

Valuation inputs for Norway

Summarize a survey of Norwegian financial analysts giving consensus estimates on parameters relevant for Norwegian valuations.

Consensus estimates

Choose parameters relevant for valuations

Common method: Look at other people *a/so* doing valuations, and asking what parameters they use.

What can one ask for in such a survey?

General parameters usable in a typical valuation.

- ▶ The risk premium of the stock market.
- ▶ The risk free interest rate
- ▶ Input relevant for growth assumptions, such as inflations, and growth in corporate earnings.
- ▶ Should we adjust for liquidity/company size?
- ▶ Is there a *control* premium?

Consensus estimates

Who does it make sense to ask?

Persons doing valuations professionally.

This case: Members of the Norwegian Association of Financial Analysts.

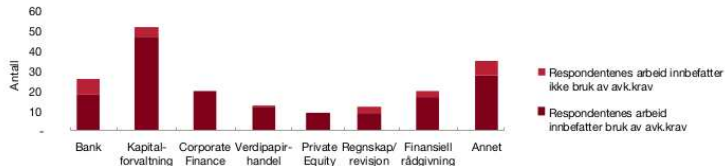
(Forening for finansfag)

Types of people surveyed

What type of job are the people surveyed doing?

- ▶ Bank
- ▶ Asset Allocation
- ▶ Corporate Finance
- ▶ Trading in financial markets
- ▶ Private Equity
- ▶ Accounting/Auditing
- ▶ Financial Advising
- ▶ Other

Figur 3.1: Respondenter fordelt på arbeidsområde

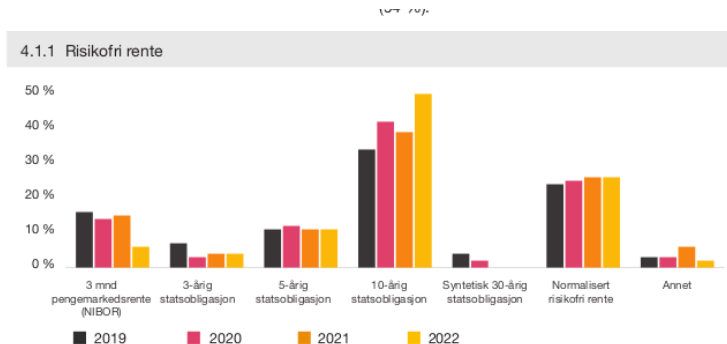


The 2022 Survey - Summary

- ▶ Market risk premium: 5%
- ▶ Risk free interest rate:
 - ▶ Interest on Norwegian Government debt with 10 year maturity, or “normalized risk free rate”
 - ▶ Typical risk free interest rate: 3%–5% (most common 3.5%).
- ▶ Small stock premium: Yes (86%).
- ▶ Control premium: Yes, between 20%–30%.
- ▶ Inflation expectation: 2%
- ▶ Long term growth in nominal earnings (for terminal value): 2%.
- ▶ ESG - does it matter?
 - ▶ Majority add to cost of capital for weak ESG companies
- ▶ What are the major risk factors the next year?
 - ▶ Energy prices
 - ▶ Inflation
 - ▶ House price falling (household debt)

Which Risk Free interest rate?

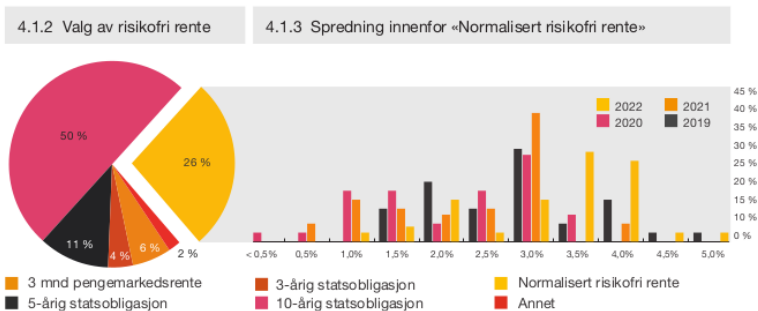
Common argument in valuations: Valuing long term cash flows. Should therefore use an interest rate that is risk free for long term investments. So what do the professionals use?



2022 study

“Normalized risk free rate”

However, in the most recent survey see more usage of a “normalized risk free rate”. with 3% as the most common choice.

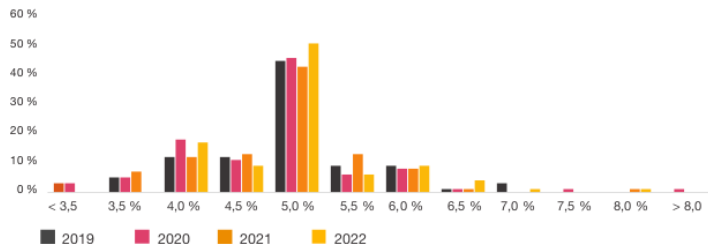


2022 study

What is the equity market risk premium in Norway?

