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# Capital Management for Conglomerates

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# Agenda

- Managing capital in conglomerates
- Measures for individual types of company
  - Banks
  - Life insurers
  - General insurers
  - Funds managers
- Using risk based capital across conglomerates

# Managing capital in conglomerates

- Financial Services companies have allocated capital using various methods:
  - Banks have used value at risk (VaR) approaches
  - Insurance companies have historically focused on asset liability modelling (ALM), or more generally, Dynamic Financial Analysis (DFA)
  - Funds Managers have generally used regulatory requirements
- In essence these are approximating Risk Based Capital (RBC), concentrating on the key risks for each entity

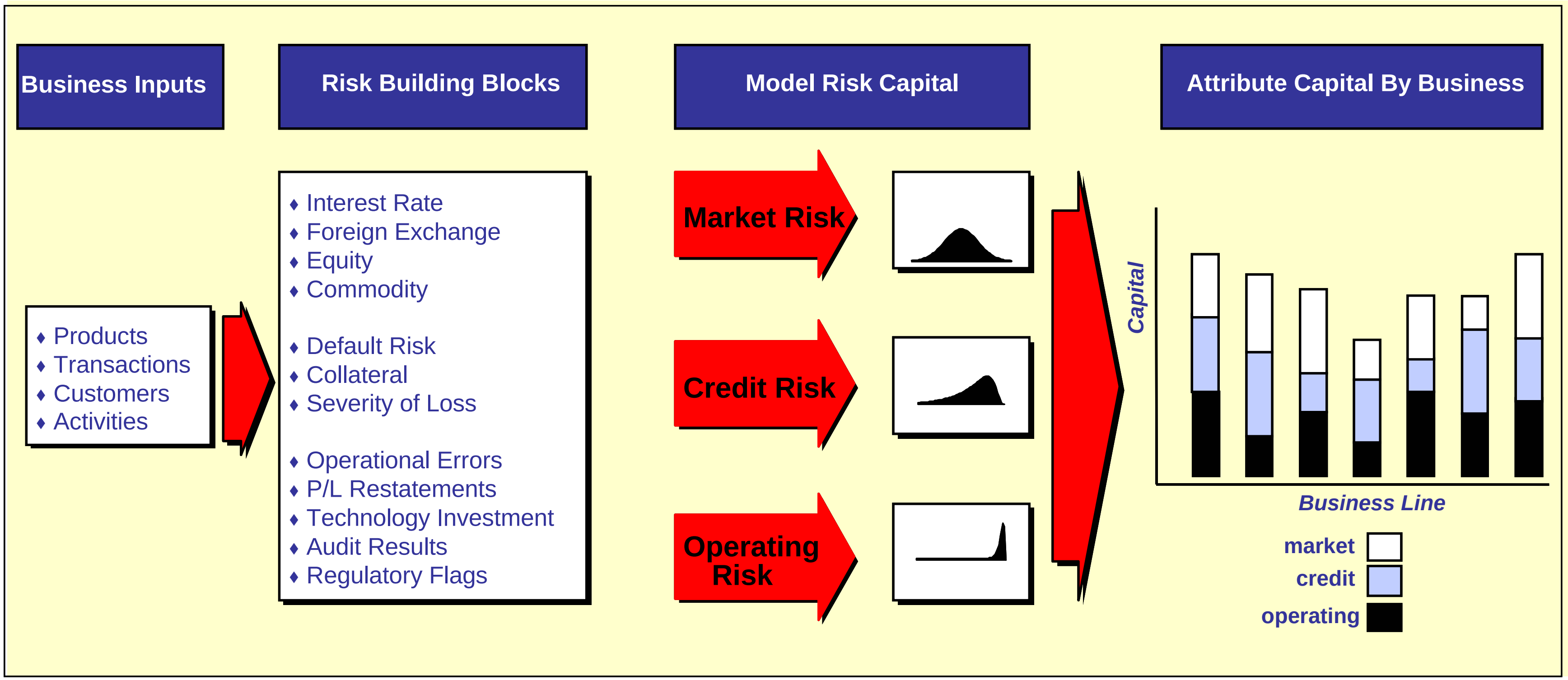
**To manage capital in conglomerates, these methods need to be made consistent, and combined**

# Key questions for all entities

- Key questions to be answered for all entities:
  - Why is capital being allocated?
    - To determine total capital required OR
    - To determine relative performance between products and companies
  - What is the time horizon for reviewing risks?
  - What capital is being allocated?
    - Including or excluding goodwill

