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# Beyond actuarial: How to build a bridge

Paul O'Connor  
Azimuth Insights



# Citigroup building



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# What we're going to cover

- Where reserve “uncertainty” comes from
- Where in the business it can cause an impact
- How we can try to recognise and defend against the impacts of reserve uncertainty

All very qualitative - we are **not** going to cover:

- Quantification of reserve uncertainty



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# The origins of uncertainty

ertise  
ponsorship  
Thought leadership  
Progress  
Community  
Sessional Meetings  
Education  
Working parties  
Volunteering  
Research  
Shaping the future  
Networking  
Professional support  
Enterprise and risk  
Learned society  
Opportunity  
International profile  
Journals  
Support

# The origins of uncertainty

Policy designed



## Example

Unexpected coverage  
(ie “woolly contract wording”)



External



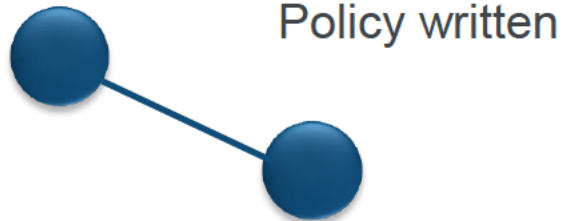
Internal



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# The origins of uncertainty

Policy designed



**Example**  
Changes in underwriting

 External

 Internal



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# The origins of uncertainty

Policy designed

Policy written

Event occurs

**Example**  
Inflationary shocks



External



Internal



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# The origins of uncertainty?

