

An introduction to the GRC (Governance, Risk and Compliance) Society.

Strategy, Risk and performance

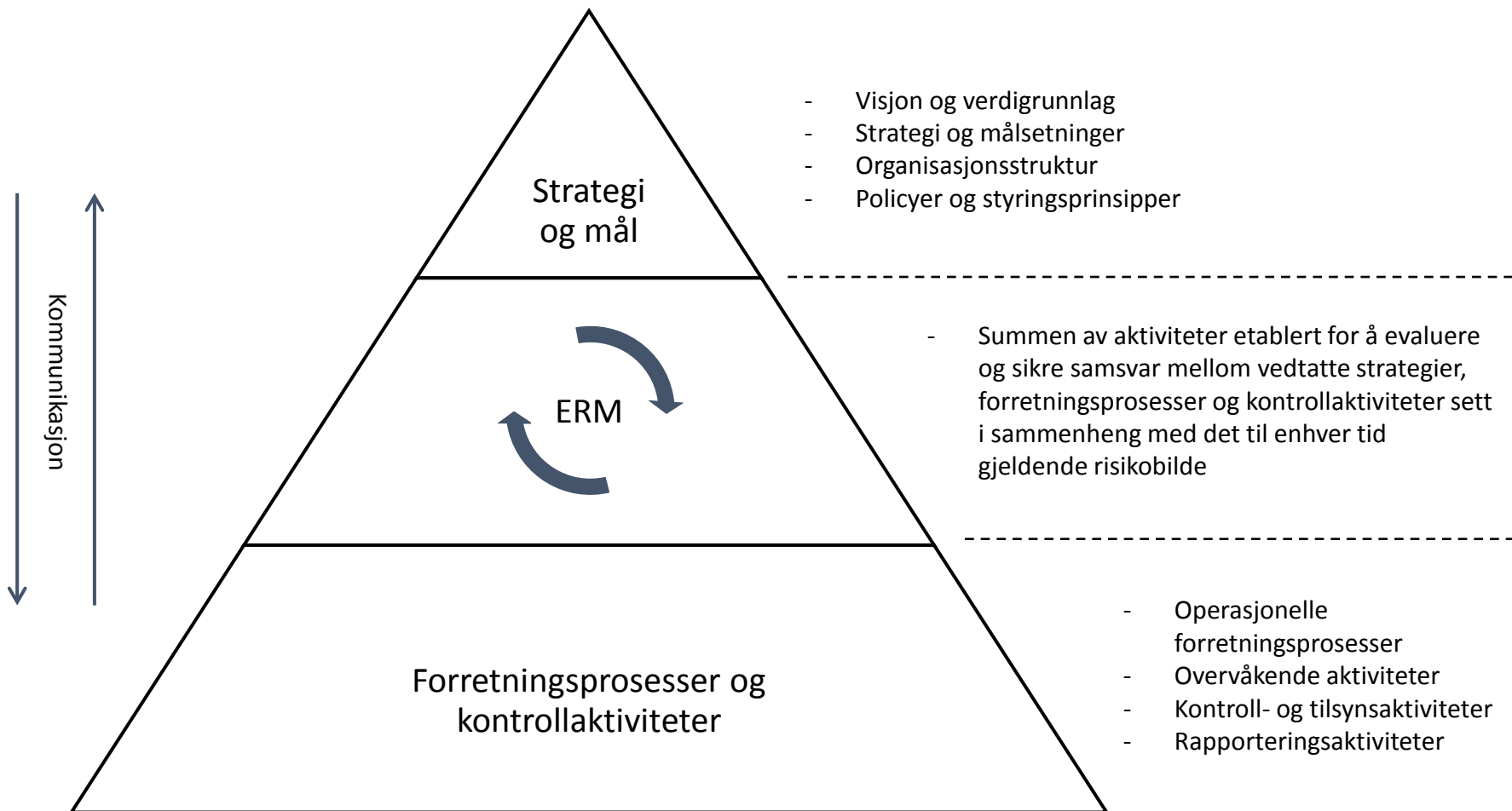
Oslo 12.10.17

Husk:

Risikoen er der – hvorfor ikke styre den?



Hva er helhetlig risikostyring?



The language of risk

- Risk represent both an upside as well as a downside!
- How to measure risk and communicate it to the board?
- The difference between risk reporting and risk management
- The importancy of having one language.



The power of a board

- A board need to know to involve!
- Never under estimate the power of the administration!
- How a good risk management can empower the board



Uavhengighet og integritet

Ansvar for risikostyringsarbeidet bør i størst mulig grad være uavhengig av den operative virksomheten.

Insentiver må støtte opp om uavhengighet og ikke inneholde resultatavhengige komponenter som svekker objektiviteten eller knytter egeninteresse til enkeltdeler i virksomheten.



A «GRC» Governance, Risk & Compliance or a Mirage?

- Do the governance structure allow a true Risk & Compliance with sufficient integrity?
- A true GRC with skilled people could be seen as strait jacket from the administration point of view!
- It is easier to implement the requirement than the intentions behind it!



Auditors looking for Risk in all the wrong Places, what about RM

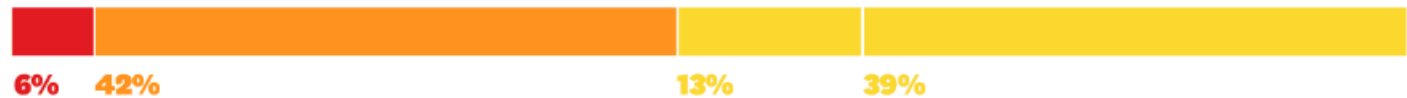
Looking for Risk in All the Wrong Places

Risk management has historically focused more than half its time on legal, compliance, and financial-reporting functions. That's starting to change as companies realize that most big hits to shareholder value come from strategic and operating risks.

