

# **RISK, UNCERTAINTY AND PASTURE INVESTMENT DECISIONS**

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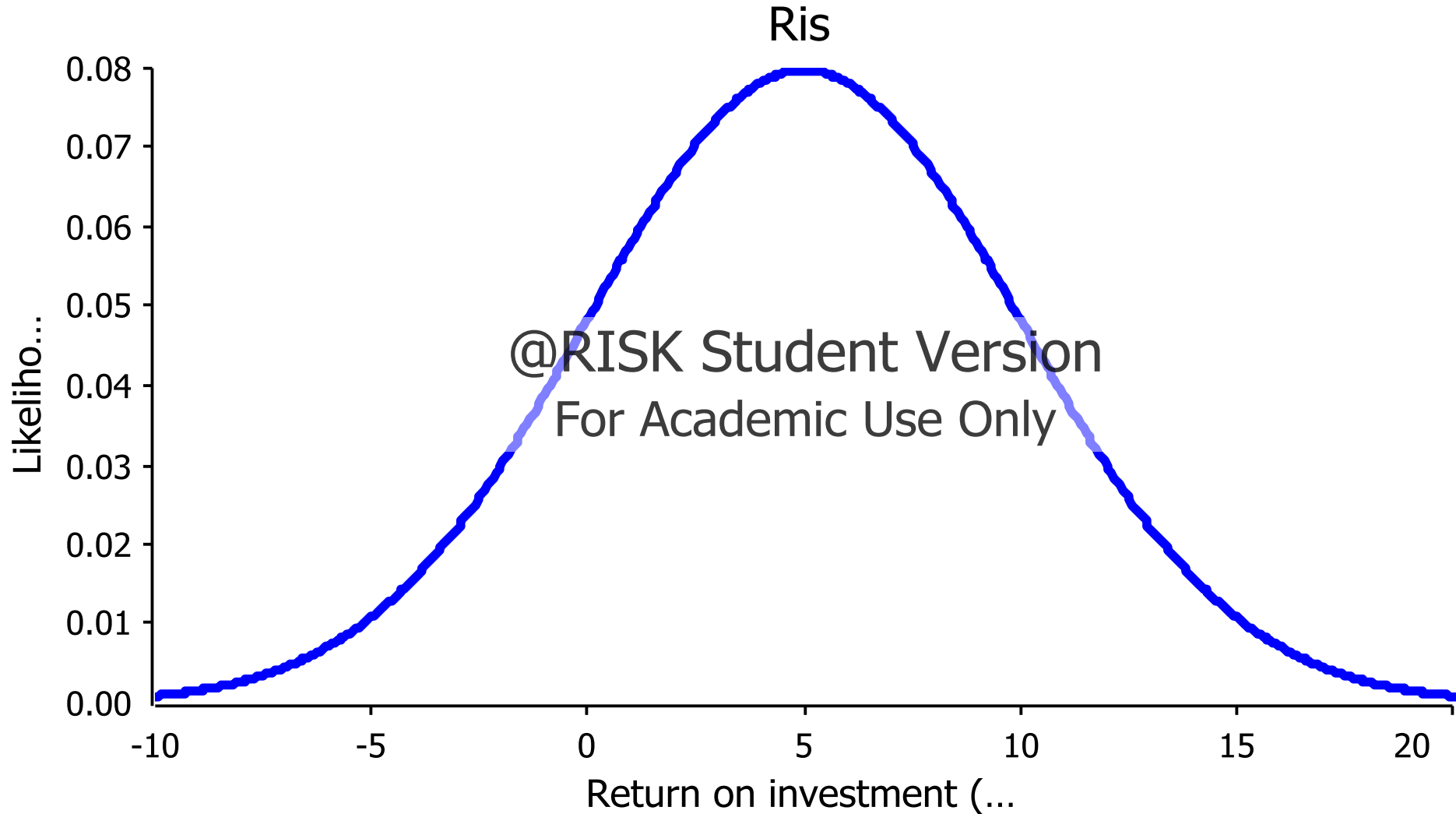
