Ranking Risk Management Options on Mountain View Farms

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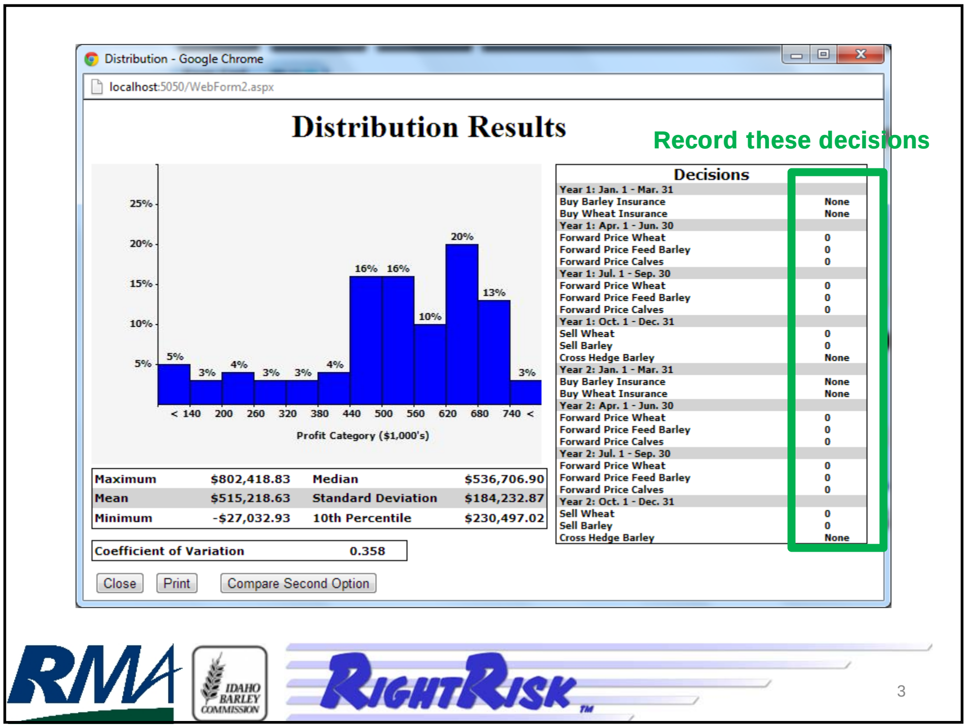
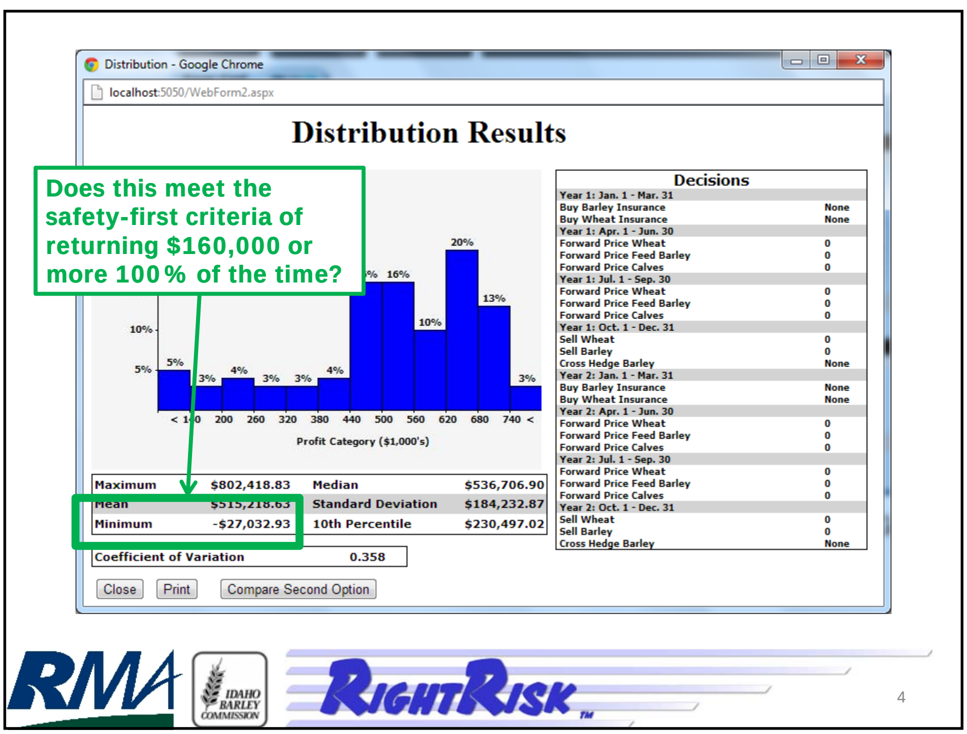
Safety-First Decision Strategy

- Safety-first is used to help managers choose the best strategy when faced with the need to meet some minimum level of income.
- Based on the idea that there is some maximum level of risk the manager is willing to accept. Must decide:
  - The level of income to protect
  - The maximum probability willing to accept of not achieving it
- Safety-first dictates that the manager would choose from alternatives that do not exceed the maximum level of risk they are willing to accept (or that meet the safety-first criteria).