THE PROPORTION OF SIGNIFICANT LOSSES IN MARKET VALUE CAUSED BY EACH TYPE OF RISK OVER THE PAST DECADE

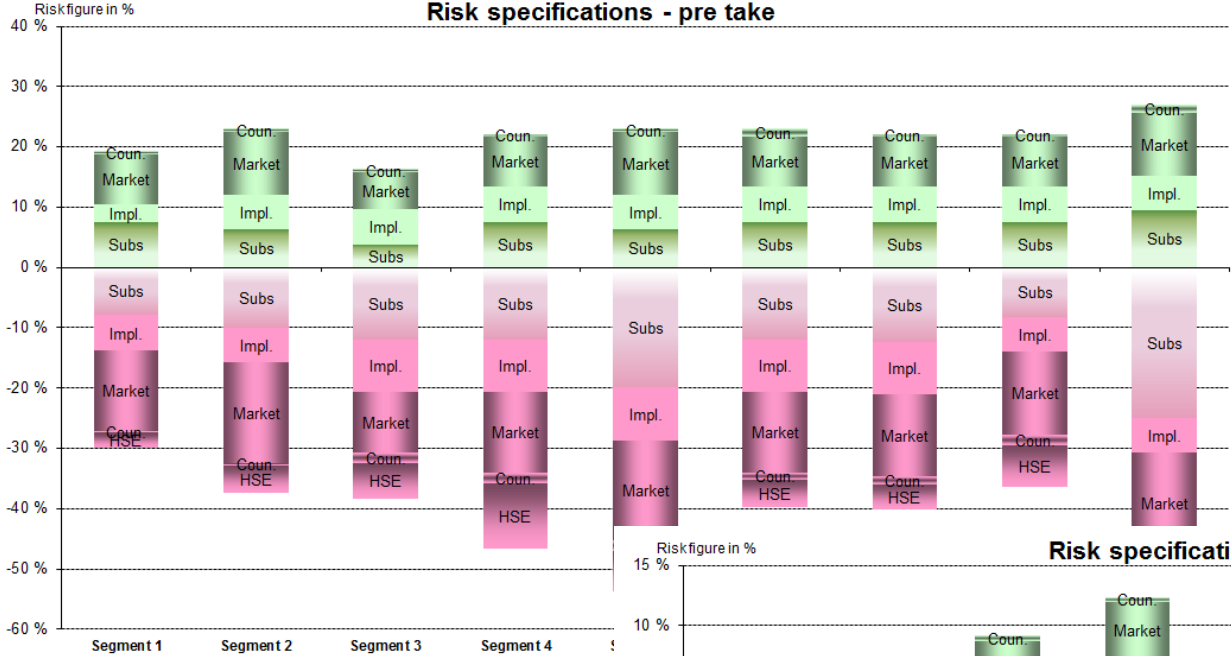


THE PROPORTION OF TIME AUDITORS SPENT ON EACH TYPE

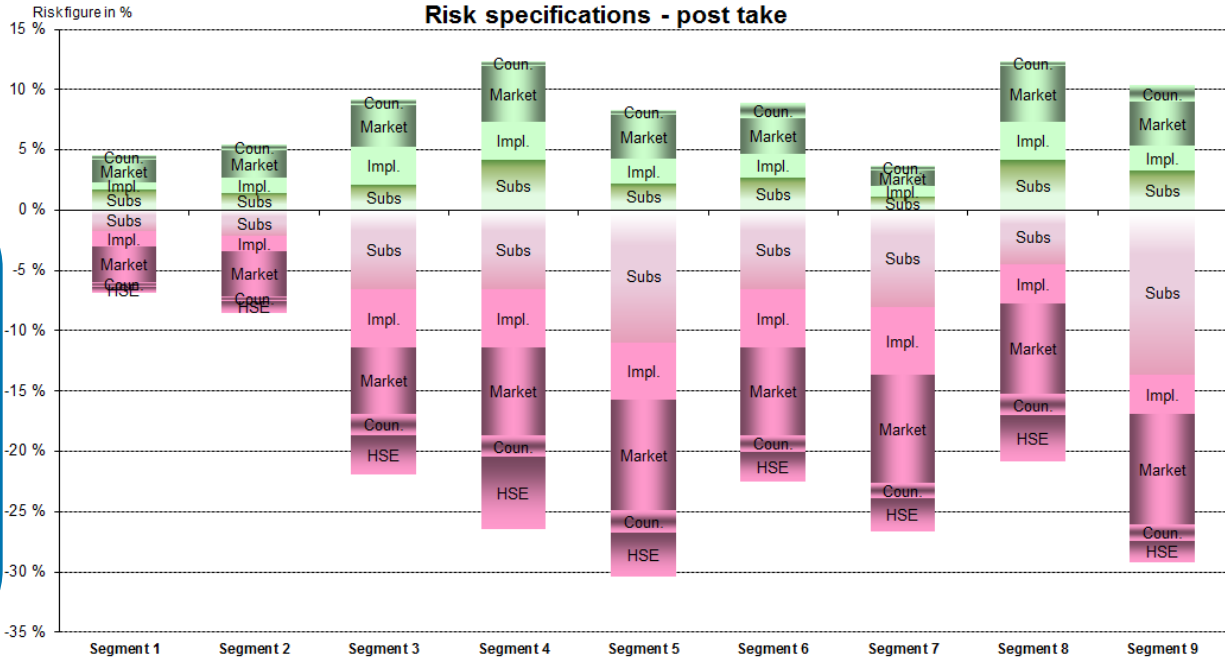


Strategy=Risk & Risk = Strategy

Risk specifications - pre take



Risk specifications - post take



- Bars shows stacked risk figures (not showing combined risk)
- Positive asymmetry is preferable
- Less variance in outcomes are preferable over high variance

Different strategies for the portfolio:

