

## Discount rate

**Risk Free Rate:** The percentage of return generated by investing in risk free financial instruments.

**Equity Market Risk Premium:** The return on investment that investors require above the risk free rate.

**Discount rate**= risk free rate + beta\*(equity market risk premium)

**Beta coefficient** - how the expected return of a stock or portfolio is correlated to the return of the financial market as a whole.

The discount rates typically applied to different types of companies:

- Startups seeking money: 50 – 100 %
- Early Startups: 40 – 60 %
- Late Startups: 30 – 50%
- Mature Companies: 10 – 25%

## Discount factor

The **discount factor**,  $D(n)$ , is the number which a future cash flow, to be received at year  $n$ , must be multiplied by, to obtain the current present value. A fixed annually compounded discount rate is:

$$D(n) = \frac{1}{(1+r)^n}$$

The fixed continuously compounded discount rate is:

$$D(n) = e^{-r n}$$