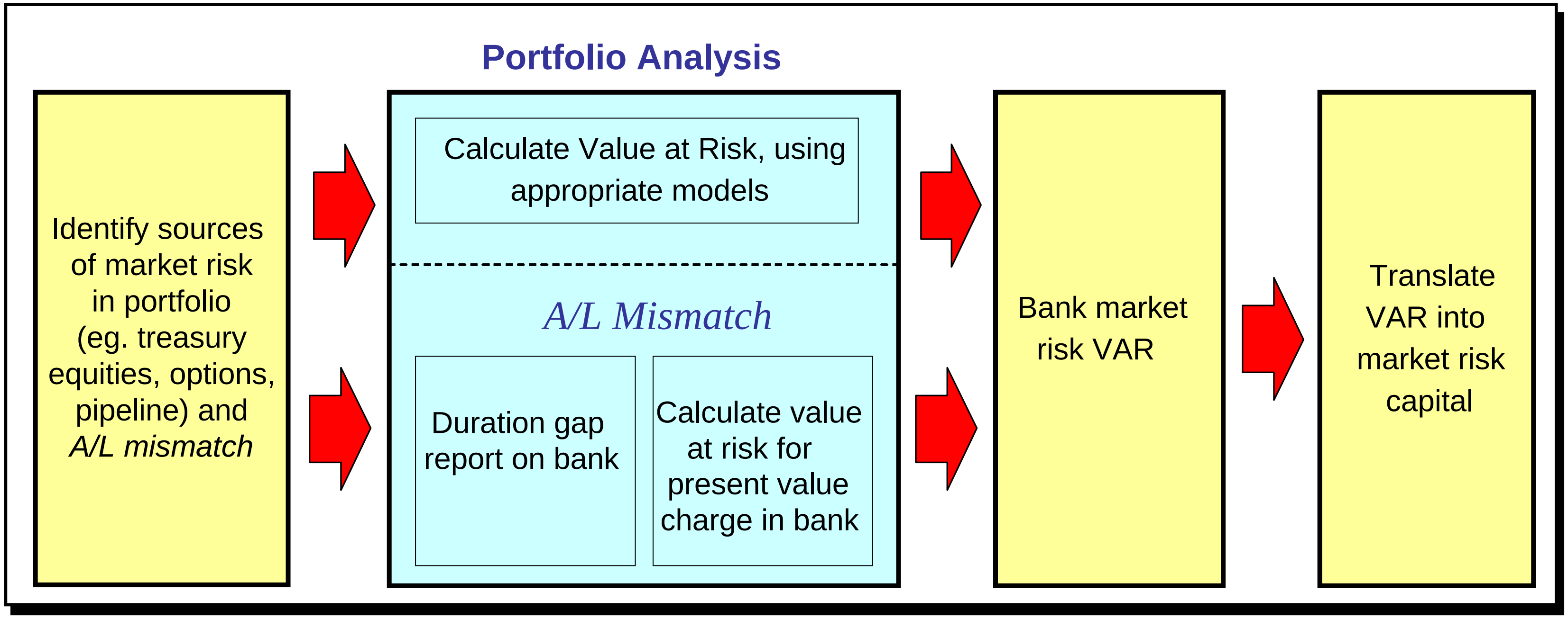
The rest of this presentation assumes:
- Capital allocation for relative performance
- A one year time horizon
- Capital allocated excludes all goodwill generated