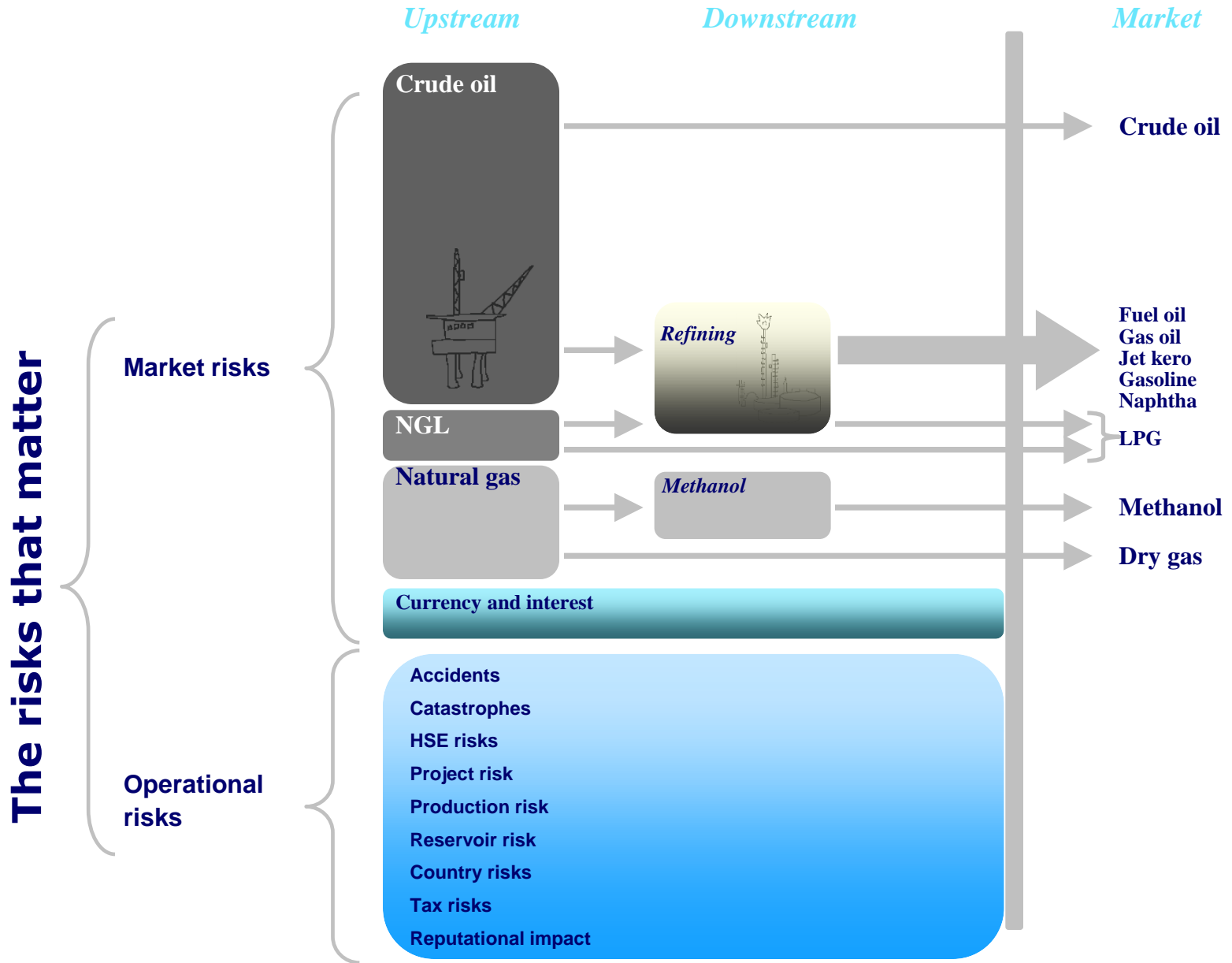
- An assessment of different strategic choices
- Goal
 - Compare risk across segments
 - Compare risk between strategic choices and scenarios

Where to start?

- Hva er det som genererer de største inntektene og kostnadene i selskapet, og hvilke risikoer kan påvirke opp- og ned side på disse?

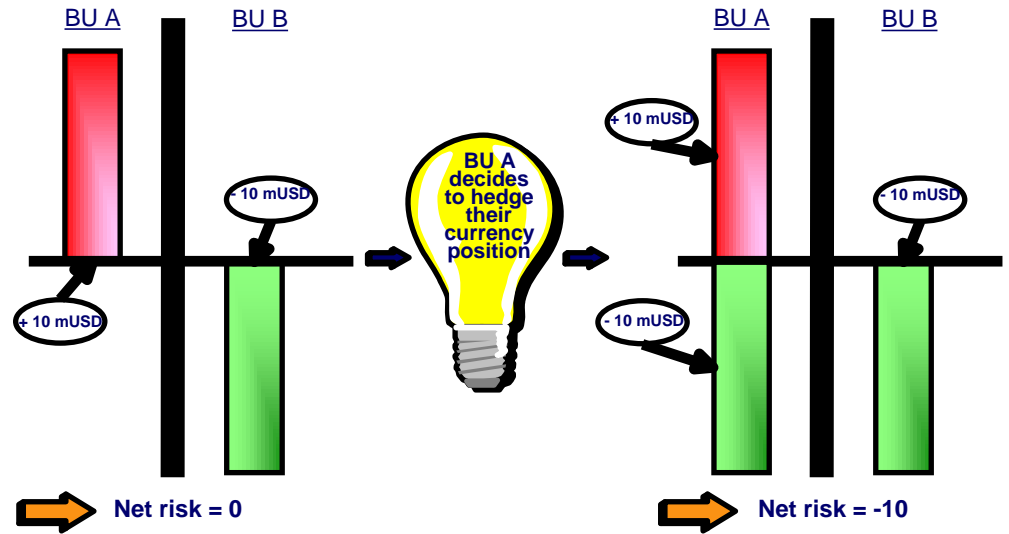


Statoil's value chain

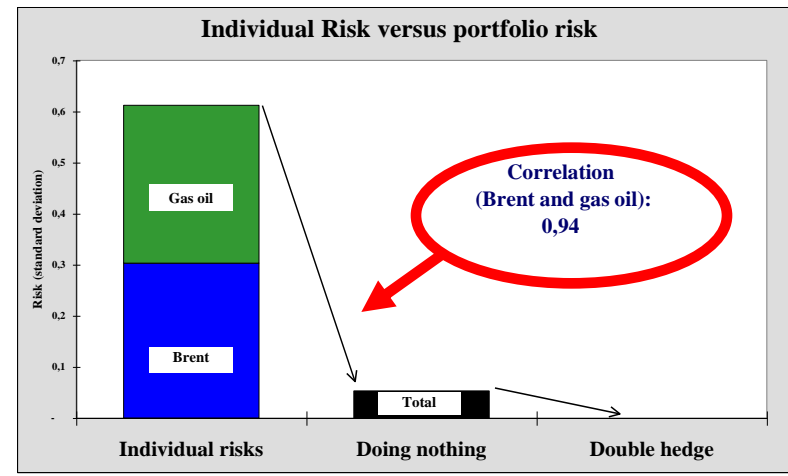
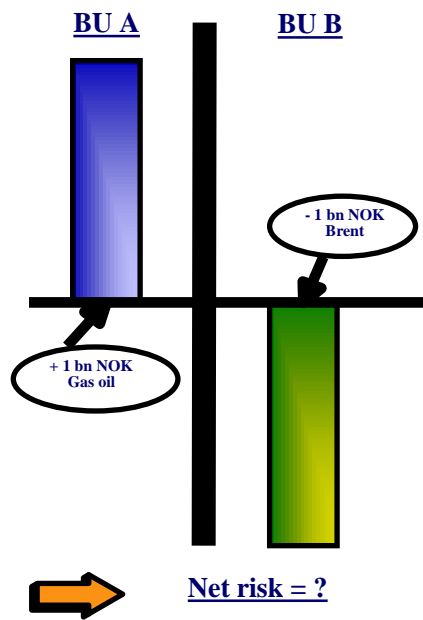


Why Enterprise Risk Management, some examples?

