenue from a sale at the time of sale, even though payments may stretch well into the following year. The footnotes to the income statement would tell the analyst which method was used.

3. Quality Risk

The exact standard or grade of the commodity required by the hedger is not covered by the futures contract. Therefore, the price movement of commodity grade A may be different from the price movement of commodity grade B, which will cause

the basis to change and prevent the hedger from forming a perfect hedge.

4. Quality Spread

The difference in market yields between yield on risky securities and matched maturityduration Treasury securities.

5. Quantile

The percentage of data points below a given value. The qth quantile of the distribution F is the smallest value x such that $F(x) \ge q$.

6. Quantity Risk

The exact amount of the commodity needed by the hedger is not available by a single futures contract or any integer multiple thereof. Hence, the amount of the commodity is not hedged exactly; this prevents the hedger from forming a perfect hedge, and the underhedged or overhedged amount is subject to risk.

7. Quanto (Cross Currency Derivative)

A derivative where the payoff is defined in terms of value of variables associated with one currency but is paid in another currency. Therefore, this kind of derivative is a cross-currency derivative.

8. Quasi-Arbitrage

The replacement of one asset or position with another that has equivalent risk and a higher expected rate of return. This is an implicit instead of an explicit arbitrage.

9. Quasi-Random Sequence

A quasi-random sequence (also called a low discrepancy sequence) is a sequence pf representative samples from a probability distribution. Descriptions of the use of quasi-random sequences can be found in Brotherton-Ratcliffe (1994).

Quasi-random sampling is similar to stratified sampling. The objective is to sample representative values for the underlying variables. In stratified sampling it is assumed that we know in advance how many samples will be taken. A quasi-random sampling scheme is more flexible. The samples are taken in such a way that we are always "filling in" gaps between existing samples. At each stage of the simulation the points sampled are roughly evenly spaced throughout the probability space. See Stratified sampling

10. Quick (Acid-Test) Ratio

A measure of liquidity similar to the current ratio except for exclusion of inventories in the numerator. The formula is:

$$\frac{Cash + Receivables + Marketable \ Securities}{Current \ Liabilities}$$

The quick ratio is a better measure of liquidity than the current ratio for firms whose inventory is not readily convertible into cash. See also **Liquidity** ratios]

11. Quick Assets

Current assets minus inventories.