2022 study

4.2.3 Markedsrisikopremie



Risk premium, distribution

Risk premium by type



From the 2022 survey. Jobs in: Bank, Corporate Finance, Trading in financial markets, Private Equity, Accounting/Auditing, Financial Advising, Other, Asset Allocation.

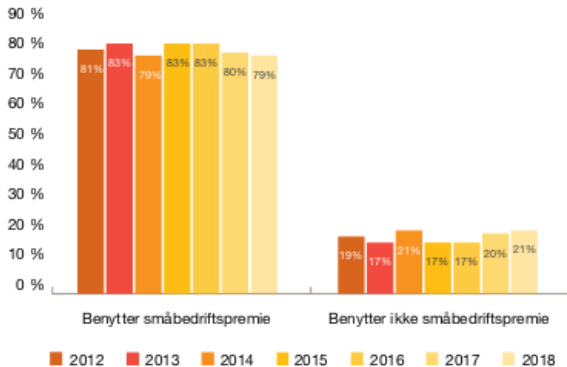
“Small stocks” / liquidity premium - should we?

Stock of small, illiquid stocks argued to be more risky (less liquid)

Common: add a “small stock premium”

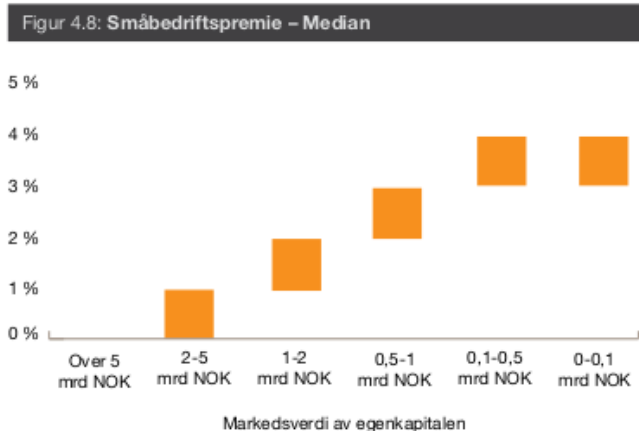
First question, should we add a small stock premium?

Figur 4.7: Småbedriftspremie



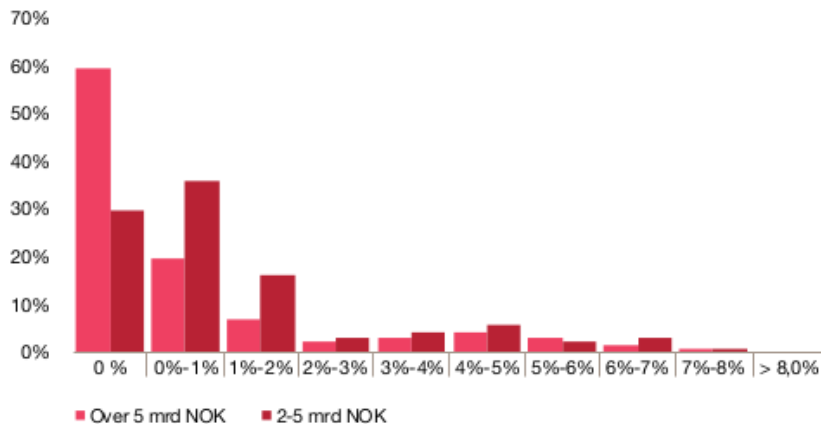
Liquidity premium by company size

Second question: how much to add.



Liquidity premium by company size

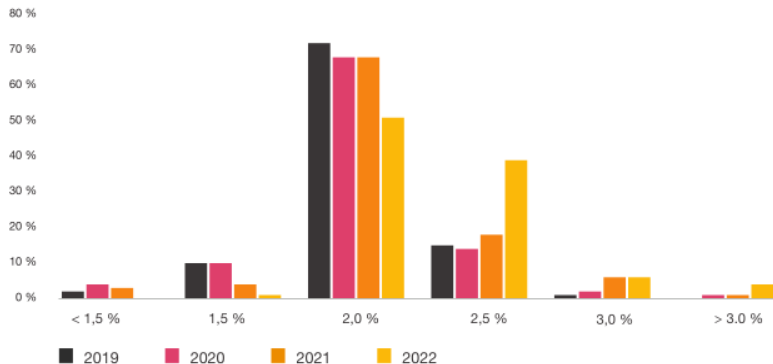
Figur 4.14: Markedsverdi over 5 mrd og 2-5 mrd