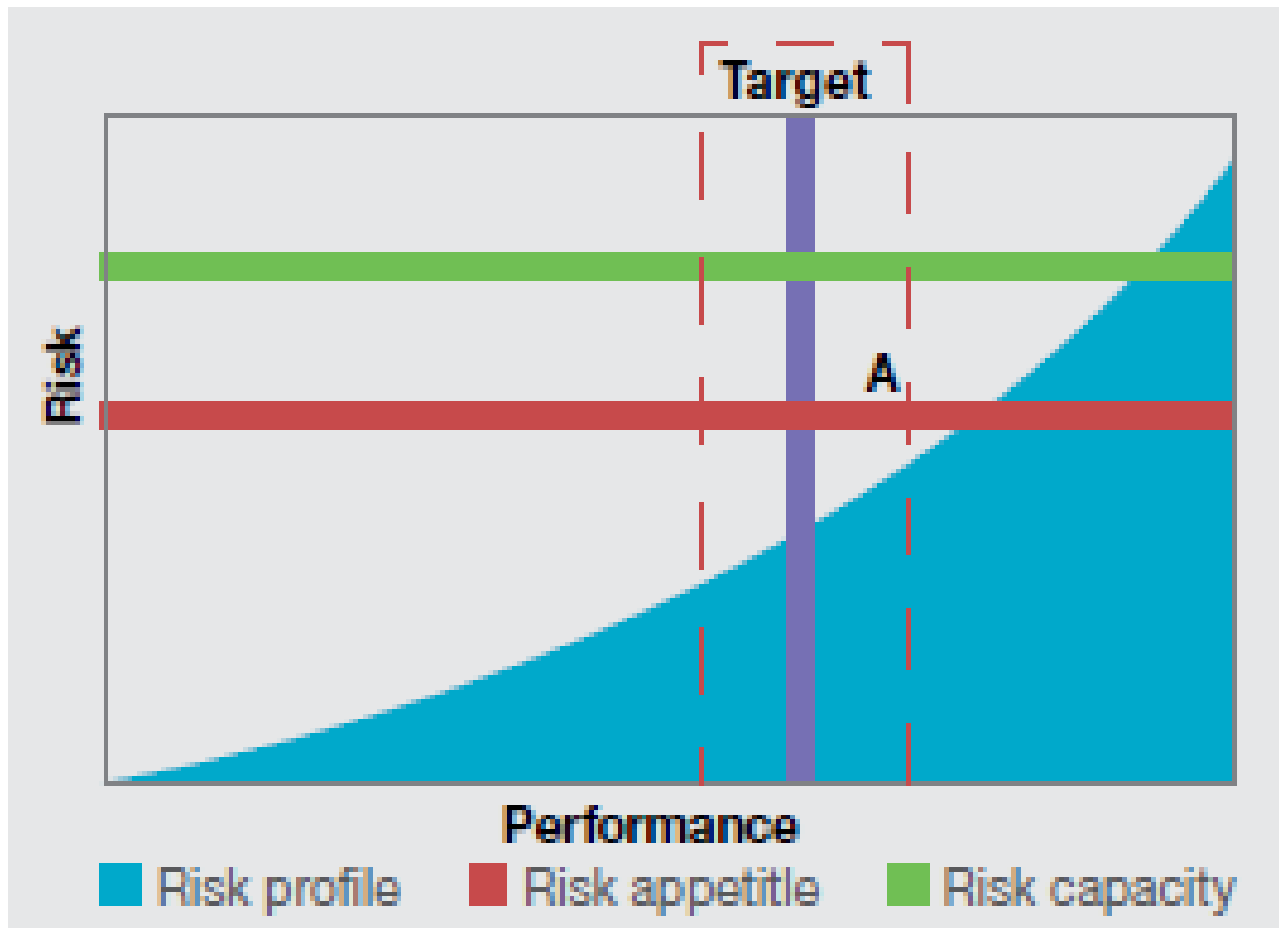
- Know what to manage
- Portfolio perspective
 - Avoiding suboptimization
 - Utilizing correlations



Expenses: 180.000 NOK
(10 mUSD * 6,00 * 30 points)



Risk appetite



Risk appetite

The level of uncertainty a corporate is willing- and able to take on to execute their activities and realize their long term goals.

Risk appetite is about both willingness and ability !

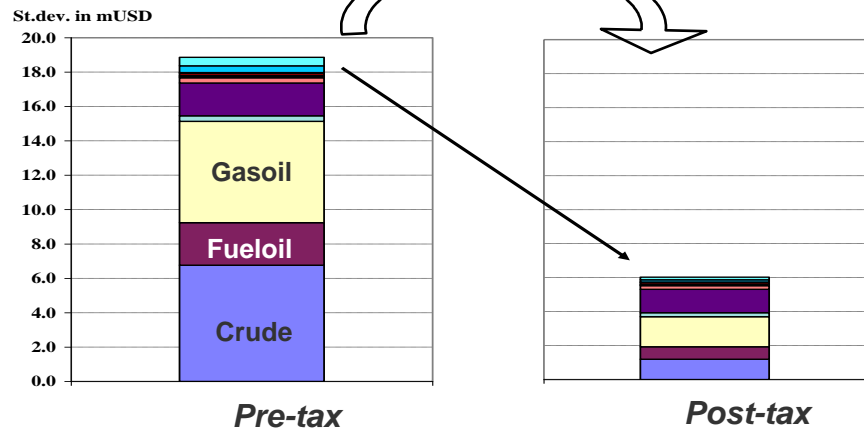
«*Risk gaps*» – huge gaps between risk and reward



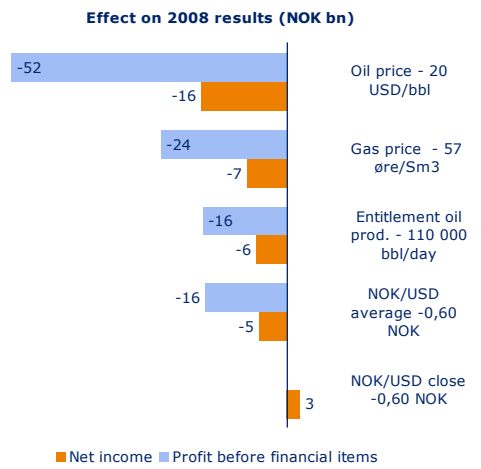
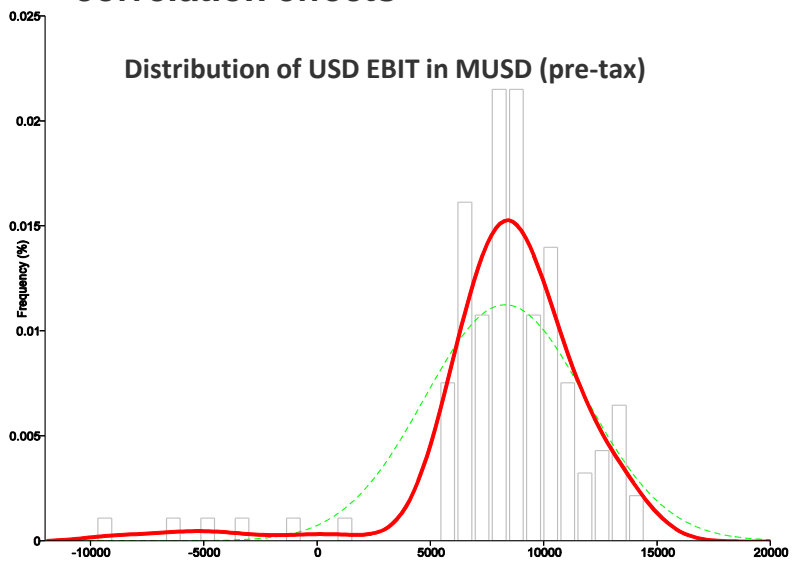
Market Risk (illustrative figures)

HSE

- Risk = Exposure x volatility (annualized)



- Total market risk post tax and including correlation effects



The Coso approach!

