Expected Versus Unexpected Rate of Return

The rate of return equals the expected rate of return (the market interest rate) plus the unexpected rate of return.

Expected Rate of Return

In an efficient market, the basis for the expected rate of return is all readily available information.

The expectation must be rational, formulated in accord with economic theory.

Unexpected Rate of Return

The unexpected rate of return is the part of the rate of return that cannot be forecasted.

Rational Forecasts

If the forecast is rational, the forecast error satisfies the following:

- The expected value of the error is zero;
- The correlation of the error with anything observable at the time of the forecast is zero.

If either property does not hold, the forecast can be improved.

News

If the forecast is rational, then *news* determines the unexpected rate of return.

News refers to something truly new, not to something known previously. News cannot be forecasted, so it is uncorrelated with previous news.

Good and Bad News

Good news causes the asset price to be higher than expected, so the forecast error is positive.

Conversely, bad news causes the asset price to be lower than expected, so the forecast error is negative.

No news implies that the rate of return should equal the market interest rate.

News Must Be New

Many items in the media are not news in this sense, as the information was known previously.

For example, a statement of the time of the sunrise in the newspaper does not qualify as news.

For example, the newspaper may report that property taxes in Albany are rising. Yet a weak budget situation may have been known previously, and hence a tax increase was expected.

News Is Unexpected

One can see news as something different from what had been expected.

Confirmation

The confirmation of something that was likely but not certain is news.

For example, on any particular day, it is expected that no airliner will crash, although a crash is possible. When no crash occurs, this fact is news, but is not surprising.

In an efficient market, perhaps an airline stock might rise slightly each day that no crash occurs, but fall significantly after a crash. On average the price change might be zero.

News of a crash is usually reported quickly on the internet. The price drop will occur immediately once the news is known, not the following day or week.