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# Outstanding Investor Digest

PERSPECTIVES AND ACTIVITIES OF THE NATION'S MOST SUCCESSFUL MONEY MANAGERS.

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## A NEW DEFINITION OF RISK: THE KEPPLER RATIO.

**OID:** *You have some interesting thoughts on risk – which most people define as being equal to volatility.*

**Keppler:** I believe that risk has to do with adversity rather than uncertainty and, in the last analysis, is strictly a function of price and time. The notion that portfolio risk is strictly a function of volatility of portfolio returns rests on invalid assumptions and does not appeal to common sense.

Volatility is very desirable in bull markets. With the exception of short sellers, I have never heard of anyone complaining about upward volatility.

**OID:** *Believe it or not, we have. One of our contributors actually lost a client for that reason convinced that it meant he was riskier – despite the fact that he'd consistently outperformed in down markets.*

**Keppler:** Amazing. Anyway, most investors intuitively feel that risk should have to do with losing money.

Risk measures such as variance or standard deviation are theoretical constructs which belong in a world bearing little resemblance to reality – a world of “efficient” markets rather than markets which are the product of human nature driven by fear and greed.

Some of the assumptions of Modern Portfolio Theory are simply unrealistic.

**OID:** *As Munger describes it, “a grand structure based on a false premise”.*

**Keppler:** Exactly. At best, it may be valid in specific circumstances. Even a stopped clock is right twice a day. But, in general, it rests on false premises, the assumption of normal distributions of returns being one of them. There is strong evidence that in the real world distributions are anything but normal. The frequency distribution of markets returns is no classic bell curve. The shape is skewed rather than symmetric and outliers are substantially different from those expected in a normal or lognormal distribution.

## **OID:** *How do you define risk?*

**Keppler:** I define risk as expectation of loss – a measure which focuses on probability and the magnitude of investment losses rather than the variability of returns. For this purpose, loss can be defined both as negative return or as a negative deviation from the required rate of return, depending on the liquidity needs or the expectation of the investor.

In calculating risk-adjusted returns, I consequently do not apply the “Sharpe Ratio” which indicates return per unit of variability. I define risk-adjusted return as a return per unit of expectation of loss – a performance measure which I immodestly call the “Keppler Ratio”.

**OID:** *After a well known astronomer, no doubt. But in other words, historical risk vs. reward, not volatility.*

**Keppler:** Yes. However, just as volatility is no indication of future risk, the expectation of loss is not much help in that department either. Future risk can only be minimized by lengthening the investment horizon and making sure that you don’t overpay.

If you take care of returns, I think risks are pretty much taken care by themselves. And how do we do that? Per dollar invested, more book value is better than less, more earnings is better than less, and more cash flow is better than less. Also, the higher the return on equity the better – other things being equal.

We look at these variables on an absolute basis and on a relative basis. We study current values compared to historical values over a period of seven years. Business cycles this century from peak to peak have averaged a little more than five years. So you could use five-year periods. But we prefer a seven-year time frame. Then our last pillar of valuation is current versus historical relative valuation.

We expect that a combination of undervalued markets will provide above-average returns, a combination of neutrally rated markets will have average performance and a combination of overvalued markets will have a below-average return.