



P1.T1. Foundations of Risk

Chapter 2. How Do Firms Manage
Financial Risk?





How Do Firms Manage Financial Risk?

- Risk appetite
- Mapping risks
- Strategies: accept (aka retain), avoid, mitigate, transfer (includes hedging)
- Hedging: advantages & disadvantages
- Risk Transfer toolbox

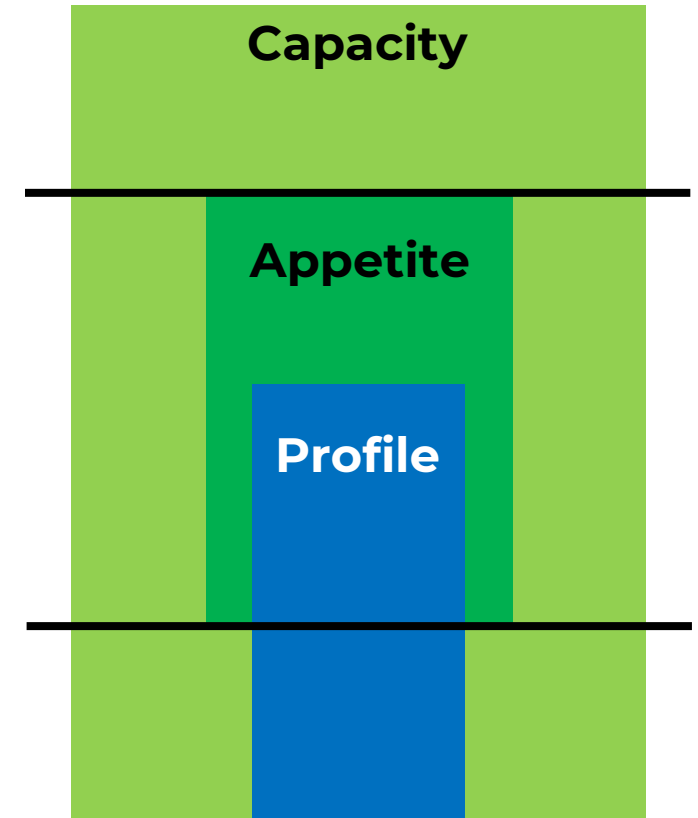
What Is Risk Appetite?

Risk appetite is how much (i.e., the level or degree) and which types of risk the firm will accept.

- Should align with a firm's strategy and goals
- Likely to be expressed in a Risk Appetite Statement that fosters a shared view of risk and reward across the firm
- Includes a detailed risk policy, business-specific risk statements, and the framework of risk limits
- Should be consistent with a firm's expertise
- Should be constantly monitored and updated as required

