



SOCIETY OF DECISION
PROFESSIONALS
Clarity & Insight for Decisive Action

Helping Decision Science Professionals Reach New Heights

Presenting:

Decision Analysis Concepts and Other Approaches **by Henk Krijnen**

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Decision analysis concepts and other approaches

Decision making is everywhere

Uncertainty and risk is everywhere

Yet the classical DA recipes are not everywhere

In the world of Finance, we see other approaches to account for risk instead:

- Opportunity cost of capital, variable discount rates
- Country risk premiums
- Etc.

Examples from publications

Choosing A Discount Rate

- The discount rate reflects the opportunity cost for the person or organization that will receive the cash flows (e.g. the federal government specifies a rate to be used)
- The analysis can be done with real or nominal discount rates
 - ▶ Real rates are used in constant-dollar analyses
 - ▶ Nominal rates reflect expected inflation (market interest rates are therefore "nominal" interest rates)
- The discount rate is not the same as the interest rate obtained to finance the project
- Higher risks will require a higher discount rate
 - ▶ Project risks (e.g. can we build this on budget and on schedule?)
 - ▶ Market risks (e.g. will the market for real estate remain strong?)
 - ▶ Economy risks (e.g. will there be a recession?)
 - ▶ Country risks (e.g. will the government remain stable and supportive of new infrastructure projects?)

(MIT)

Examples from publications

- **Beta (β):** The β represents the correlation of industry or business sector with the economy. A challenge in the Middle Eastern region is the lack of liquidity in the local markets and inadequate data for the correlation analysis. This has resulted in practitioners relying on β determined from different sources (such as Prof. Ashwath Damodaran's publications) and personal experience and judgment.
- **Country risk premium (CRP):** When estimating the K_e based on data from a developed market, an adjustment needs to be considered for the country risk. While there is some convergence amongst valuers on how to determine the CRP, there is a difference of opinion on if and how to adjust the total CRP to reflect a company's exposure to country risk.

The discount rate is applied to determine the present value of future cash flows and represents the investor's appetite for risk and the underlying uncertainties in the cash flows. The higher the implied risk the higher the discount rate is and the lower the value, and vice versa.

(Deloitte)

Discussion



Can such incompatibility of approaches lead to inappropriate decision making? Experiences, anyone?

Should the DA world connect better to the Finance world? If so, how?