Distribution - Google Chrome
localhost:5050/WebForm2.aspx
Distribution Results
Record these decisions
Decisions
Year 1: Jan. 1 - Mar. 31
Buy Barley Insurance None
Buy Wheat Insurance None
Year 1: Apr. 1 - Jun. 30
Forward Price Wheat 0
Forward Price Feed Barley 0
Forward Price Calves 0
Year 1: Jul. 1 - Sep. 30
Forward Price Wheat 0
Forward Price Feed Barley 0
Forward Price Calves 0
Year 1: Oct. 1 - Dec. 31
Sell Wheat 0
Sell Barley 0
Cross Hedge Barley None
Year 2: Jan. 1 - Mar. 31
Buy Barley Insurance None
Buy Wheat Insurance None
Year 2: Apr. 1 - Jun. 30
Forward Price Wheat 0
Forward Price Feed Barley 0
Forward Price Calves 0
Year 2: Jul. 1 - Sep. 30
Forward Price Wheat 0
Forward Price Feed Barley 0
Forward Price Calves 0
Year 2: Oct. 1 - Dec. 31
Sell Wheat 0
Sell Barley 0
Cross Hedge Barley None
Profit Category ($1,000's)
Maximum $802,418.83 Median $536,706.90
Mean $515,218.63 Standard Deviation $184,232.87
Minimum -$27,032.93 10th Percentile $230,497.02
Coefficient of Variation 0.358
Close Print Compare Second Option
RMA
IDAHO BARLEY COMMISSION
RIGHTRISK
3


Distribution - Google Chrome
localhost:5050/WebForm2.aspx
Distribution Results
Does this meet the safety-first criteria of returning $160,000 or more 100% of the time?
Decisions
Profit Category ($1,000's)
Maximum $802,418.83 Median $536,706.90
Mean $515,218.63 Standard Deviation $184,232.87
Minimum -$27,032.93 10th Percentile $230,497.02
Coefficient of Variation 0.358
Close Print Compare Second Option
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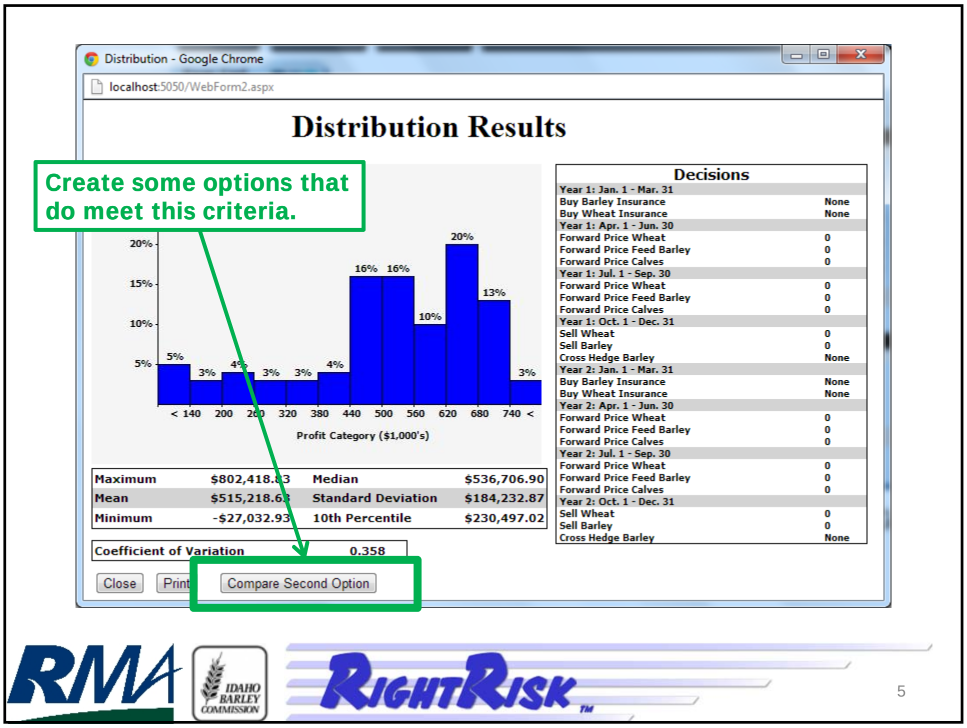
4


