# Stock Pricing 

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## 1 Summary

Equity - Ownership right - Claim on future dividends
Stock Value: Generally, Stock price $P$ present value of future dividends $D$

$$
P_{0}=\sum_{t=1}^{\infty} \frac{D_{t}}{(1+r)^{t}}
$$

Special case: with constant growth $g$ :

$$
P_{0}=\frac{D_{1}}{r-g}
$$

Use above to estimate returns from dividend yield and assumed growth:

$$
r=\frac{E\left[D_{1}\right]}{P_{0}}+g
$$

Expected future price:

$$
E\left[P_{t}\right]=P_{0}(1+g)^{t}
$$

Cost of equity capital: Risk adjustment.
What is the riskiness of the stock (company)?
Possible method: CAPM - What is the beta of the stock - measure of riskiness.
To estimate growth: Can use historical growth