Figur 4.15: Markedsverdi 1-2 mrd og 0,5-1 mrd

Inflation Expectation

4.7.1 Langsiktig inflasjonsforventning

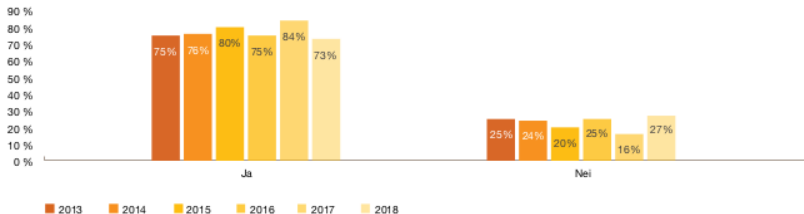


From the 2022 study.

Ownership structure

Does ownership structure affect required cost of capital?

Figur 4.17: Eierstruktur og påvirkning på avkastningskravet

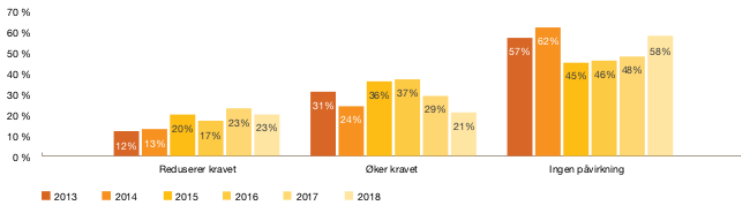


From the 2018 study.

State Ownership

Does state ownership in particular affect required cost of capital?
No

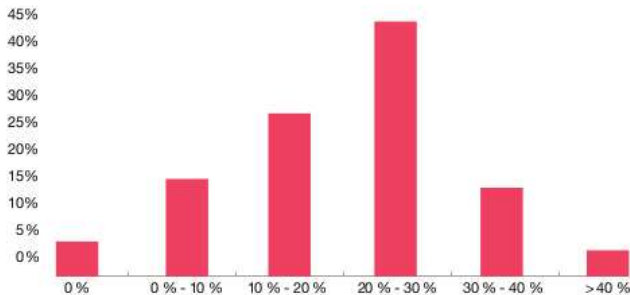
Figur 4.18: Statlig eierskaps påvirkning på avkastningskravet



Corporate control premium?

20-30%

Figur 4.17: Kontrollpremie på Oslo Børs ved kjøp av alle aksjene i et selskap



45% ville benyttet en
kontrollpremie på **20% - 30%**

Estimating an implicit risk premium

Idea: Dividend discount model

$$P_0 = \frac{E[D_1]}{r - g}$$

Observe the current stock price P_0 , and estimate $E[D_1]$ and g , we can solve for r .

Market as a whole:

P_0 is the level of a broad stock market index,
 D_1 the dividend yield for the market, and
 g the growth of the the market.

Estimating an implicit risk premium

Alternatively, we can do this on a stock by stock basis

$$P_{i,0} = \frac{E[D_{i,1}]}{r_i - g_i}$$

$P_{i,0}$ is the price of stock i ,

D_i dividend of stock i ,

r_i a company-specific cost of capital, and

g_i assumed growth for that company.

r_i changes from company to company

Assume a model for company risk adjustment: CAPM.

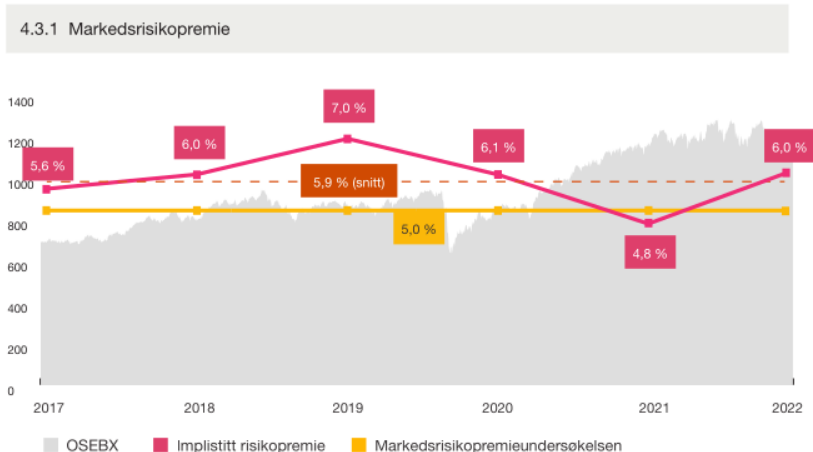
$$r_i = r_f + \beta_i(E[r_m] - r_f)$$

Across companies, $(E[r_m] - r_f)$ is constant.

