Price and Drought Risk Management

RISK,
the AG Risk-5,
and Risk Management

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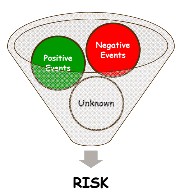
RightRisk

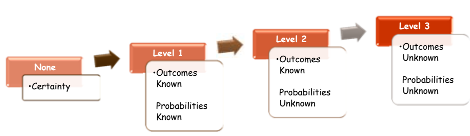
What is RISK?

- **Certainty**- lack of doubt
- **Uncertainty**- doubt about future events
- **RISK**- potential variation in the outcome of future events



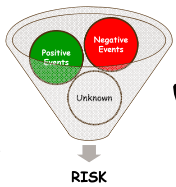
What is RISK?

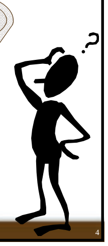
- **RISK**- potential ***variation*** in the outcome of future events



What is RISK?

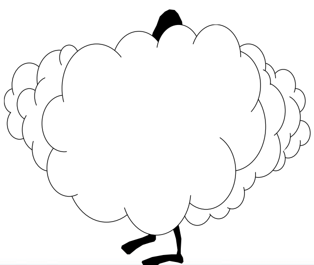
- **Cost of Loss**
  - *Income*
  - *Resources*
  - *Productive capacity, etc.*
- **Cost of Uncertainty**
  - *Worry, doubt, fear, misallocation of resources, etc.*
  - *With potential for gain or loss comes moral or ethical implications*





The **HUMAN** Dimension of Risk

- Emotionally we **avoid risk (uncertainty)** to avoid the shame of:
  - *Failure,*
  - *Being wrong,*
  - *Being laughed at*
  - *Being made fun of,*
  - *Loosing the farm, etc.*



Personal Perspectives on Risk

- Generational differences
- Gender differences
- Life stage/family differences
- Life experiences

dynamic and changing over time.

The **HUMAN** Dimension of Risk

- Humans tend to be **loss averse** more than **risk adverse**
- **Emotion can cloud** the ability to decide rationally
- The **way questions about risk are framed** will influence attitudes about risk
- **Obtaining more information** about certain risks tends to promote a willingness to take those risks
- People tend to ignore that runs of luck tend to **regress to the mean** over time
- Humans do not possess **all information** necessary to decide in an economically rational manner
- Human choice is often based on **inadequate sampling**

Tversky and Kahneman, 1992

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What is RISK?

- The probability of an event occurring that can negatively impact:
  - *Current profit level*
  - *Financial situation* (equity position)
  - *Satisfaction and well-being*

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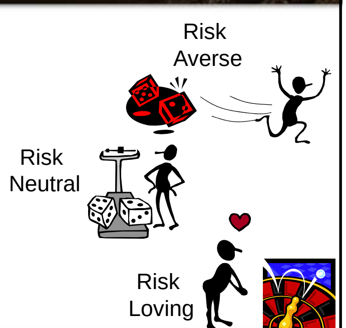
Types of Risk Preference



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Sources of Risk in Agriculture – *Ag Risk 5*

1. Marketing/Price Risk
2. Production Risk
3. Institutional/Legal Risk
4. Human Risk
5. Financial Risk

Sources of Risk

- Business Risks: *Business risks are those risks that occur independently of the way a firm (or farm) is financed. Even with 100% equity (no debt obligations) these risks still exist.*
  - Market/Price risk
  - Production risk
  - Institutional/Legal risk
    - Social risk
    - Legal risk
  - Human risk
- Non-Business Risk: *arise from the obligations created when external financing is used to leverage business operations.*
  - Financial Risk

Risk Tradeoffs

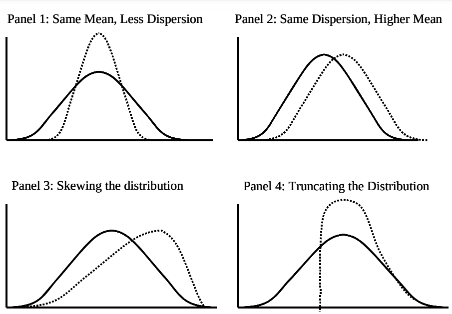
Profits are returns for taking risks

- **Upside**: Greater risk taking usually leads to greater wealth over time
- **Downside**: Losses from risk taking can potentially be devastating
- Managing risks are a matter of **evaluating tradeoffs**
- How much **risk** (uncertainty) are you willing to accept for **possible higher returns**?

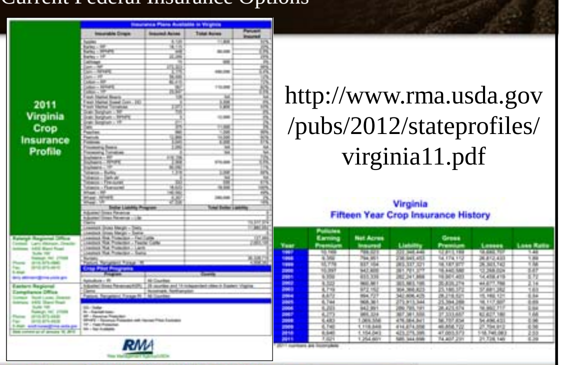
Strategies for Managing Risk

1. Avoid it
2. Reduce it
   a) *Reduce the probability it will happen*
   b) *Reduce the impact if it does happen*
3. Transfer it outside the business
   a) *Insurance*
   b) *Contracting*
4. Increase capacity to bear
   a) *Increase reserves*
   b) *Maintain flexibility*
5. Accept it

Strategy Impacts



Current Federal Insurance Options



http://www.rma.usda.gov/pubs/2012/stateprofiles/virginia11.pdf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