# Risk Management Task Force
# Risk in Pricing Subgroup
# Glossary

1) **Return on Investment:** Rate at which the present value of profits equals the investment in the product. Investment typically equals statutory strain and target surplus.
2) **Return on Equity:** GAAP earnings after tax divided by GAAP surplus. This measure may be short term (year by year returns) or longer term (weighted average of year by year returns).
3) **Return on Liabilities:** The present value of profits divided by the present value of reserves.
4) **Risk-Adjusted Return on Capital:** Profit measure adjusted to reflect the level of risk. Such adjustment(s) may be to profits, capital, and/or the discount rate.
5) **Premium Margin:** Present value of profits expressed as a percentage of premium income.
6) **Break-even Year:** Year in which the accumulated profit equals or exceeds zero.
7) **Internal Rate of Return:** See Return on Investment.
8) **Return on Assets:** The present value of profits divided by the present value of assets.
9) **Return on Capital:** The present value of profits divided by the present value of required capital. The required capital may be prescribed by regulatory bodies, credit agencies, or company specific.
10) **Contribution to Surplus:** The portion of dividends retained in surplus over a time horizon. The amount retained is typically determined by some prescribed formula.
11) **Revenue Margin:** The present value of profits divided by the present value of revenue.
12) **Embedded Value (or EconomicValue Added)**: The present value of future profits, including the cost of capital, discounted at the company's hurdle rate. The change in embedded value from year to year is the Economic Value added.
13) **Capital Allocations:** Amounts added to the product line and held in the surplus account.
14) **Risk-Adjusted Profit Target:** This refers to adjusting the profit target to reflect the level of risk.
15) **Stochastic Scenario Analysis:** Any process where projections are made on the basis of a stochastic process. A stochastic process is a model of a phenomenon that exhibits both strong trends and randomness.
16) **Assumption PADS:** Margins to account for the uncertainty around the expected value.
17) **Assumption Stress Testing:** Testing that involves any process where projections are made on the basis of specified scenarios defined by the user.
18) **Regulatory Formula Multiple:** Capital charges are determined based on a multiple of a prescribed regulatory minimum. For example, 200% of US Risk Based Capital Company Action Level.

19) **Economic Capital:** Capital charges are based on an internal model rather than a prescribed regulatory formula.
20) **Earnings (Value) at Risk:** the systematic measurement of profits that are subject to loss over a specified time period, with a specified probability.
21) **Mean-Variance Analysis**: Any analysis (of which the Efficient Frontier is one) pairing the mean result with a variance measure to provide a metric for comparing multiple return distributions.
22) **Efficient Frontier:** The set of all points on the graph, where x=mean return and y=variance of returns, that corresponds to efficient portfolios. An efficient portfolio is one where there exists no portfolio whose mean return is larger <u>and</u> whose variance of returns is smaller.
23) **Conditional Tail Expectation:** The expected value, conditioned on the outcome the being less favorable than a predetermined benchmark.
24) **Problem Scenario Analysis:** An investigation of the scenarios producing the worst results, within a set of scenarios, in hopes of identifying the common attributes, or events, leading to the poor results.
25) **Reduction to Yield:** As an alternative to modeling the specific risk within the pricing process, the yield of an asset used in the pricing process is modified (reduced) to approximate the cost of eliminating that risk.
26) **Covariance of Risk:** the degree to which the evaluation of a given risk is impacted by the presence of another risk. For example, the assumption that lapse rates vary directly with interest rate changes has a 100% covariance. On the other hand, a put and a call with the same strike would have –100% covariance.