Policy designed

Policy written

Event occurs

Claim reported

**Example**  
Publicity impacts  
("nosy neighbour")



External



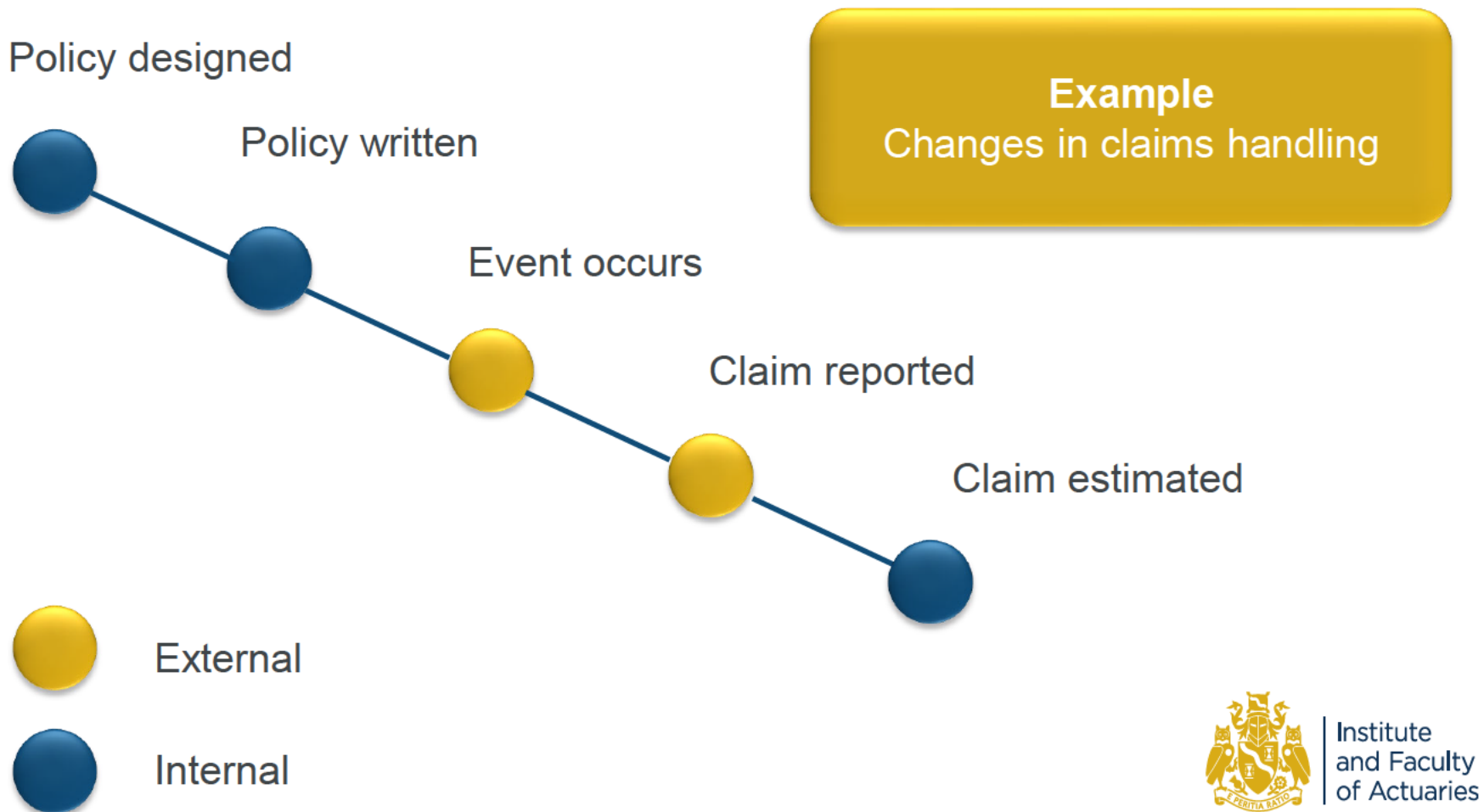
Internal



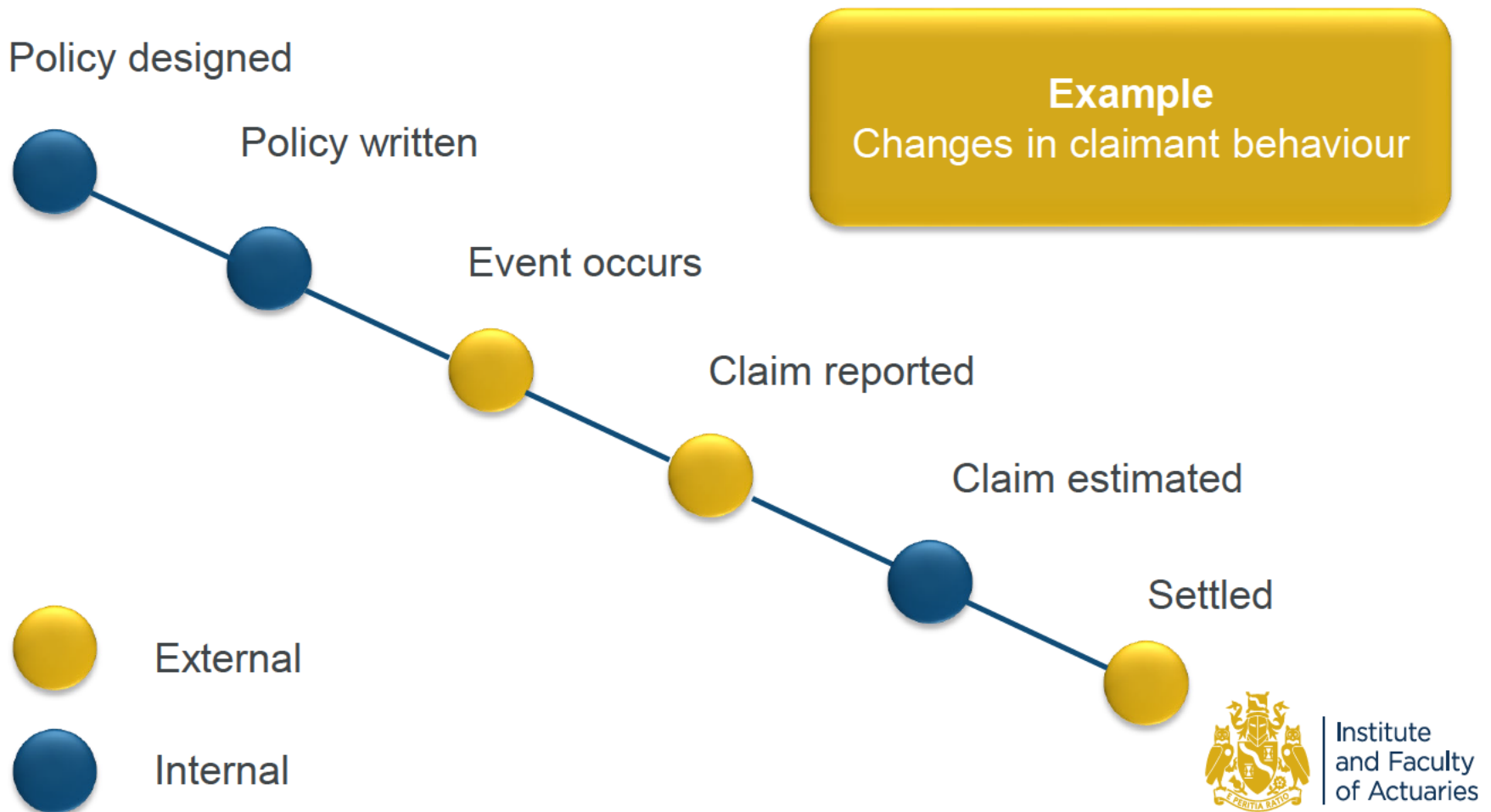