Distribution - Google Chrome
localhost:5050/WebForm2.aspx
Distribution Results
Create some options that do meet this criteria.
Decisions
Profit Category ($1,000's)
Maximum $802,418.83
Median $536,706.90
Mean $515,218.63
Standard Deviation $184,232.87
Minimum -$27,032.93
10th Percentile $230,497.02
Coefficient of Variation 0.358
Close
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Compare Second Option
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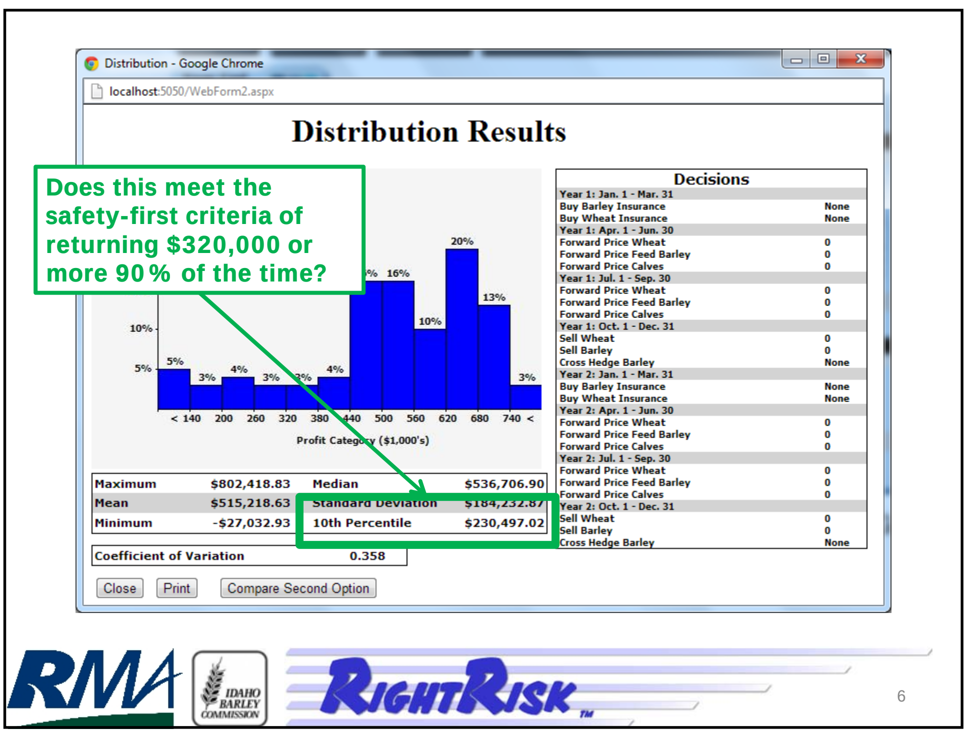
5


Distribution - Google Chrome
localhost:5050/WebForm2.aspx
Distribution Results
Does this meet the safety-first criteria of returning $320,000 or more 90% of the time?
Decisions
Profit Category ($1,000's)
Maximum $802,418.83
Median $536,706.90
Mean $515,218.63
Standard Deviation $184,232.87
Minimum -$27,032.93
10th Percentile $230,497.02
Coefficient of Variation 0.358
Close
Print
Compare Second Option
RMA
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RIGHTRISK
6

Other Basic Risk Management Decision Rules

- Maximize Expected Value
- Maximax
- Maximin
- Minimize Variation
- Minimize Relative Variation

Distribution - Google Chrome

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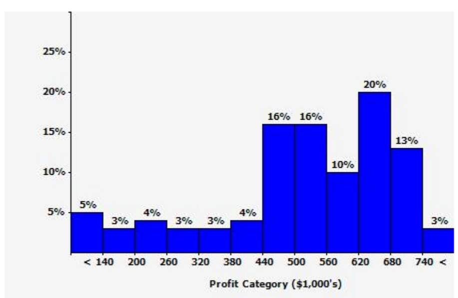
Distribution Results