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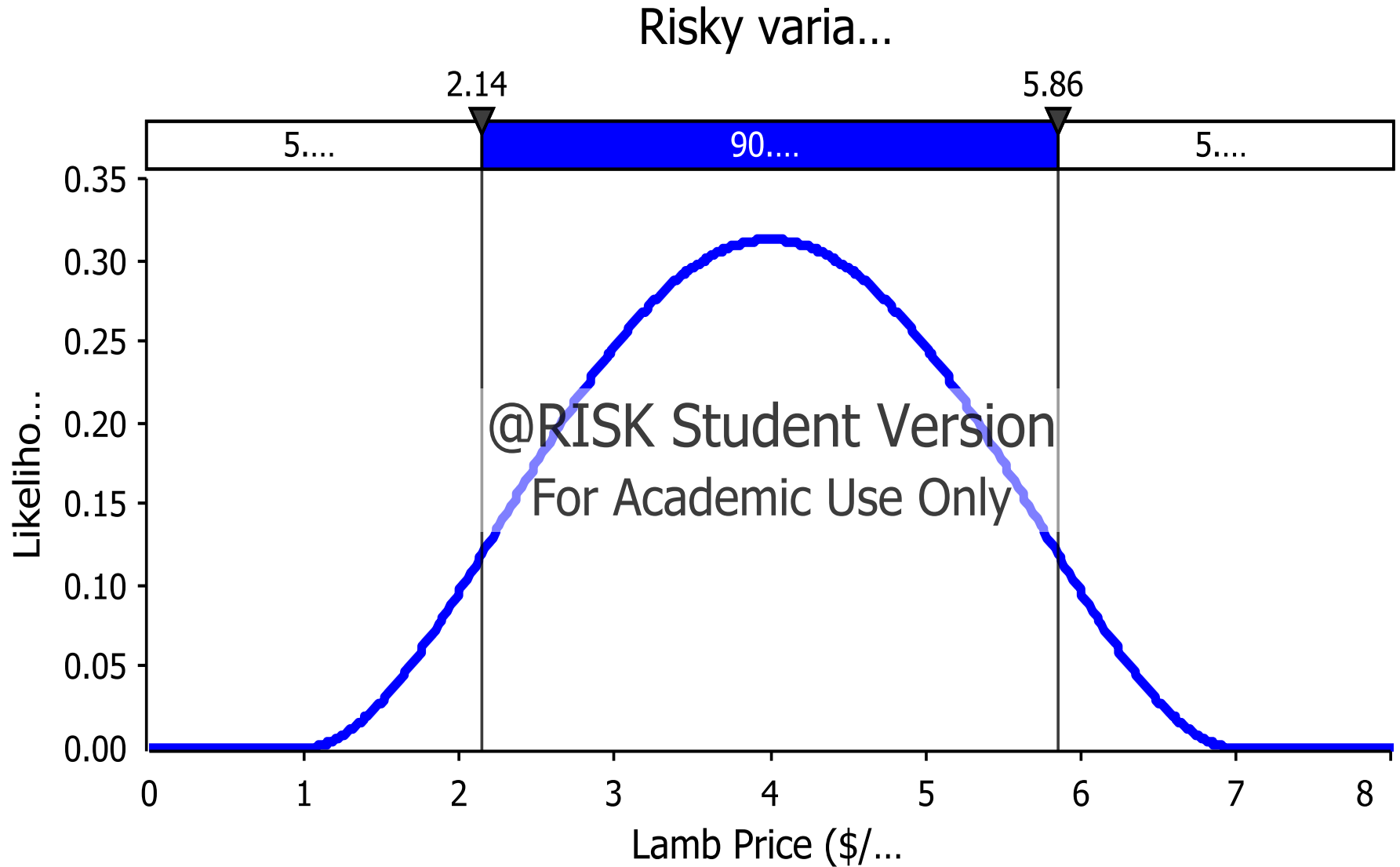
# Research objectives