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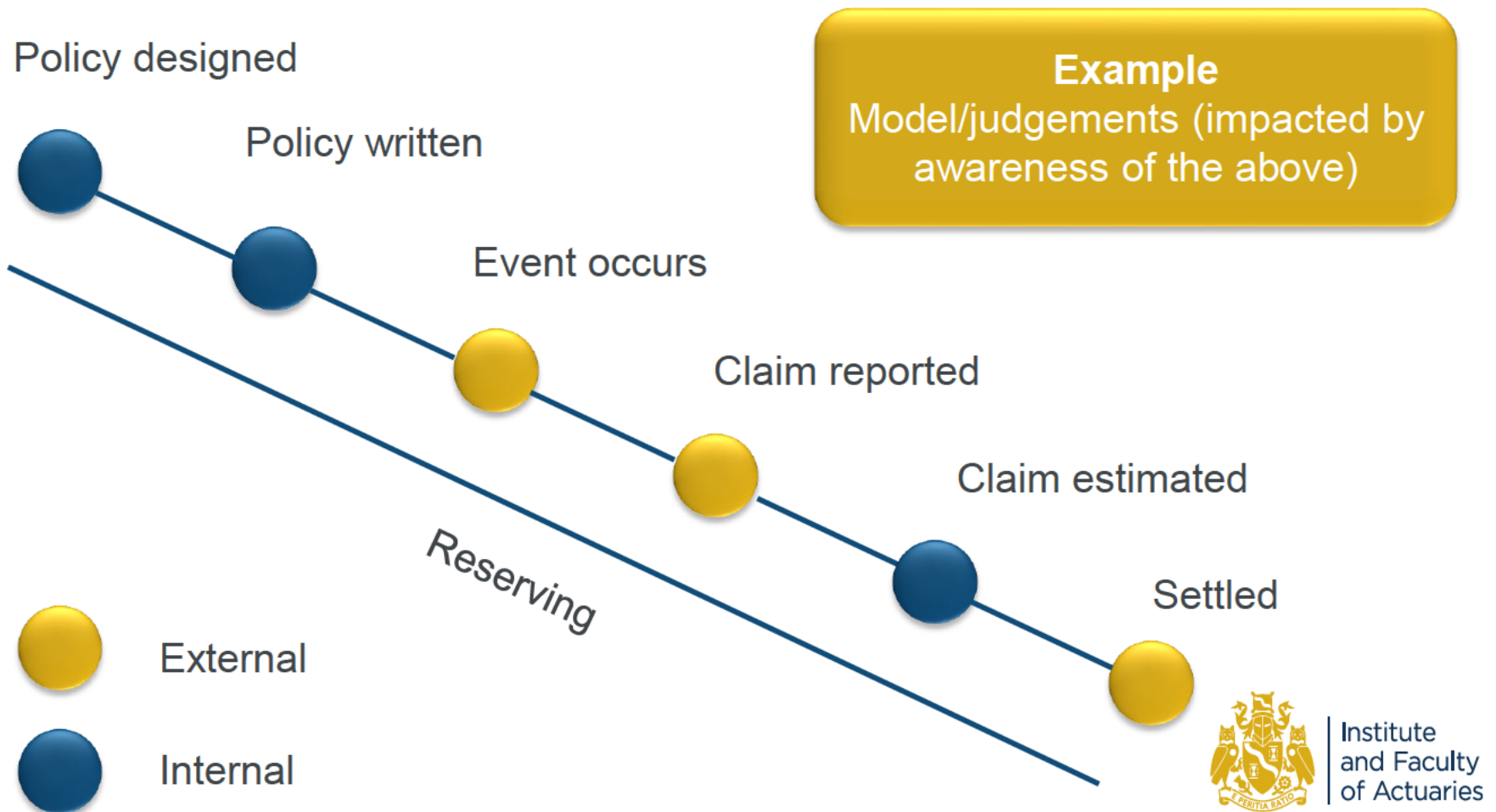
# The origins of uncertainty?



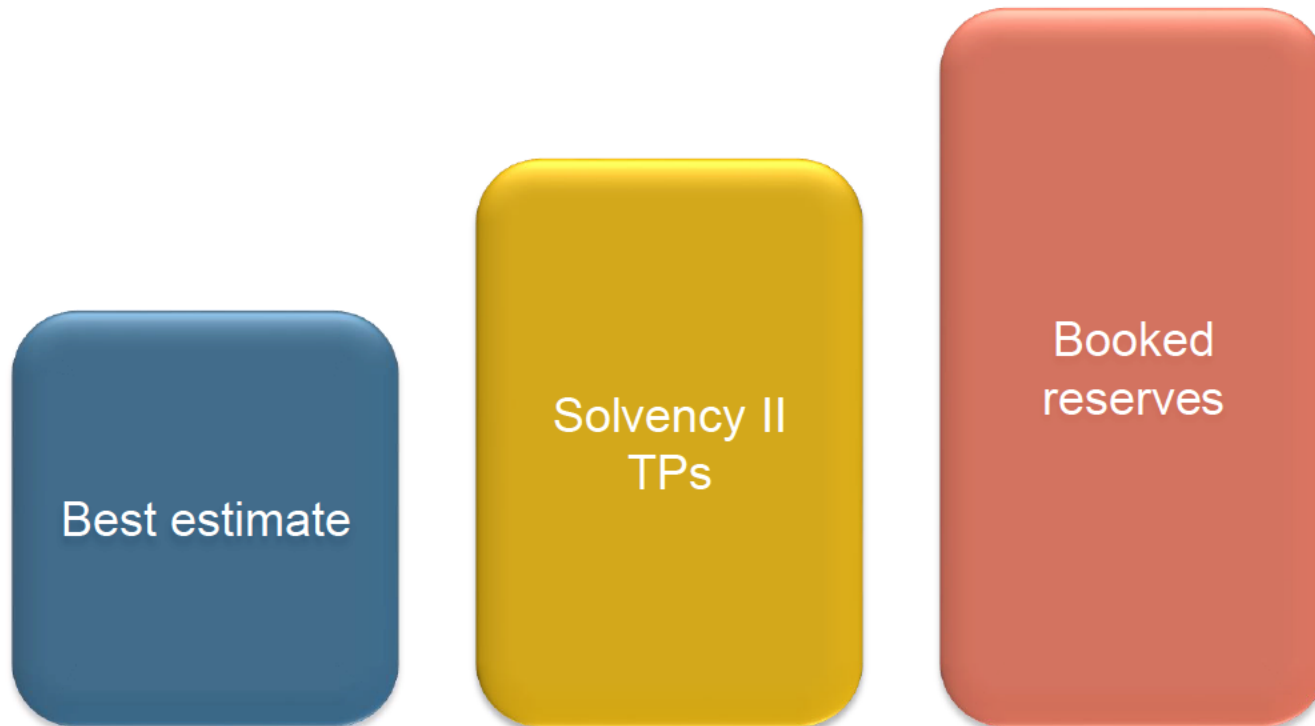
# The origins of uncertainty?