COSO

Committee of Sponsoring Organizations of the Treadway Commission

Enterprise Risk Management
Aligning Risk with Strategy and Performance

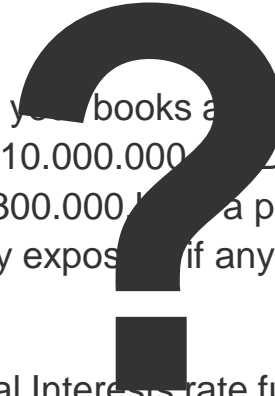


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Do we have risk professionals in RM



- 1 FX Swap : Buy spot 1.000.000.- USD, Selling NOK 8.000.000.- , reversing the deal 12 months later(pips are 350.000.-) a plain vanilla fx swap! What is the currency exposure if any?
- You have deposit in your books and earned interests, you have borrowed 10.000.000.- USD for 10 years, interests add up to 300.000.- USD a plain deposit! What is the currency exposure if any?
- You have a Financial Interests rate future, principal amount is 1.000.000.- initial margin is 1000.- USD. Variation margin changes from day to day based on market value. What is the exposure if any?



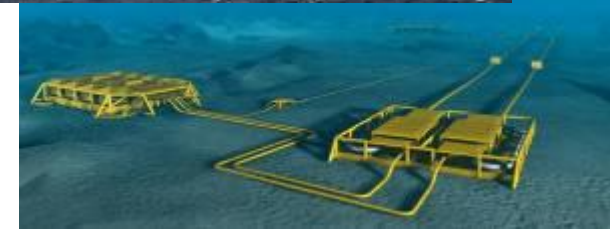
Do we understand operational risk ?

- Operational risk is more than HSE
- High Impact Low Probability events have to be acknowledged!
- Insurance is a risk adjusting tool, and Statoil has one of the biggest Captives in the world !

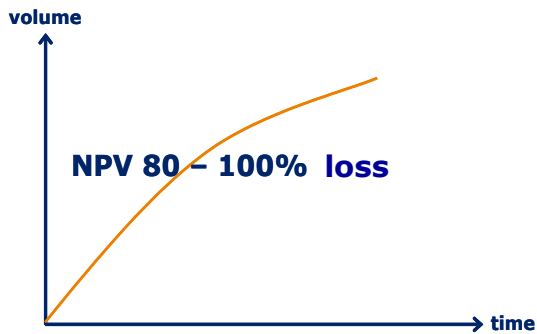




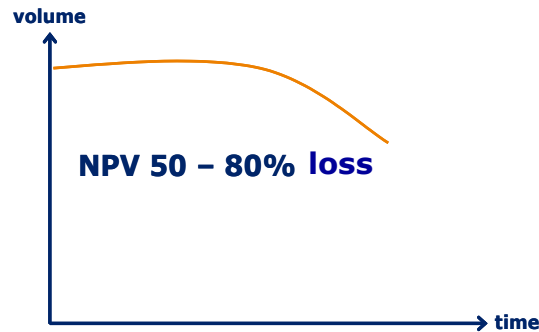
NPV calculation disruptions



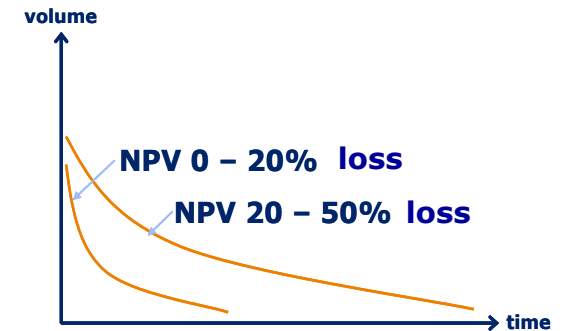
- Simplified approximation by calculation:
 - Damage delays production 12 months => all production profiles moved 1 yr out in time



increasing production



plateau

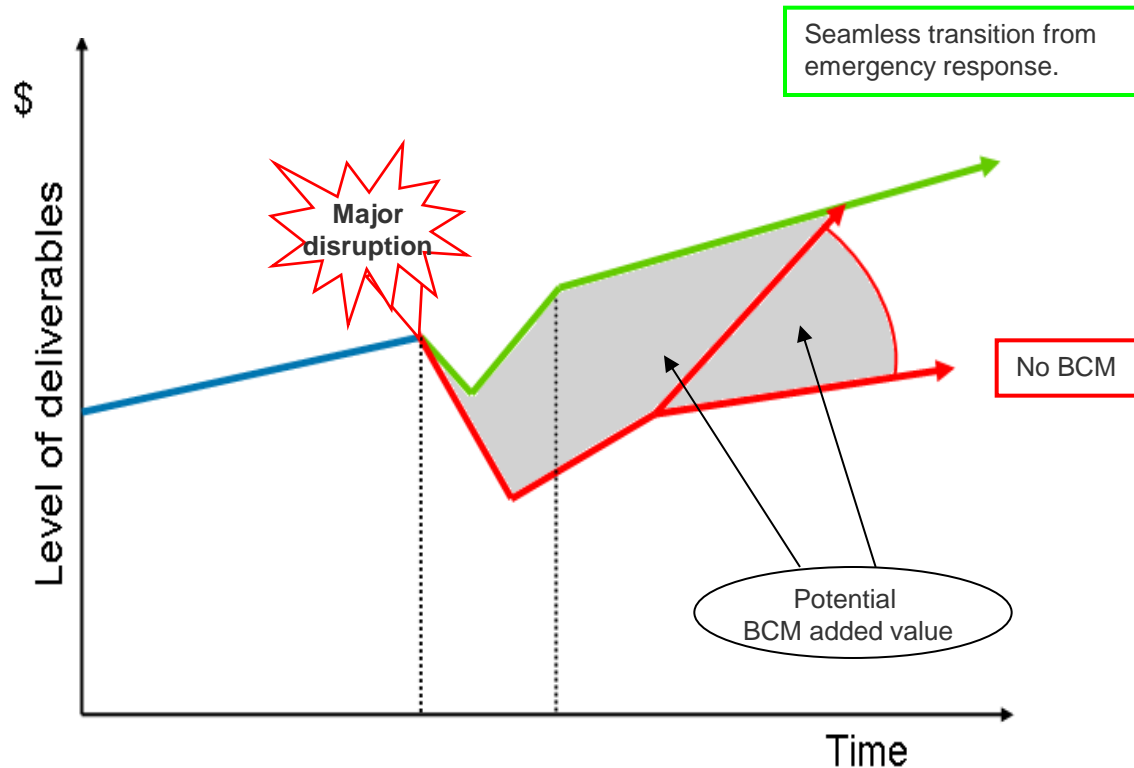


tail

- Insuring on a NPV-basis reduces the need for protection with approx. 50%

Business Continuity Management (BCM)