- Represent the process of uncertainty resolution over time in a model
- Incorporate this dynamic component into a whole farm economic model
- Analyse pasture investment decisions using the dynamic model

# Risk and uncertainty

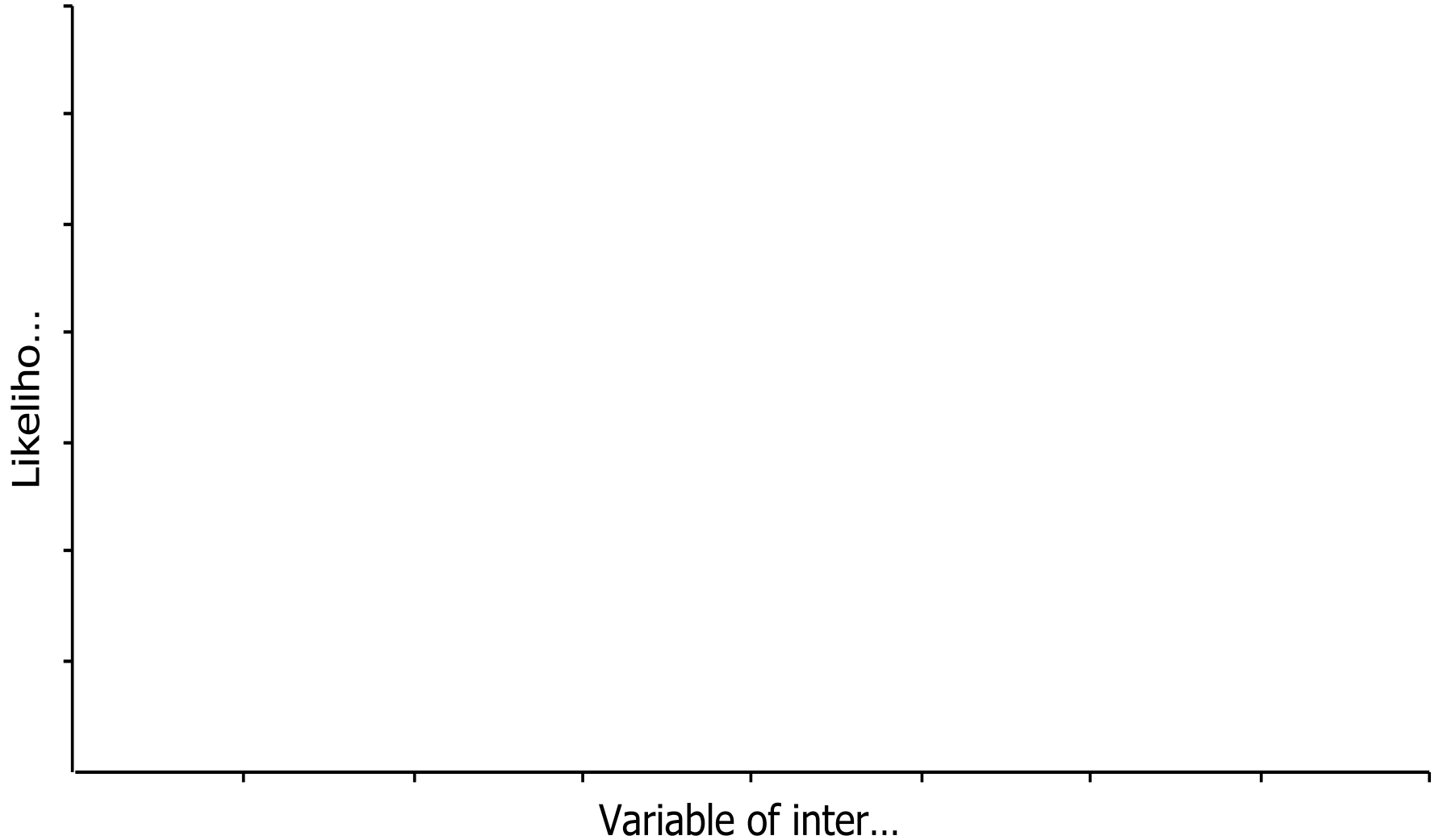


# Risk and uncertainty



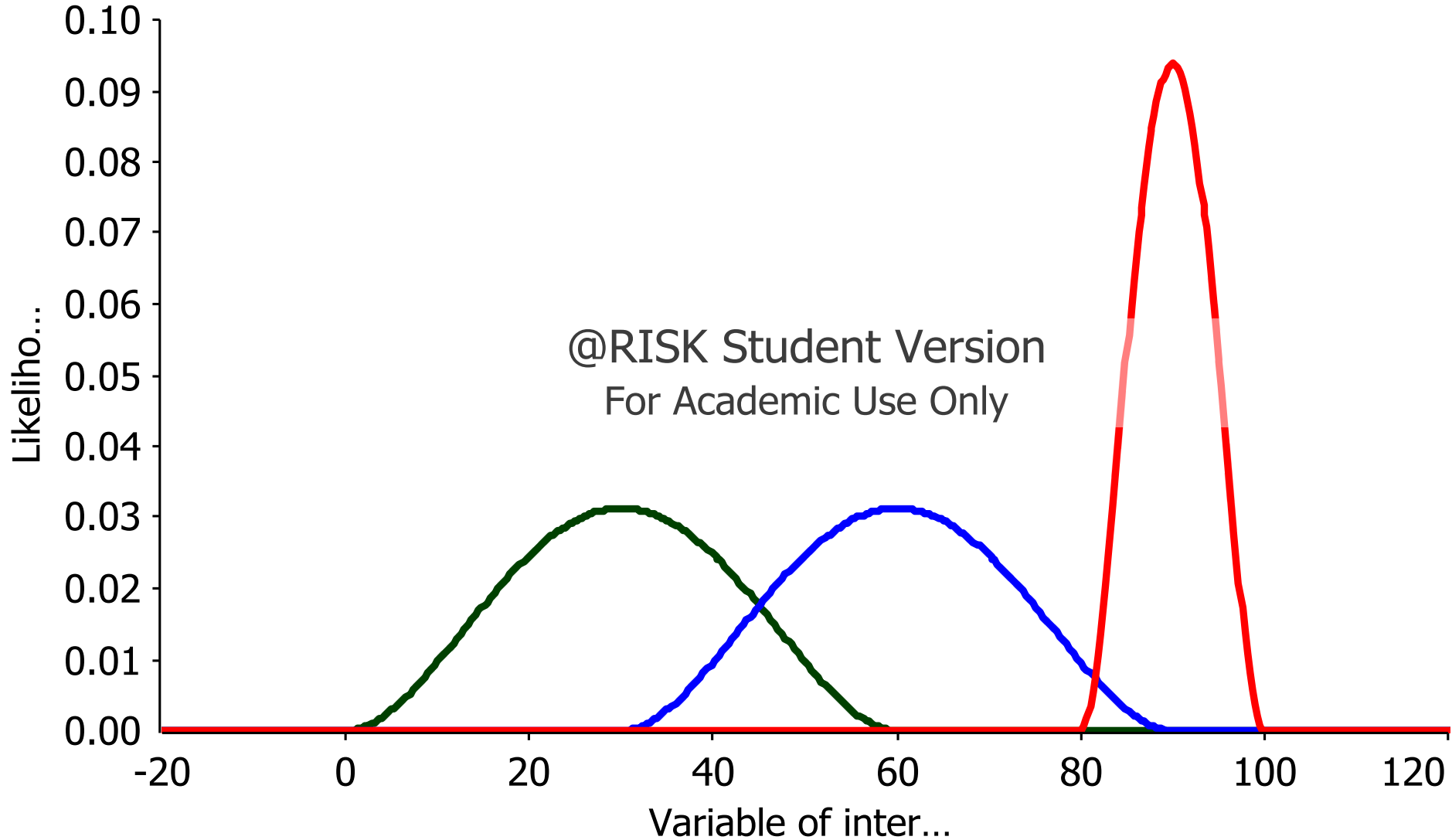
# Risk and uncertainty

Knightian uncertai...



# Risk and uncertainty

Uncertai...