# Banks – Building Risk Based Capital



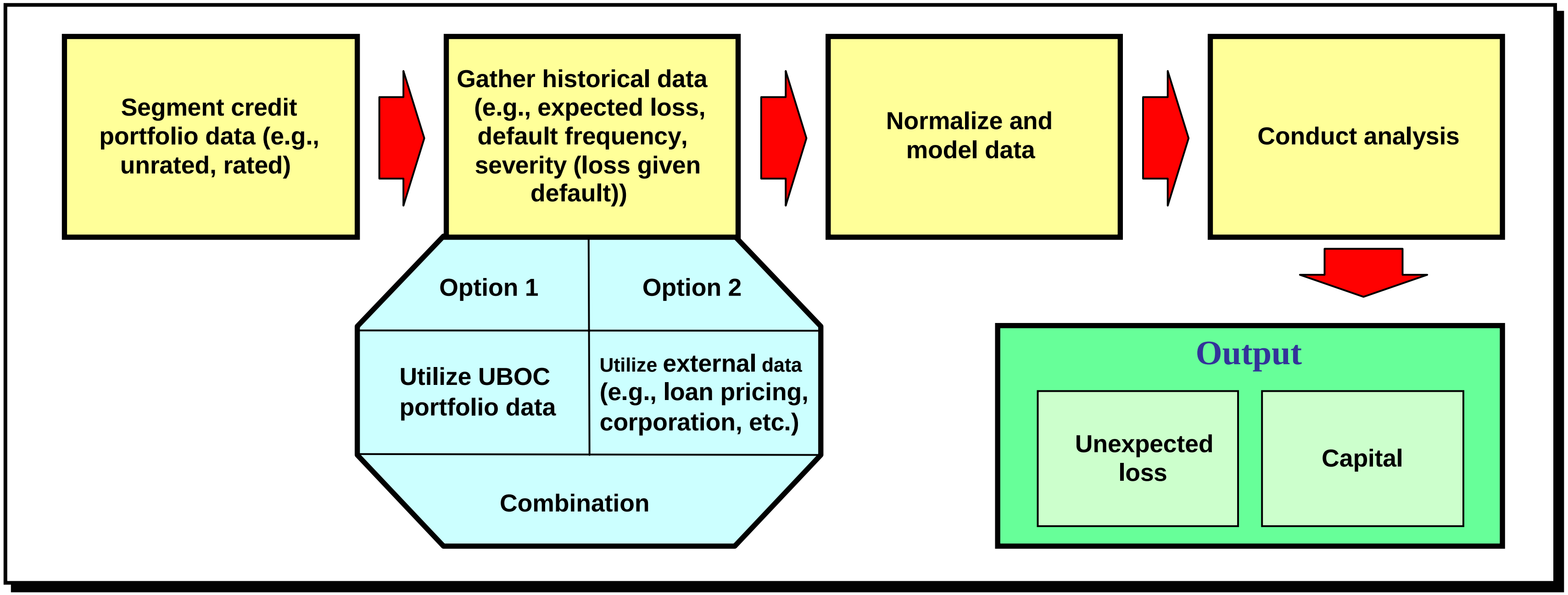

All three risks defined above are modelled separately, correlated within risks and then combined