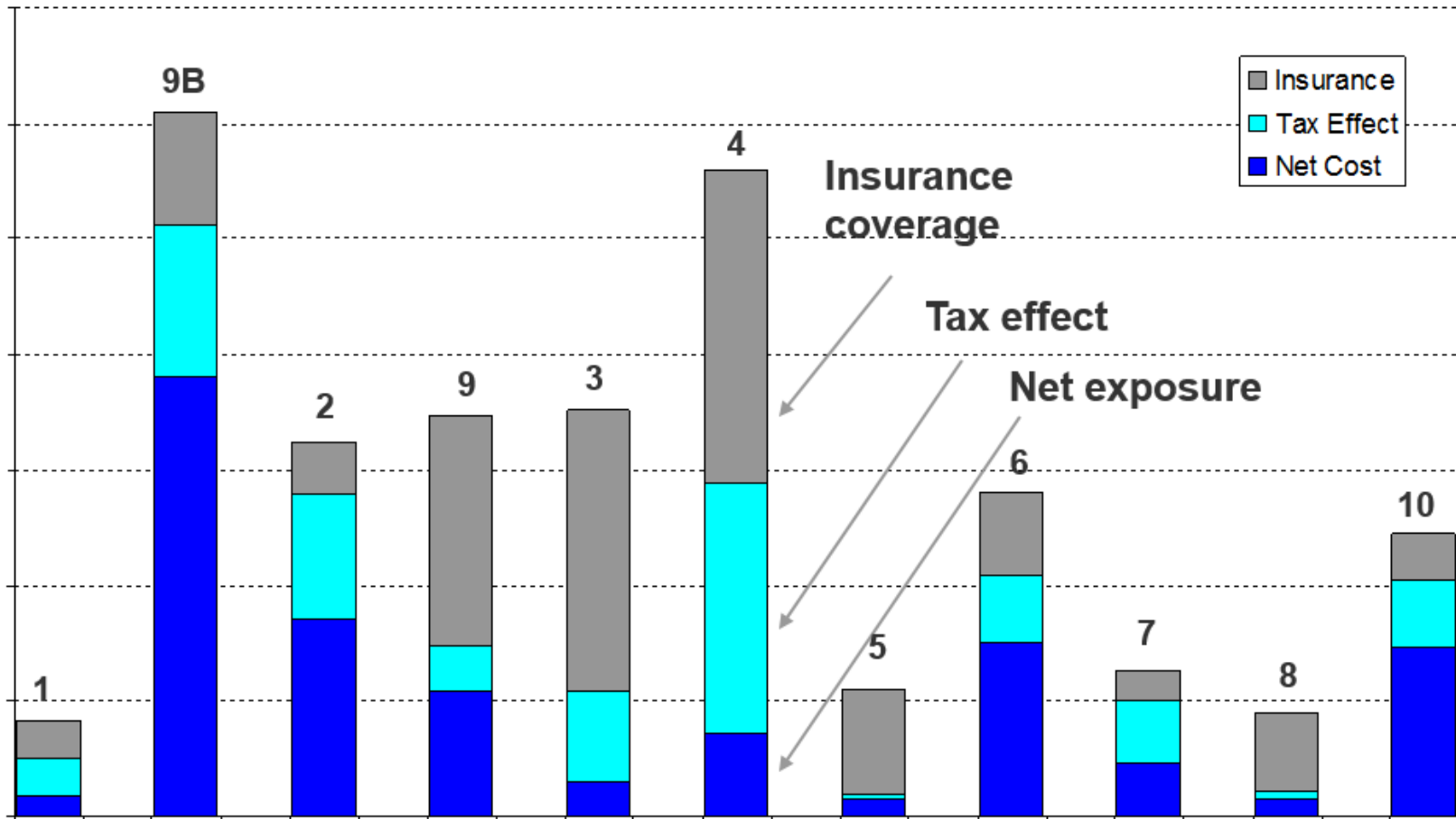
Risk based and top-down implementation



- Better prepared
- Reduced potential loss of income
- Optimised insurance

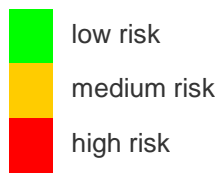
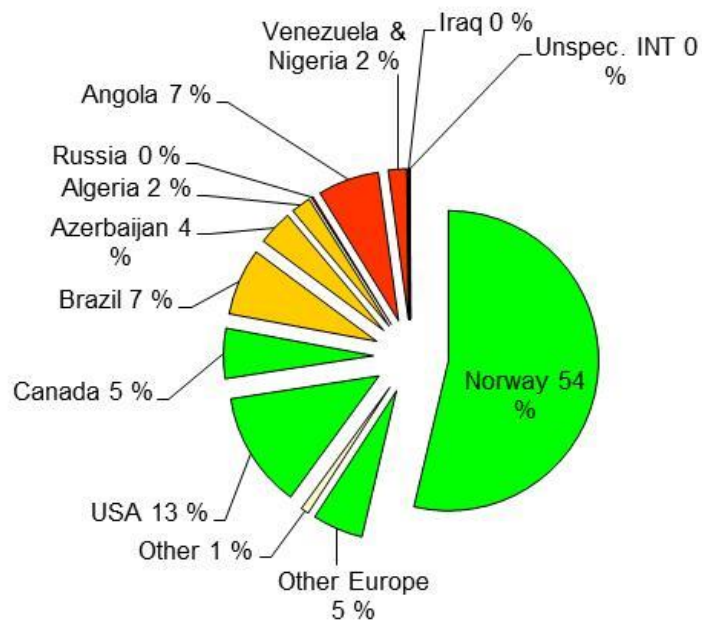
Catastrophic scenarios

Net exposure: After insurance and tax effects (illustrative numbers)