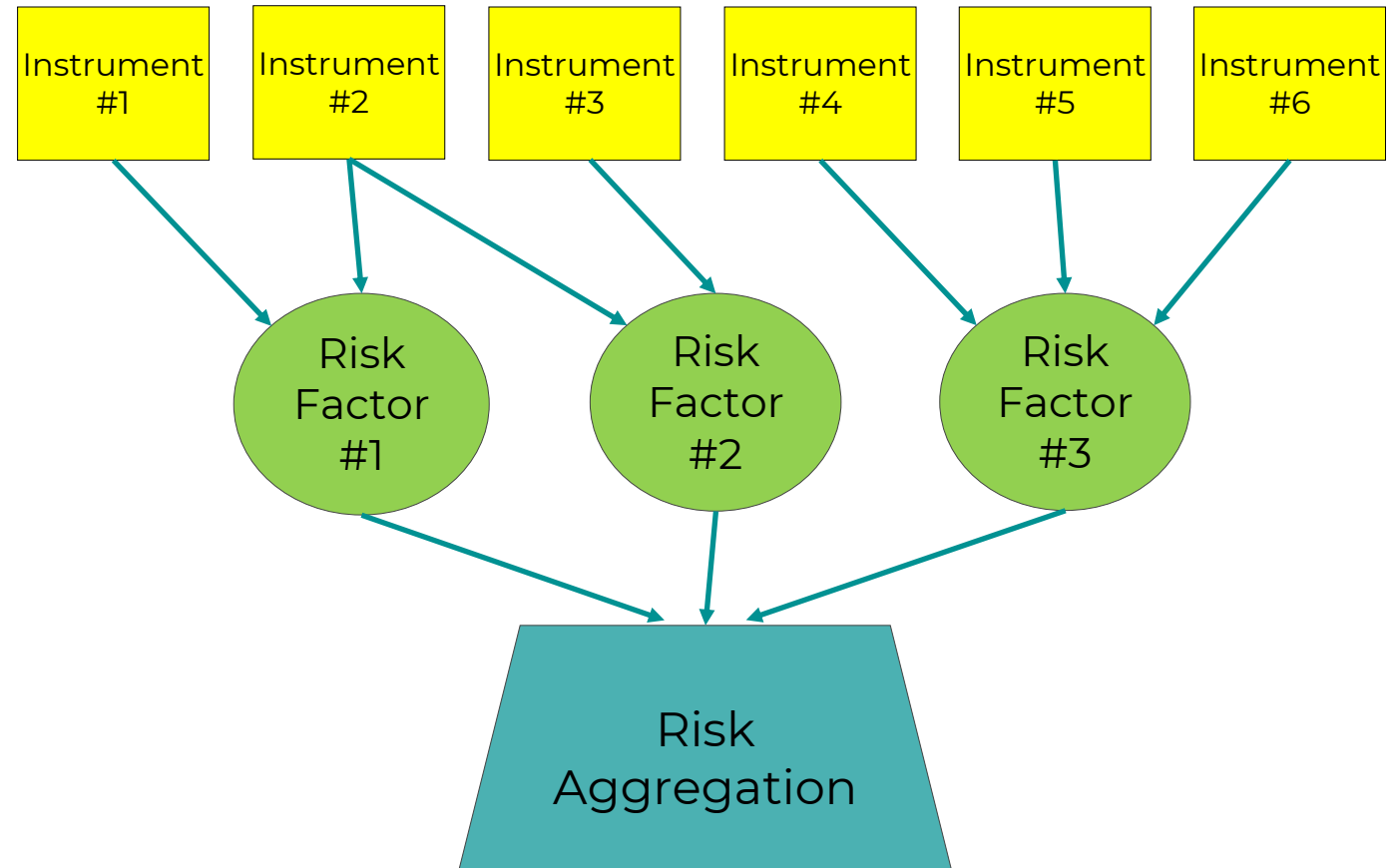
**Upper
Limit**

**Lower
Limit**



Mapping Risks

- The aim is to simplify the risk measurement process by capturing the vast majority of exposure with a manageable number of factors
- A (VaR) mapping exercise "maps" a complex set of exposures to a limited number of primitive factors





Risk Appetite Strategies

FIRST: Define critical exposures and prioritize

SECOND: What are costs and benefits?

Accept or Retain

Can't avoid all risks. Accept some risks in their entirety or some segment of the loss distribution.

Avoid

Firms might avoid "unnatural" risks. Easiest avoidance tactic is to stop an activity.

Transfer

Insurance and derivatives are common means of risk transfer.

Mitigate

Collateral is risk mitigation. A firm can also mitigate via operational means such as safer production processes.



Hedging: Advantages & Disadvantages



Cons

- May distract management
- Requires special talent, knowledge, and/or skills
- Often requires specific data
- Implies additional compliance costs; i.e., disclosure, accounting
- Trade-off between economics & accounting: reduced cash flow volatility might increase earnings



Pros

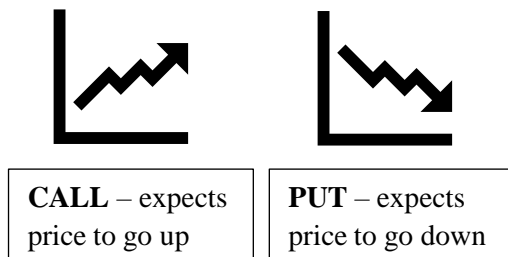
- Liberates management to focus on economic performance
- Reduce weighted average cost of capital (WACC)
- Tax benefits - less volatile earnings may mean lower total taxes
- Can stabilize its costs and implied price scheme
- Reduce chance of default

Risk Transfer Toolbox



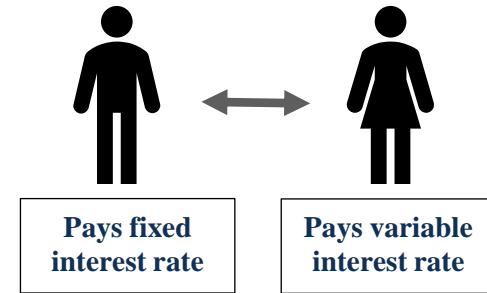
FORWARD - Exchange an asset at a pre-agreed price at some future date.

FUTURE - An exchange-listed forward.



CALL – Right to buy at strike price.

PUT – Right to sell at strike price.



SWAP - Swap cash flows from two different positions until (or at) maturity.

SWAPTION - Right, not obligation, to enter a swap at some future date at pre-agreed terms.



EXOTIC OPTION - Various options beyond the standard puts and calls. E.g., Asian options, basket options



Summary

- A firm's risk appetite statement should provide the firm with guidance at board level and at operational levels
- A risk mapping exercise allows the firm to aggregate risk by mapping exposure to a limited number of primitive factors
- A firm must decide whether to retain, avoid, mitigate or transfer risk
- A variety of hedging instruments are available if a firm opts to transfer risk