If we for each company estimate the β_i , we can calculate an *implicit market risk premium* as the average of estimated $(E[r_m] - r_f)$ across companies.

Estimating an implicit risk premium

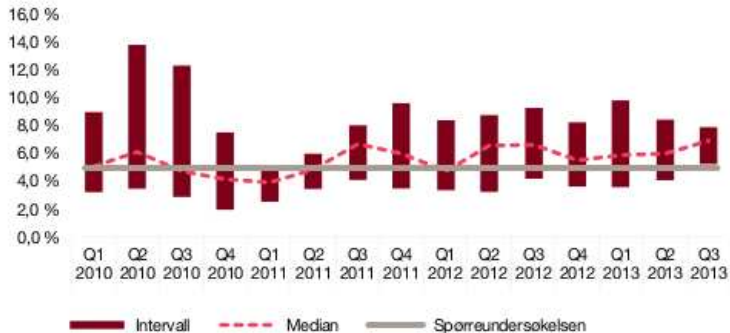
The 2022 Survey



Estimating an implicit risk premium

The largest companies at the OSE, those in the OBX index.

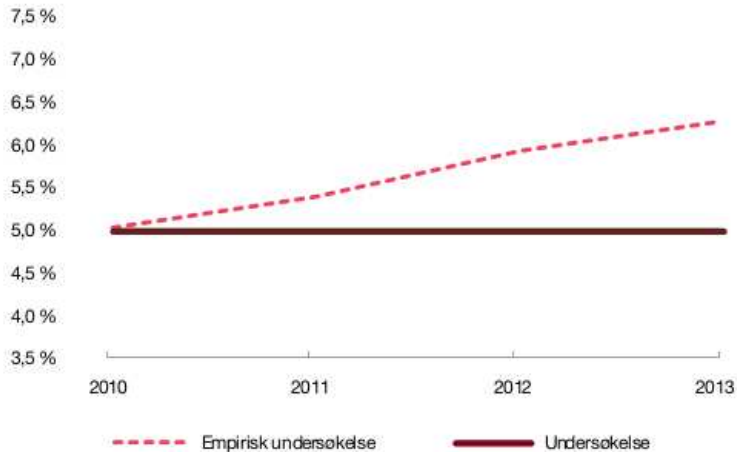
Figur 5.1: Median implisert risikopremie for OBX-listen fra Q1 2010 til Q3 2013



Implicit Risk premium From the 2014 study.

Estimating an implicit risk premium

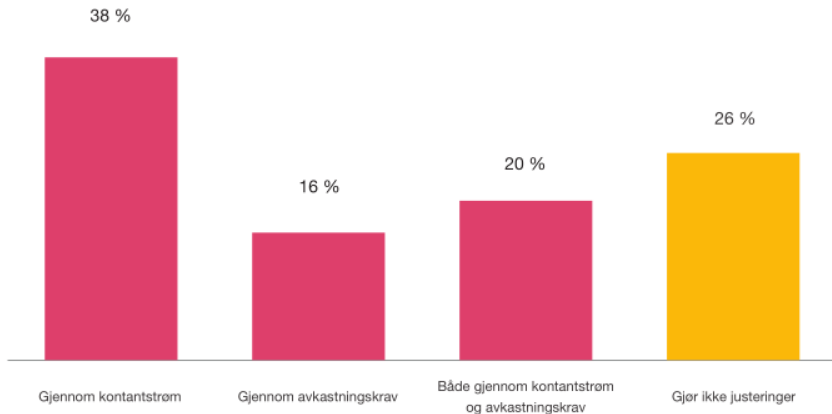
Figur 5.2: Median implisert risikopremie og spørreundersøkelsen



Adjust for ESG

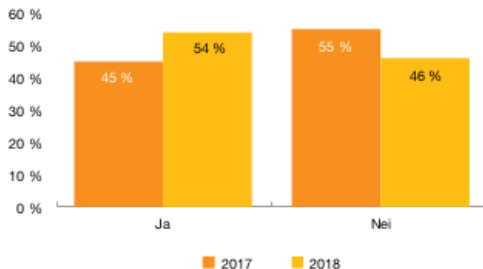
2022 Survey

4.10.1 Følgende justeringer gjøres for selskaper med svak prestasjon knyttet til miljø og bærekraft



Adjust for environment issues?

Figur 4.19: Bør det benyttes et påslag i avkastningskravet for selskaper med svak performance knyttet til miljø og bærekraft?



From the 2018 investigation.

What risks do people foresee?

Figur 4.21: Risikofaktorer som kan påvirke det norske aksjemarkedet de neste 12 månedene