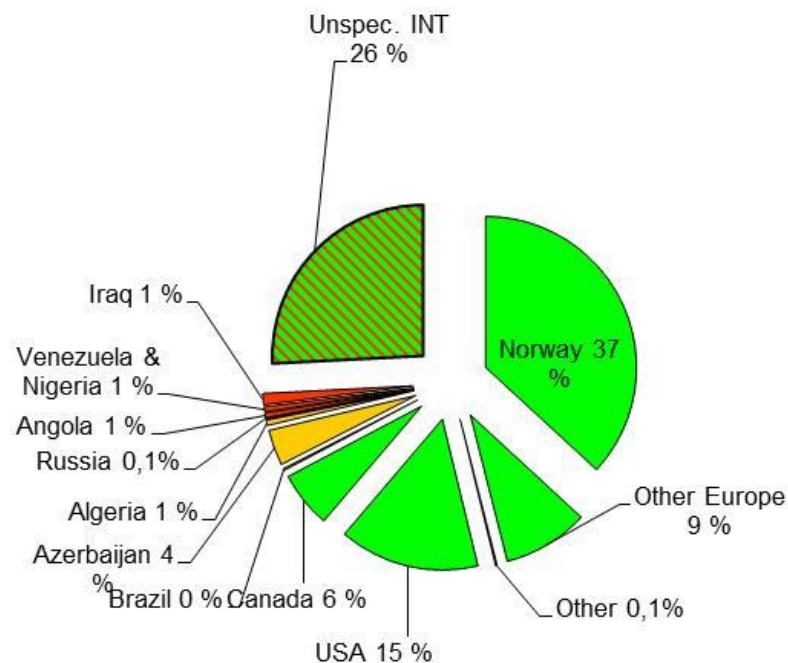
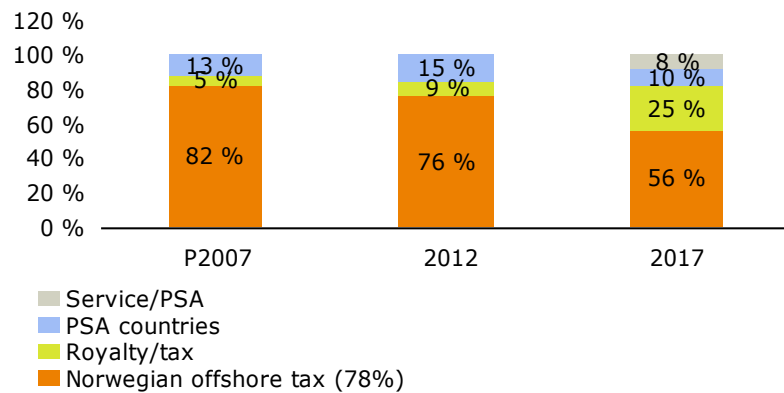


Country Risk development

Fixed assets distribution scenarios
(illustrative numbers)



Petroleum production and tax regimes
Scenario X1

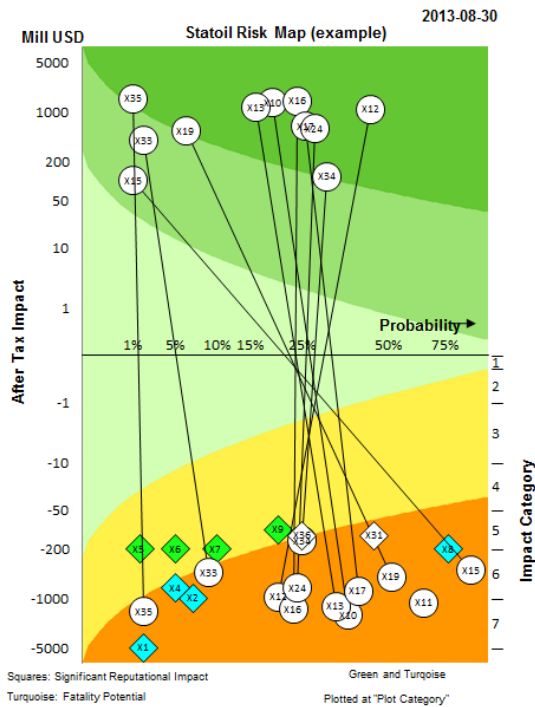


Do we have any risk gaps , and how do we communicate these?

- Make sure that the risk profile is balanced! (risk reward balance)
- If gaps, make sure that they are understood (upside- & downside- potential)
- Do the board understand the full risk picture?

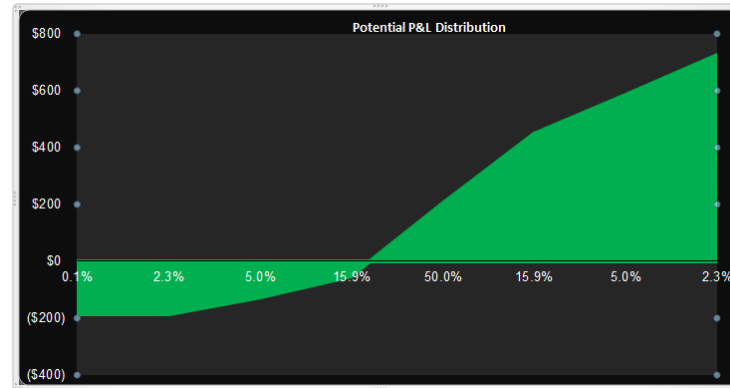


The assessment !



Upsides and downsides

What volatility means...



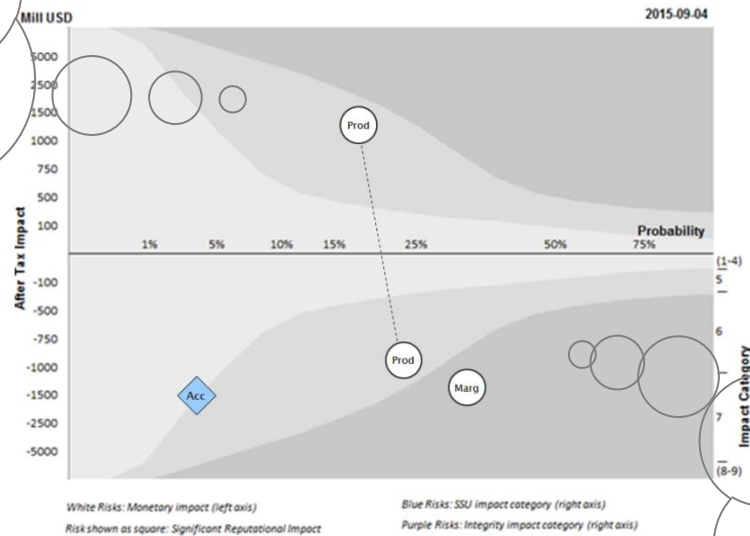
The chart tells us:

- Risk is asymmetric and skewed to the upside
- However, the probability of us achieving the +\$354 million valuation in the DGB memo is only 28%

Evaluation and decision

How do we manage upside risks?