# Market Risk



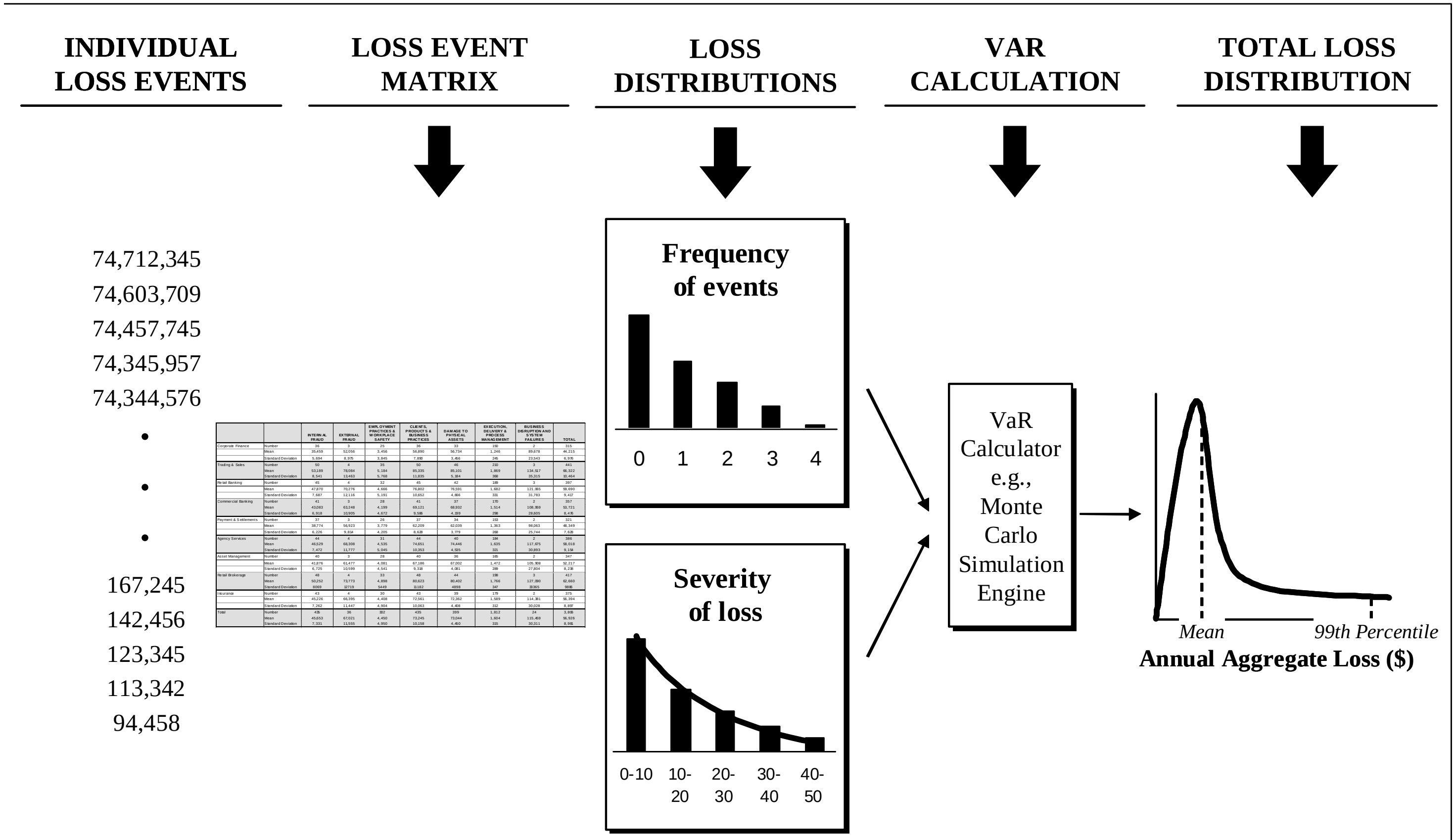

Market risk frameworks within banks are generally very sophisticated, with allowances for interactions between complex positions on different instruments

# Credit Risk



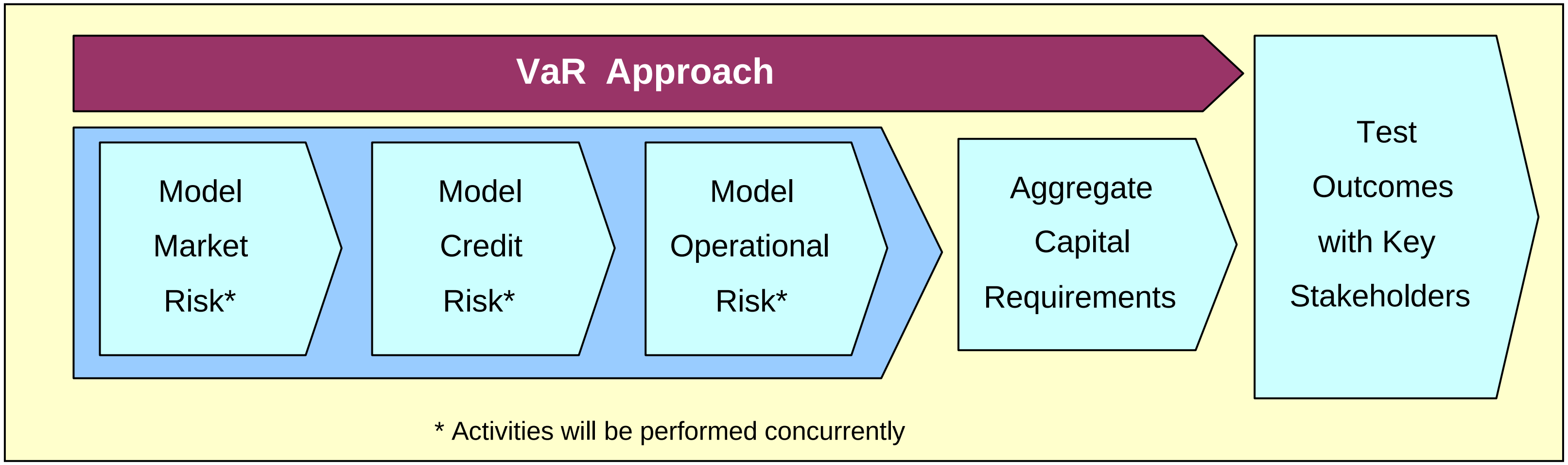

Credit risk is also reviewed using a value at risk framework, but the time horizon is generally longer than for market risk, as holding periods are longer for these risks