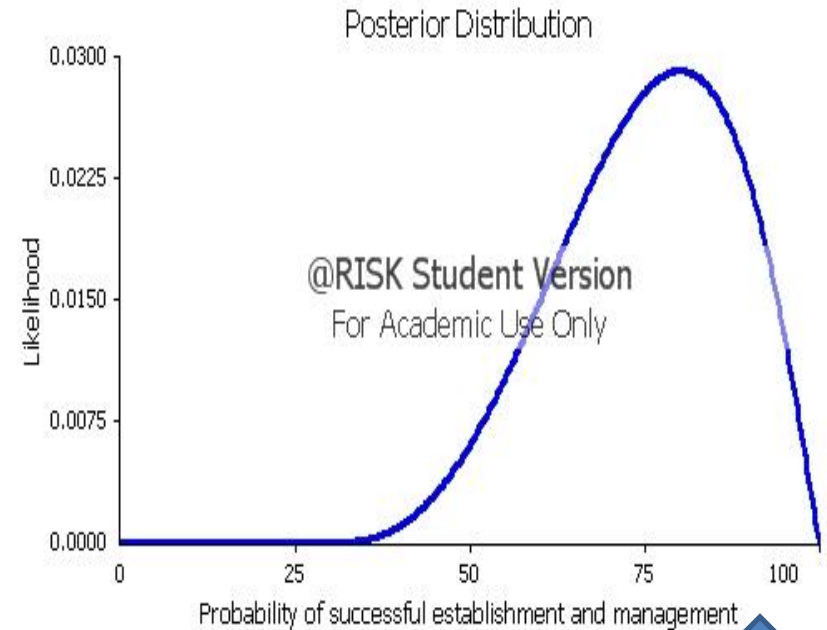
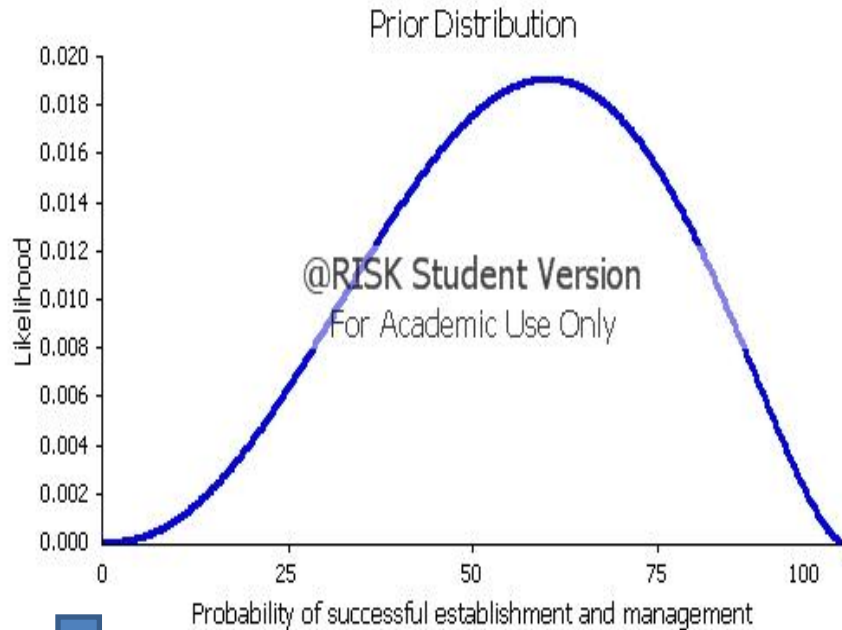
# Problem

- How can the process of learning about this probability be represented in a model?
  - Bayesian learning?
  - Learning by doing?

# Solution

- Elicit subjective probability distributions from farmers
- Use the distributions to calibrate the learning model
- Use the distributions to estimate the new information obtained in a period of learning

# The Equivalent Random Sample (ERS)\*



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**Equivalent Random Sample**

\* See Delavande (2008)

# Future work

- Elicit probability distributions from a sample of farmers over a period of learning
- Calibrate the learning process
- Combine the learning process with a whole farm economic model to analyse pasture investment decisions