# The origins of uncertainty?



# The meaning of “reserves”



# The meaning of uncertainty?

“Within a range of reasonable best estimates”

“The  $y^{\text{th}}$  percentile”

“A plausible alternative scenario”

“Best estimate with a margin for prudence”

“An extreme but foreseeable scenario”



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# Identify the pressure points

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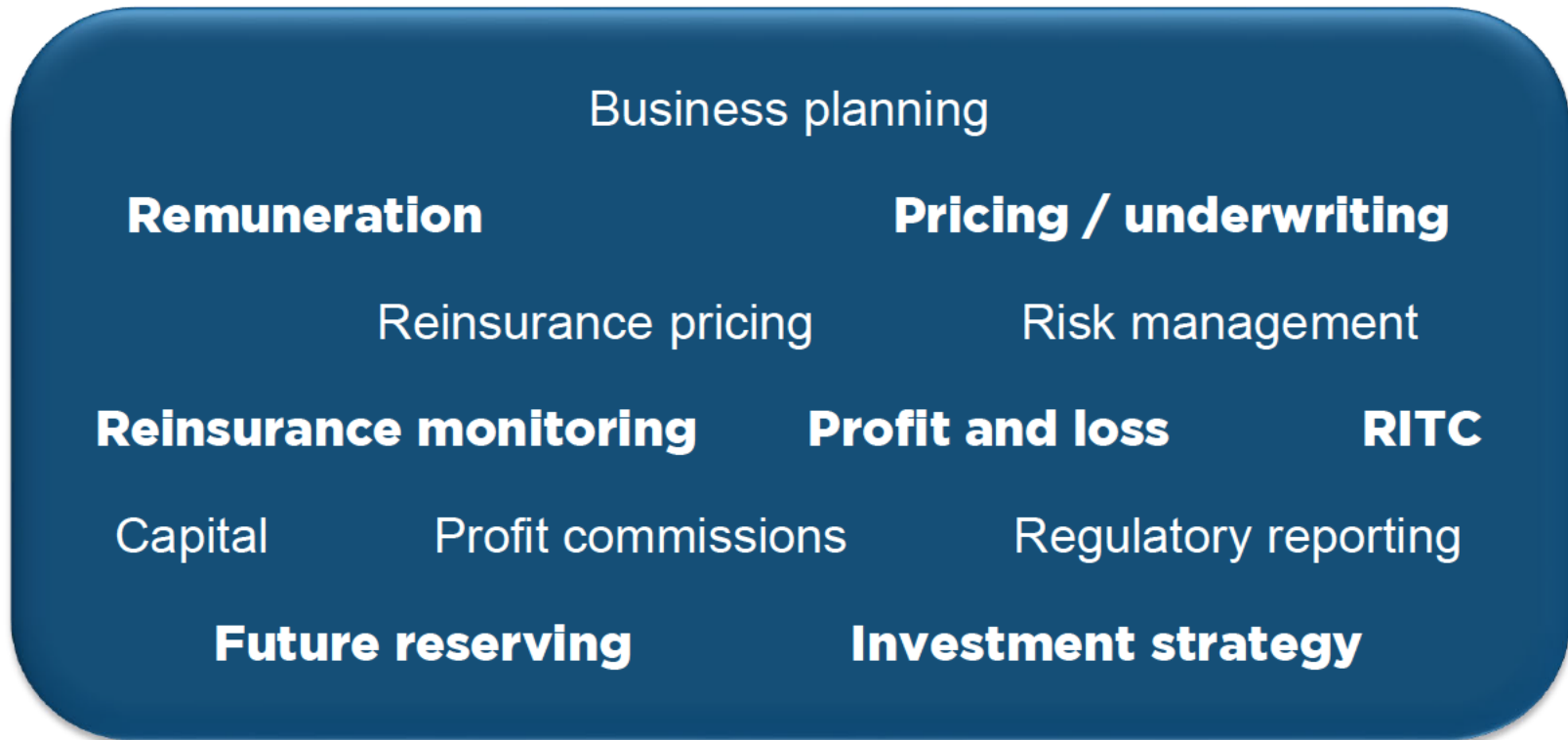
# Where does reserving lead?

RESERVING OUTPUTS



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# Where does reserving lead?







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# Damage control

ertise  
ponsorship  
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# Damage control

How do we more effectively communicate reserve uncertainty?

Two objectives:

- Make better decisions where possible and practical
- Where not possible: to raise awareness

Examples from:

- Capital modelling
- Investment
- Business planning

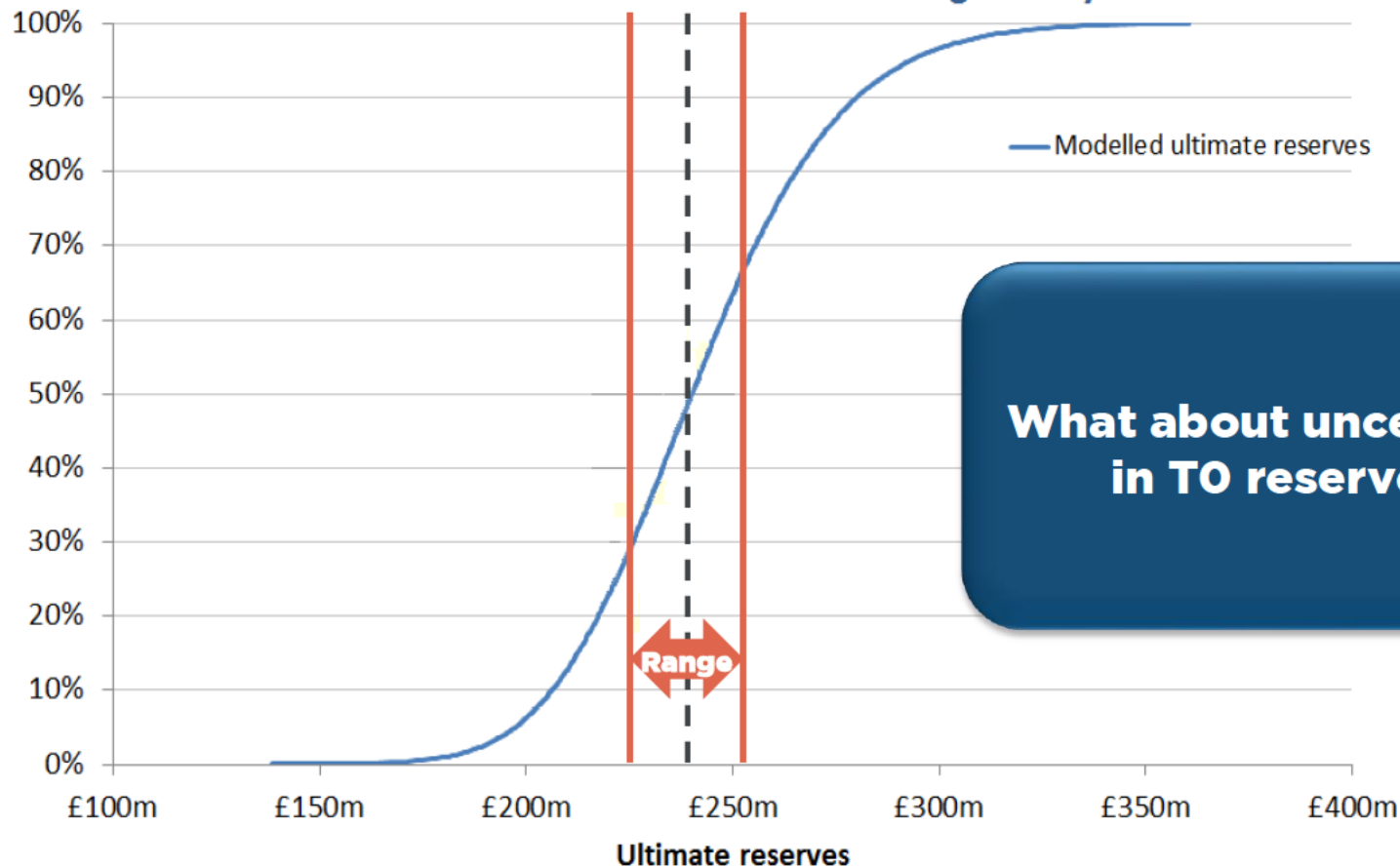
**What about  
uncertainty?**



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# Capital modelling

Distribution of modelled ultimate reserves against independent reasonable best estimates from reserving activity



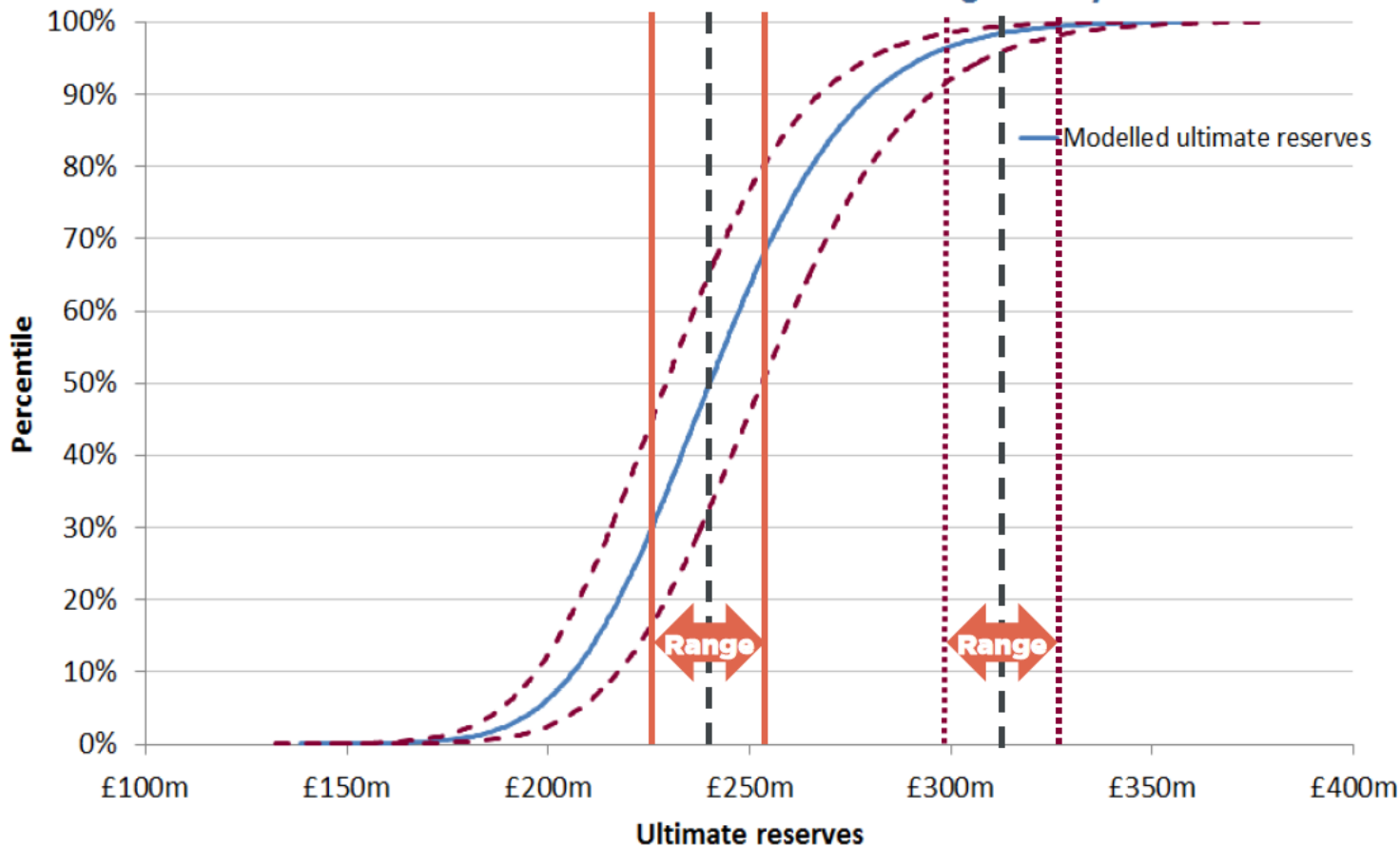
**What about uncertainty in T0 reserves?**



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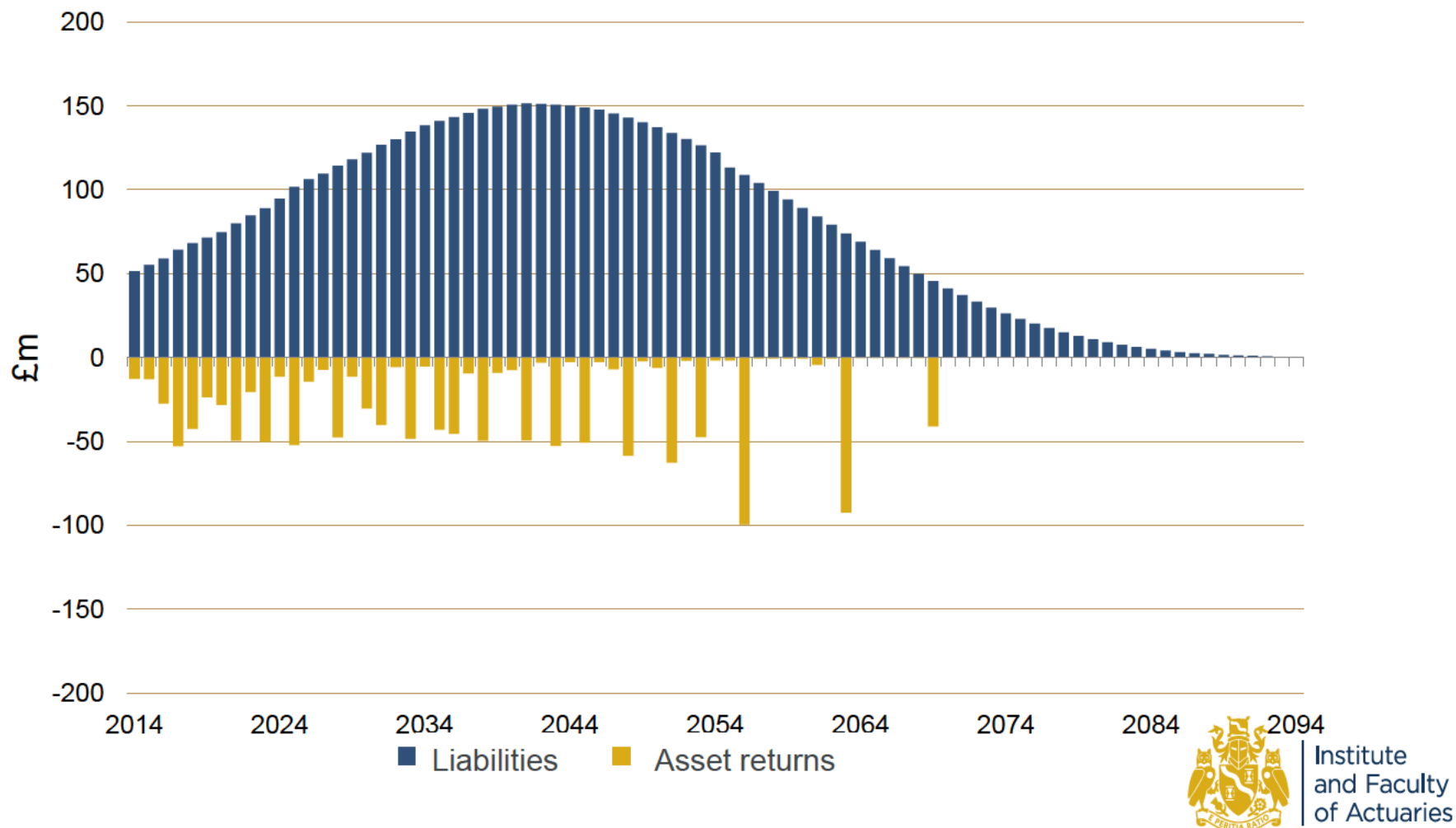
# Capital modelling

