

Violations of Expected Utility: The Common Ratio and Common Consequence Effects

ECON 1820 Spring 2015
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The Common Ratio Effect

C1	100% \$8	vs	80% \$10 \$0		C2
D1	25% \$8 75% \$0	vs	20% \$10 80% \$0		D2

- Many people choose C1 and D2

The Common Ratio Effect

100% \$8	vs	80% \$10 \$0
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– Which would you choose?

The Common Ratio Effect

C1	100% \$8	vs	80% \$10 \$0		C2
D1	25% \$8 75% \$0	vs	20% \$10 80% \$0		D2

Option	Probability
C1	~0.95
D1	~0.65

Option	Probability
C1	~0.90
D1	~0.65

The Common Ratio Effect

25% \$8 75% \$0	vs	20% \$10 80% \$0
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– Which would you choose?

The Common Ratio Effect

C1	100% \$8	vs	80% \$10 \$0		C2
D1	25% \$8 75% \$0	vs	20% \$10 80% \$0		D2

- Claim:
 - C1 and D1 consistent with EU (63%)
 - C2 and D2 consistent with EU (5%)
 - C1 and D2 inconsistent with EU (27%)
 - C1 and D2 inconsistent with EU (5%)
- Significant violations of EU
 - These violations are not random

Common Consequence Effect

100% \$16

vs

89% \$16

1% \$0

10% \$18

– Which would you choose?

Common Consequence Effect

A1

100% \$16

vs

89% \$16

1% \$0

A2

10% \$18

B1

\$0

vs

\$0

10% \$18

B2

11% \$16

2014

10% \$18

2015

Common Consequence Effect

\$0

vs

\$0

11% \$16
10% \$18

– Which would you choose?

Common Consequence Effect

A1

100% \$16

vs

89% \$16

1% \$0

A2

10% \$18

B1

\$0

vs

\$0

10% \$18

B2

- Claim:
 - A1 and B1 consistent with EU (9%)
 - A2 and B2 consistent with EU (64%)
 - A1 and B2 inconsistent with EU (27%)
 - A1 and B2 inconsistent with EU (0%)
- Significant violations of EU
 - These violations are not random

Common Consequence Effect

A1

100% \$16

vs

89% \$16

1% \$0

A2

10% \$18

B1

\$0

vs

\$0

10% \$18

B2

- Many people choose A1 and B2

And the winner is....

- Stewart Sharpe
- Randomly Selected Question: A
- You Chose A2

And the winner is....

- Stewart Sharpe
- Randomly Selected Question: A
- You Chose A2

What do these violations mean?

C1 100% \$8 vs 80% \$10 \$0 C2

D1 25% \$8 75 % \$0 vs 20% \$10 80% \$0 D2

E1 95% \$8 \$0 vs 76% \$10 \$0 E2

\$0

- Often interpreted as a ‘preference for certainty’
- But what about E?

Class Exercise

C1 100% \$8 vs 80% \$10 \$0 C2

D1 25% \$8 75 % \$0 vs 20% \$10 80% \$0 D2

A1 100% \$16 vs 89% \$16 \$0 A2 10% \$18

B1 \$0 11% \$16 vs \$0 10% \$18 B2

What do these violations mean?

C1 100% \$8 vs 80% \$10 \$0 C2

D1 25% \$8 75 % \$0 vs 20% \$10 80% \$0 D2

E1 95% \$8 \$0 vs 76% \$10 \$0 E2

\$0

What do these violations mean?

C1 100% \$8 vs 80% \$10 \$0 C2

D1 25% \$8 75 % \$0 vs 20% \$10 80% \$0 D2

E1 95% \$8 \$0 vs 76% \$10 \$0 E2

\$0