# Operational Risk




**Operational risk modelling is much newer than the other two risks, as data is hard to find**

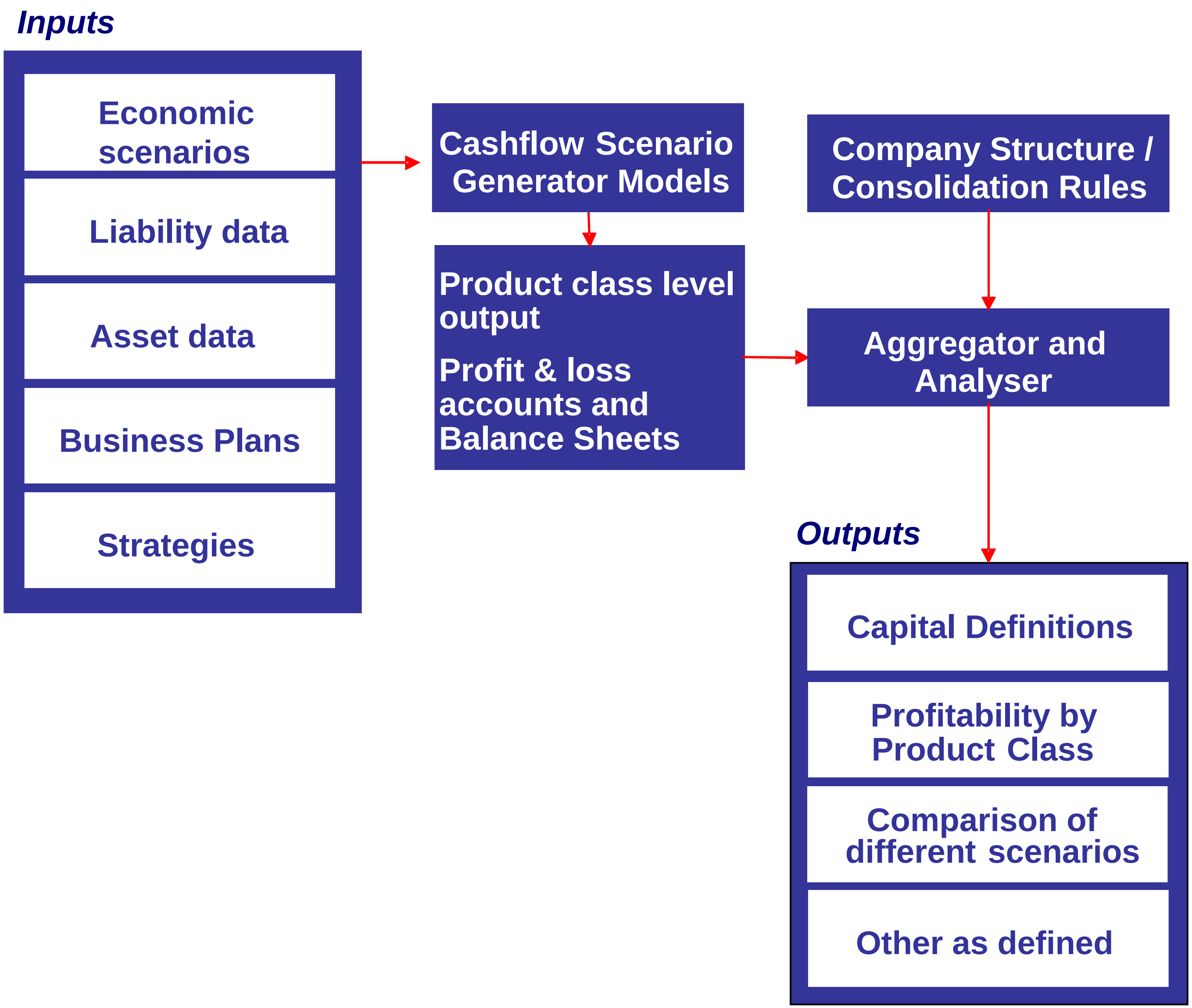
# Combining risks into capital




Combining the main risk types into capital involves:

- Determining a holding period
- Understanding correlations between risks and products
- Determining risk levels