Distribution of modelled ultimate reserves against independent reasonable best estimates from reserving activity

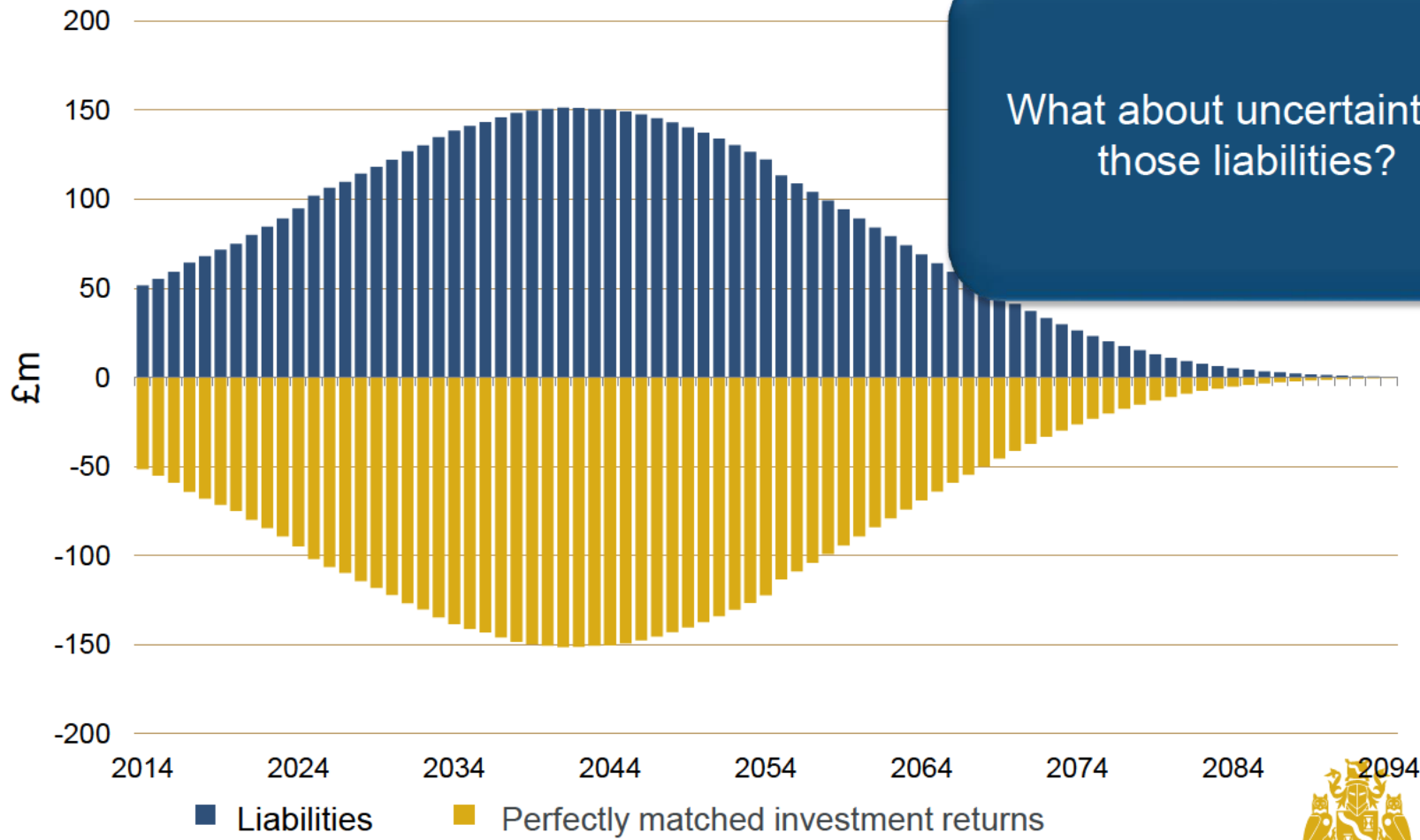


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# Investment



# Investment

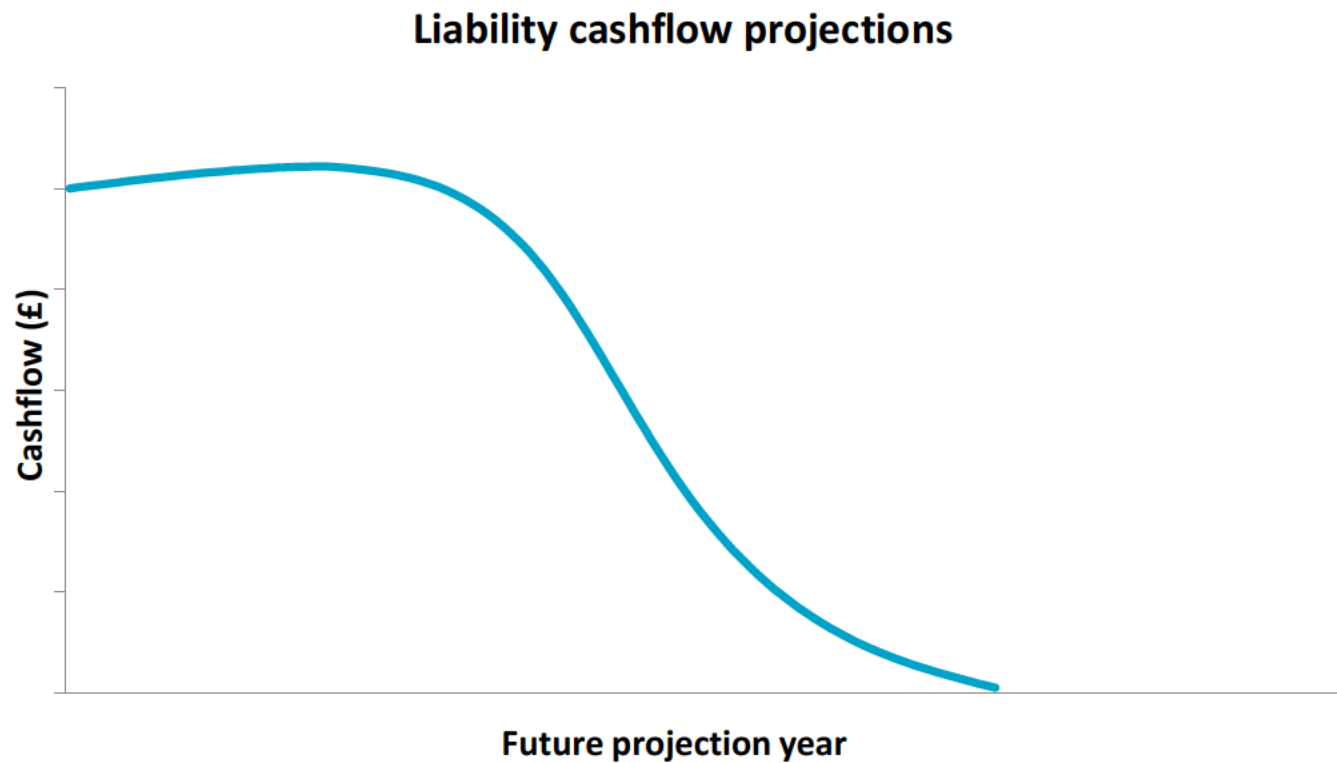


What about uncertainty in those liabilities?