- **Exploit**
- **Share/ transfer**
- **Accept**



How do we manage downside risks?

- **Mitigate**
- **Share/ Transfer**
- **Avoid**
- **Accept**

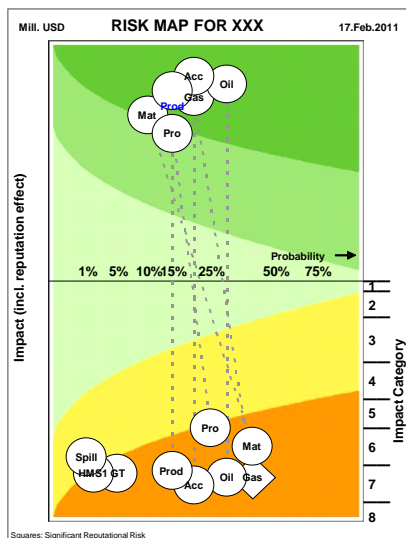
Corporate Risk Management – main products

- Corporate perspective
- Secretary function to the Corporate Risk Committee
- Process owner role of Risk Management
- Risk reporting

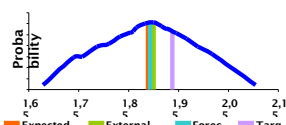
Detailed analyses

Total risk

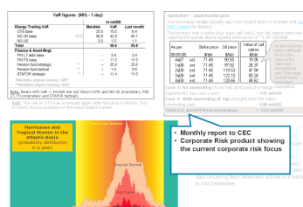
Risk adjusting actions



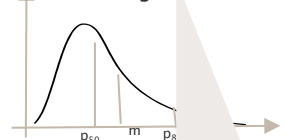
Equity production



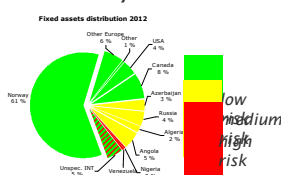
Risk communication



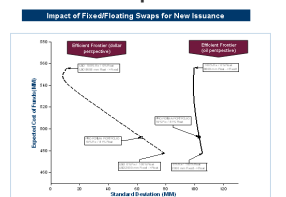
Trading Risk - VaR



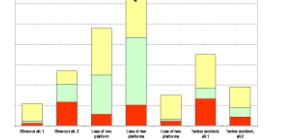
Country Risk



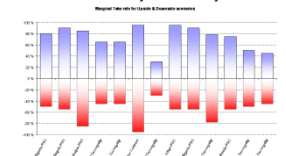
Debt optimization



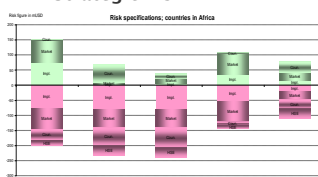
Catastrophic scenarios



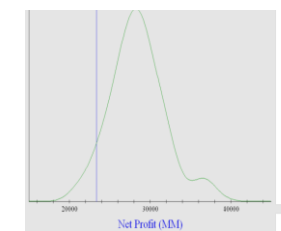
Tax asymmetry



Strategic Risk

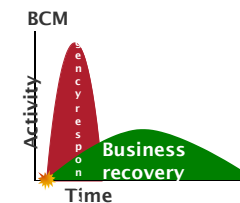
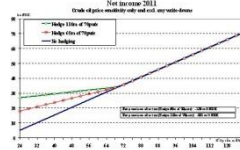


Total risk



Cash flow, Net Profit etc.

Corporate hedge planning



Corporate Insurance risk policy and strategy



Hva er egentlig compliance i dag?

- Compliance begrepet omfatter :



ODD FRANK.

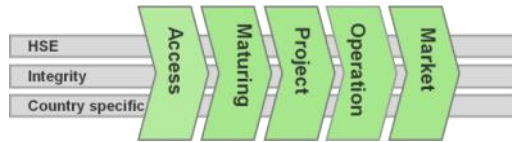
kommersielt og i selskaps

- Forstå og etterleve interne og
- Myndighets
- Etablere regler/rutiner for å unngå
brudd, sikre integritet(både
styrings modellen).

Risk management in Statoil

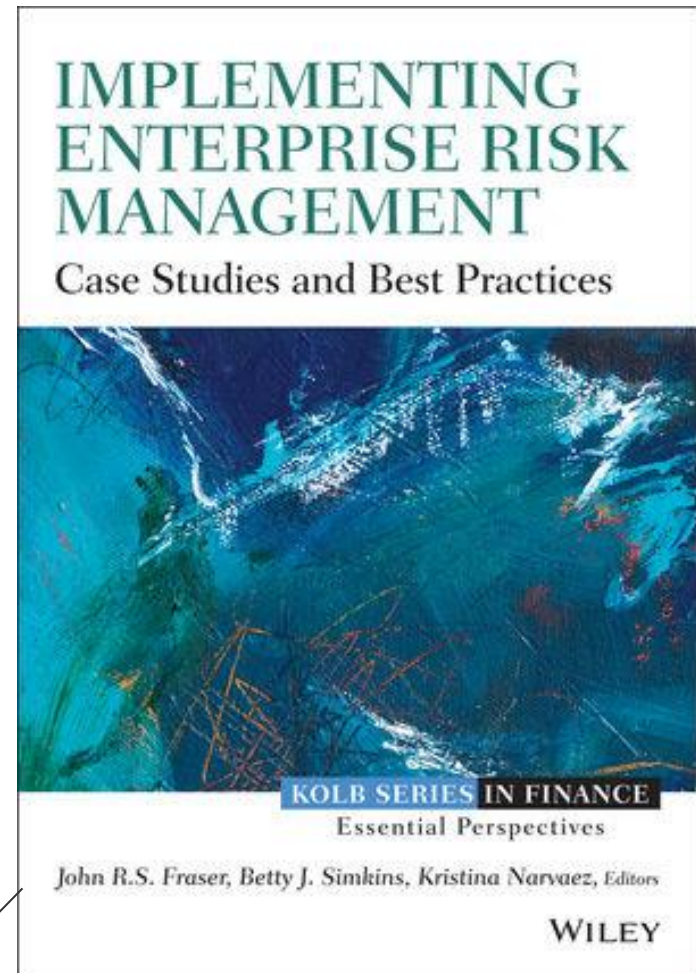
Summing up

- Risk is originated from the activities in the value chain



- In Enterprise Risk management risk is seen in relation to Principal Objectives
 - Create sustainable value
 - Avoid incidents
- Risk management as an Integrated part of management in general

Chapter 4
Case: Statoil



Veiledere for styre og ledelse

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