# Insurers – Dynamic Financial Analysis



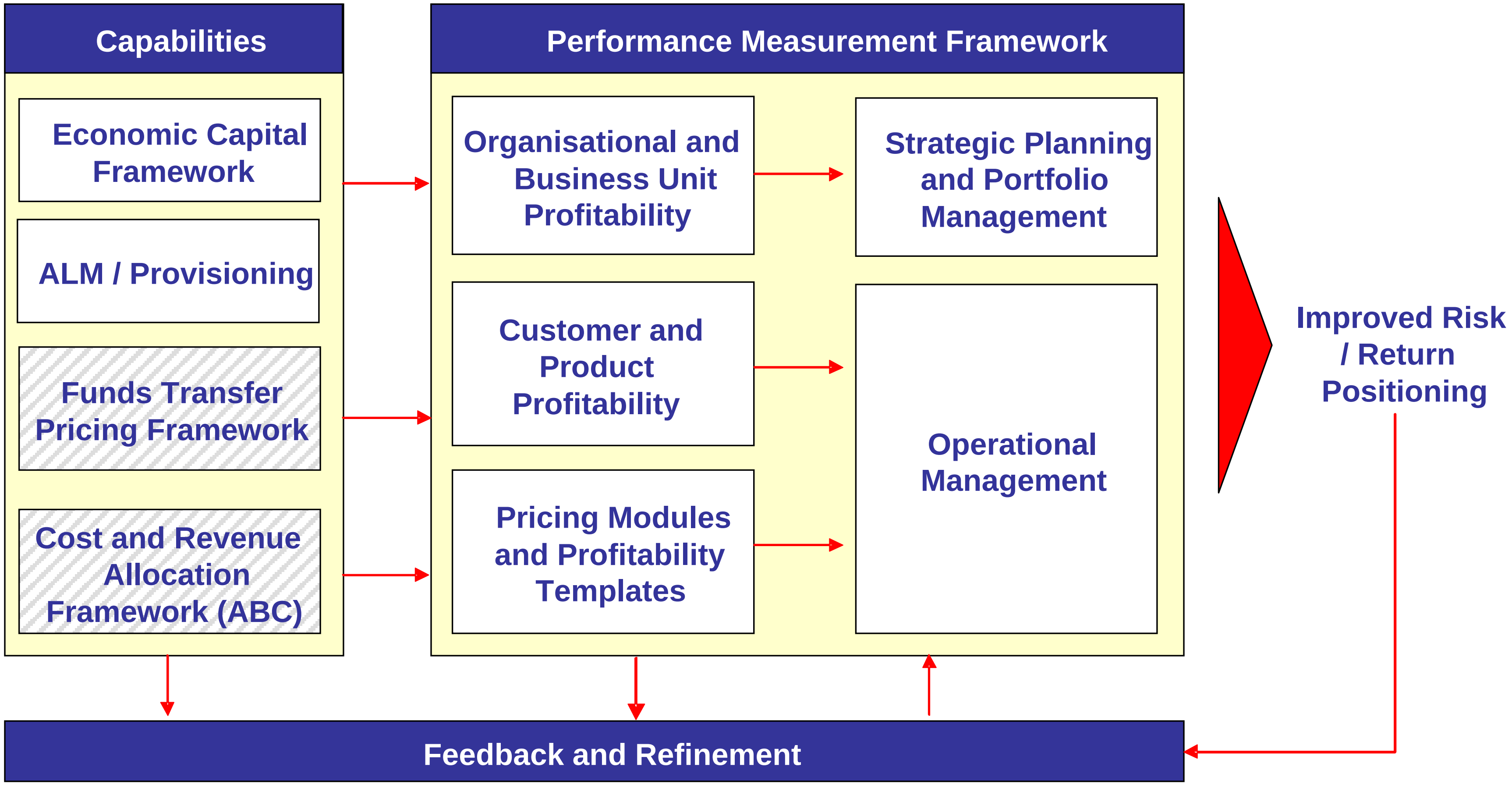
# Risk based capital

- Both banks and insurers are aiming for risk based capital
- Risk Based capital allocates capital based on the relative risks borne by different businesses
- The superficial differences in approaches are mainly due to the major risks being different between insurance companies and banks
- To allocate capital for conglomerates, we need to go back to basics

# Risk Based capital framework

- Choose the products for allocation of capital (eg mortgages, risk insurance)
- Determine a time frame for review of risks
- Develop a model to capture all sources of volatility of profits
- Allocate capital based on total levels of volatility of each product set
- Allow for risk sharing between products (using correlations between product sets
- Scale capital allocated to the total level being allocated

# Capital Management feeds Performance Measurement



# Discussion

- Is Risk based capital the best measure?
- What is the right duration of the risk?
- What are the key areas of volatility?
- How do you take into account correlations?
- How should goodwill be taken into account?

# References

- Managing Bank Capital — Chris Matten
- A Global Framework for Insurer Solvency Party Assessment Working — IAA Insurer Solvency Assessment
- Target Surplus – Developing an Industry Approach — Kent Griffin & Robert Baillie