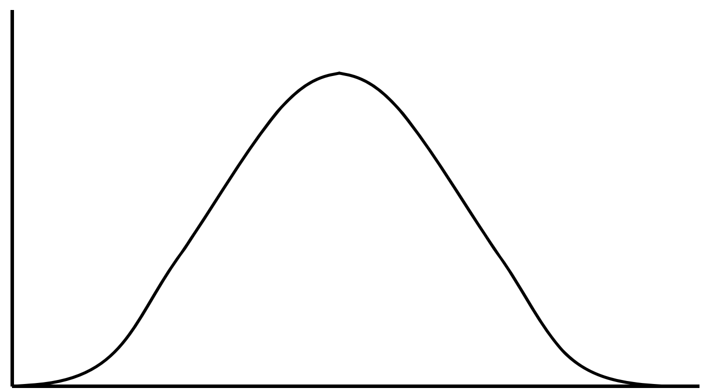


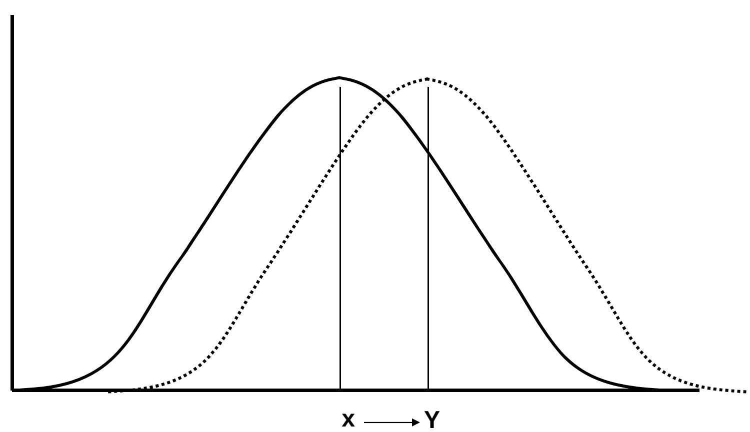
Maximum	$802,418.83	Median	$536,706.90
Mean	$515,218.63	Standard Deviation	$184,232.87
Minimum	-$27,032.93	10th Percentile	$230,497.02

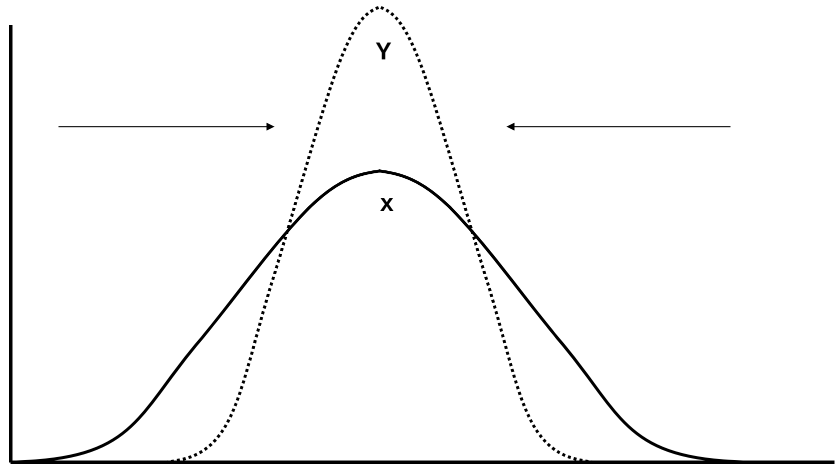
Coefficient of Variation	0.358

Close Print Compare Second Option

Decisions	
Year 1: Jan. 1 - Mar. 31	
Buy Barley Insurance	None
Buy Wheat Insurance	None
Year 1: Apr. 1 - Jun. 30	
Forward Price Wheat	0
Forward Price Feed Barley	0
Forward Price Calves	0
Year 1: Jul. 1 - Sep. 30	
Forward Price Wheat	0
Forward Price Feed Barley	0
Forward Price Calves	0
Year 1: Oct. 1 - Dec. 31	
Sell Wheat	0
Sell Barley	0
Cross Hedge Barley	None
Year 2: Jan. 1 - Mar. 31	
Buy Barley Insurance	None
Buy Wheat Insurance	None
Year 2: Apr. 1 - Jun. 30	
Forward Price Wheat	0
Forward Price Feed Barley	0
Forward Price Calves	0
Year 2: Jul. 1 - Sep. 30	
Forward Price Wheat	0
Forward Price Feed Barley	0
Forward Price Calves	0
Year 2: Oct. 1 - Dec. 31	
Sell Wheat	0
Sell Barley	0
Cross Hedge Barley	None




X → Y



This would be awesome!