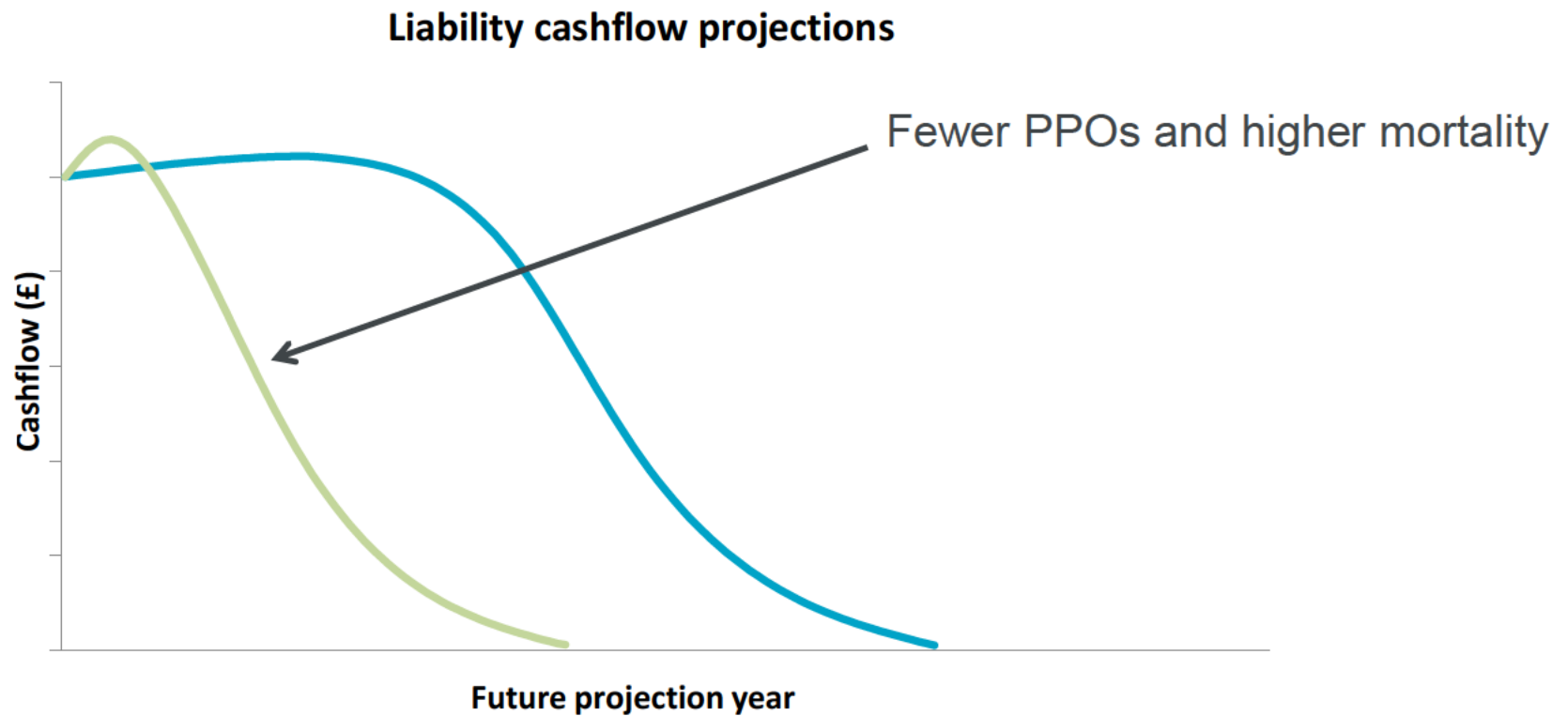


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# Investment

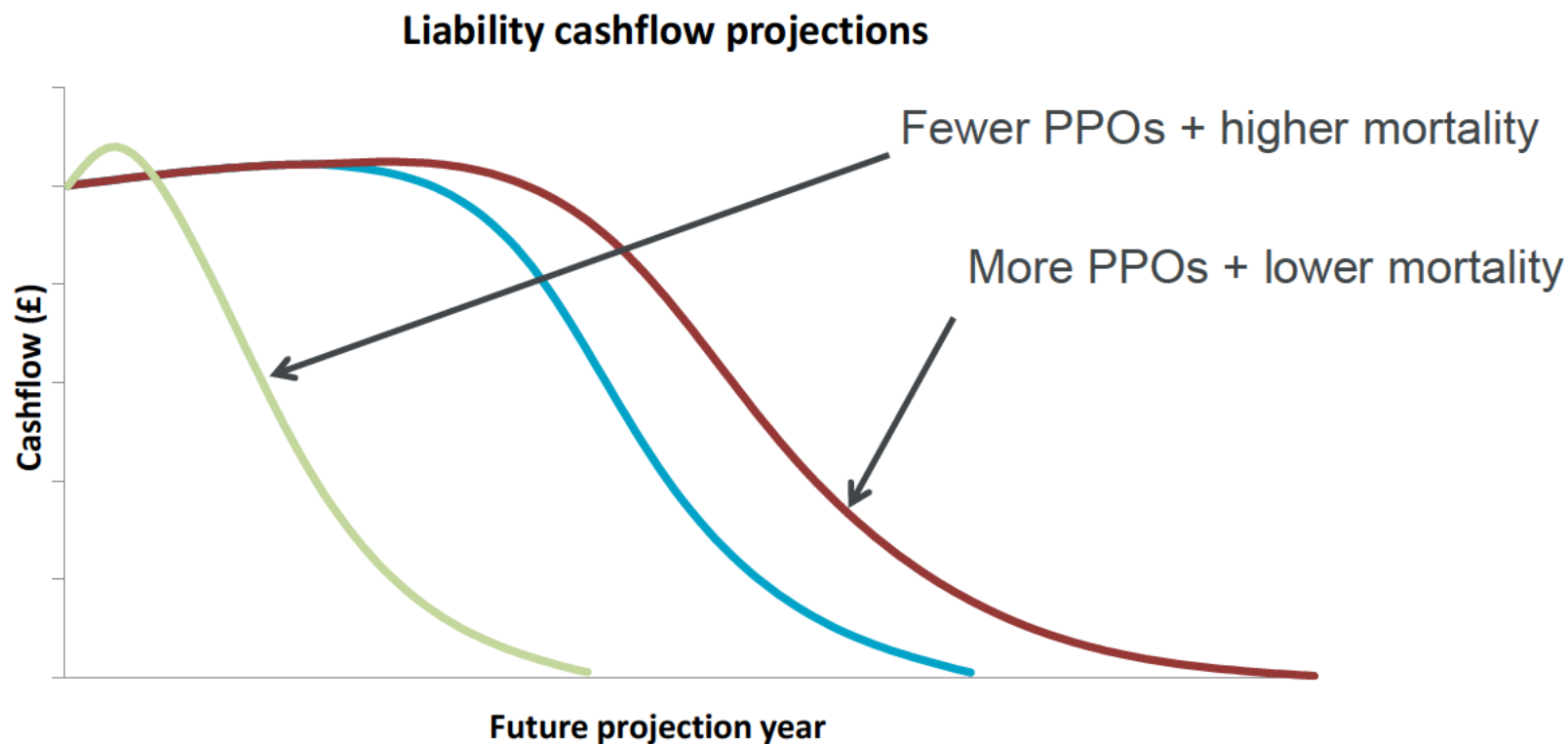


# Investment





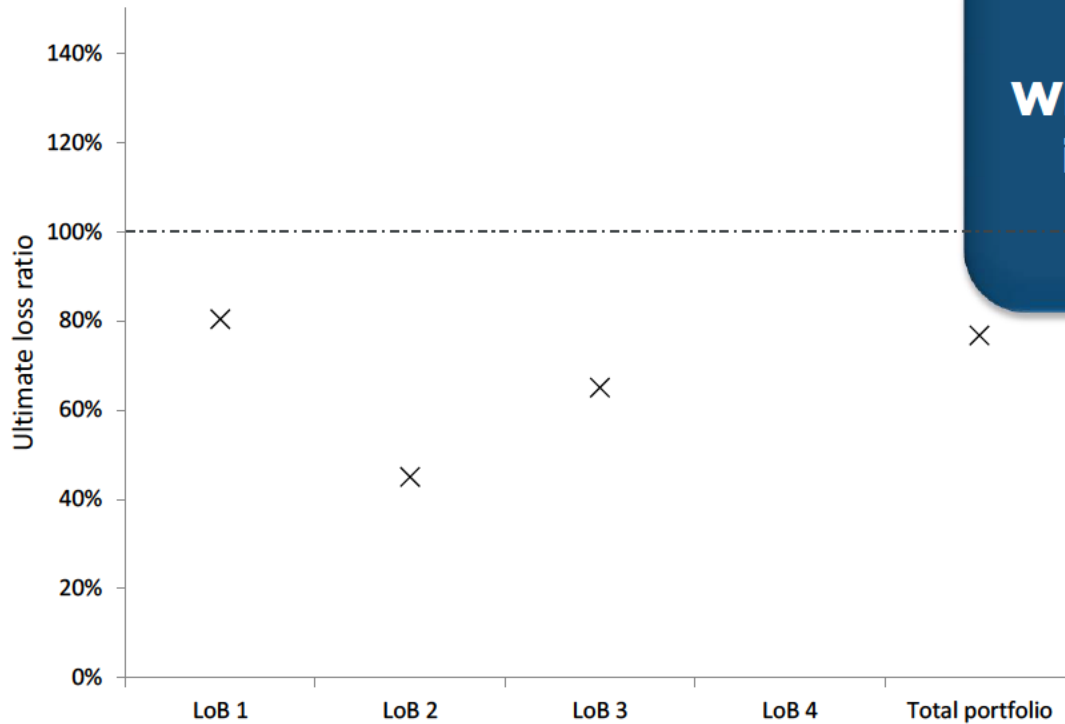
# Investment



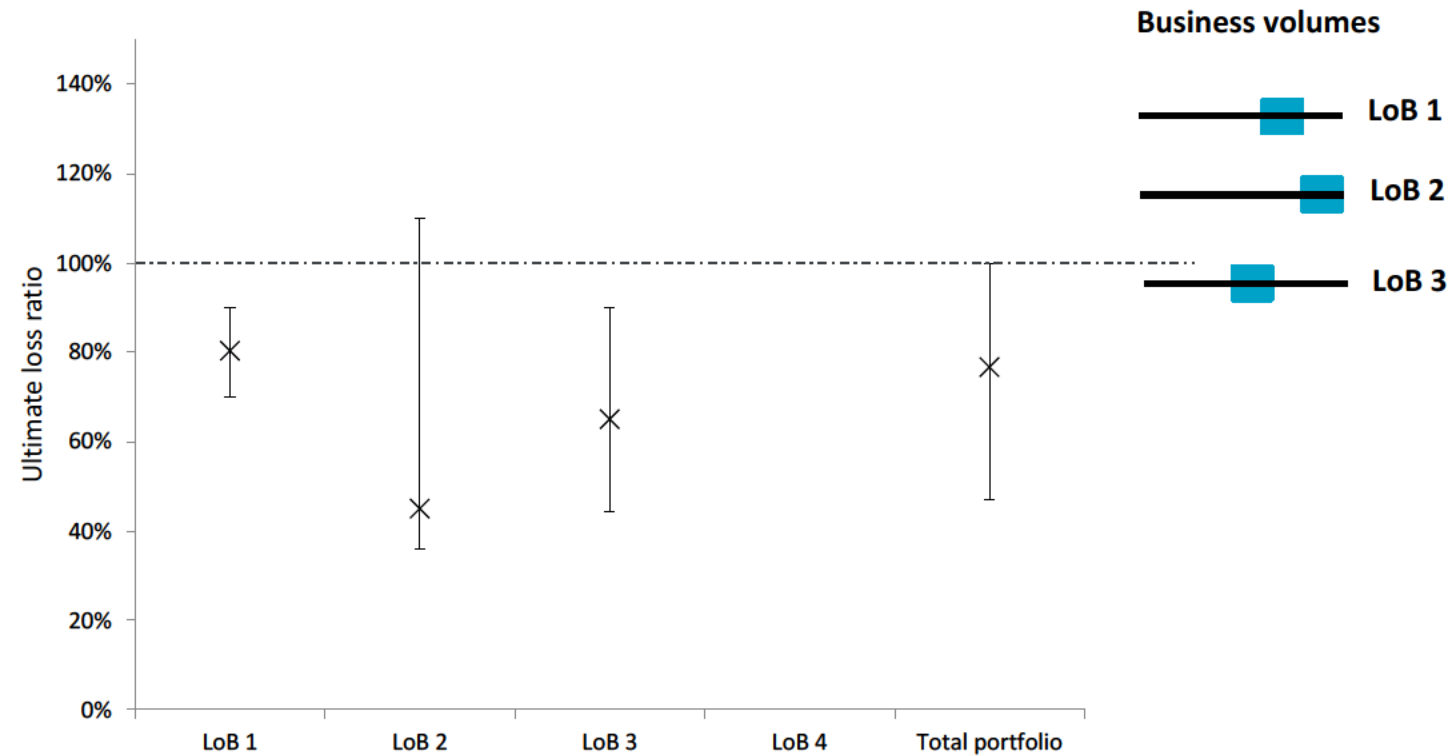
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# Business planning

