Evaluation model

See Also

From the textbook (財務管理)

Generalization

Formula

The estimated price of stock can be generalized as follows.

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Limitation

1. Has no big effect after change of growth rate.

Gordon model

Intro

Gordon model considers the price of stock has linearly relationship to growth rate.

Parameter

: Price

: Price of 0th data, price at initial time

: Price of 1th data, the price in next period

: rate of growth

: rate of fee due to release of common stock

: ( formatted as “P\_0^\*” announced as “P 0 star” ) , estimated

: Return on Equity

: Retention ratio.

k : Required rate of return for stockholder (someone who holds stock)

: Dividend Yield (股利率)

: Dividend Yield at initial time

Assumption

Assume that

1. Fix all required rate of return for stockholde. I.e. for all period .
2. Fix all growth rate. I.e. for all period .

Formula

1. =

Simplify it.

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( by the assumption that and are fixed and by the fact )

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Then apply sum of geometric series, one has that

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Rewrite the 2th formula.