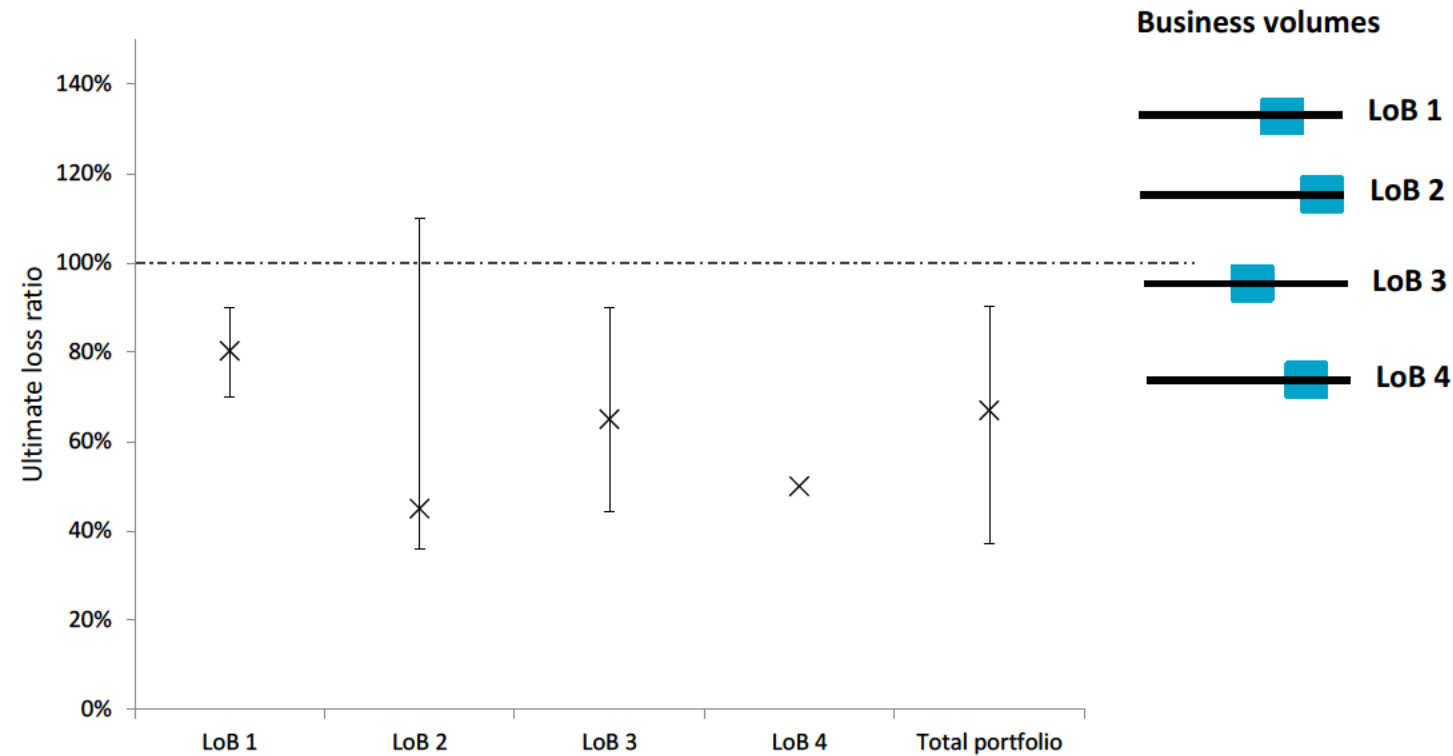
**What about uncertainty  
in those loss ratios?**



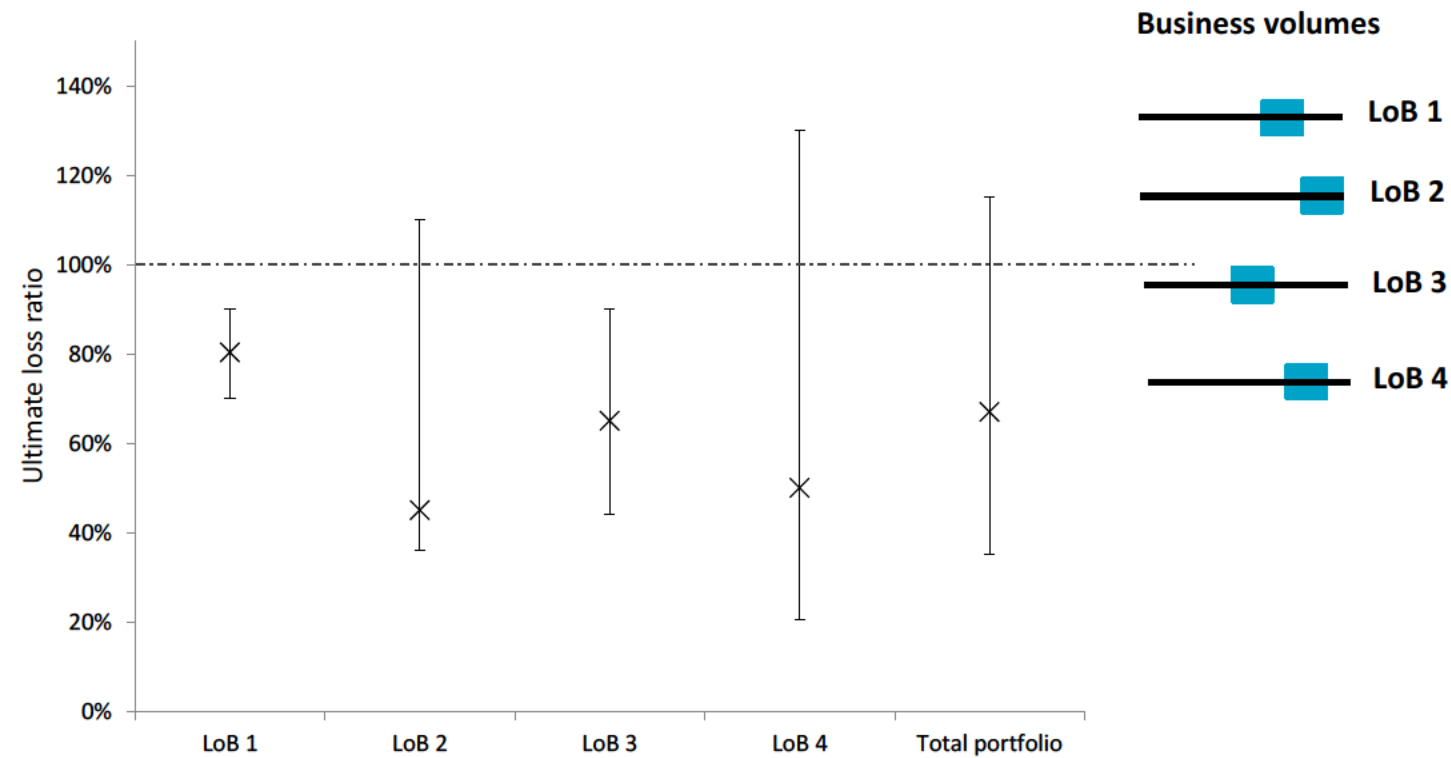
# Business planning



# Business planning



# Business planning



# How can we communicate uncertainty?

Business planning

**Remuneration**

**Pricing / underwriting**

Reinsurance pricing

Risk management

**Reinsurance monitoring**

**Profit and loss**

**RITC**

Capital

Profit commissions

Regulatory reporting

**Future reserving**

**Investment strategy**



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# Actions for you

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# Key actions for you

## Reserving actuaries

Know your business:

- Who relies on your reserving results?
- What aspects of those results are most important to them?
- How much does uncertainty matter?

Tailor communication about uncertainty accordingly



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# Key actions for you

## Everyone else

Know your business:

- Are you reliant on the reserving results?
- Which aspects of those results impact you the most?
- How much does uncertainty matter?

Ask for the uncertainty information that you need!



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# Questions

# Comments

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