

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

Behavioral Economics Spring 2017
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The Common Ratio Effect

100% \$8

vs

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

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The Common Ratio Effect

25% \$8	75% \$0
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vs

20% \$10	80% \$0
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– Which would you choose?

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The Common Ratio Effect

100% \$8

vs

80% \$10	\$0
----------	-----

C1

25% \$8	75% \$0
---------	---------

vs

20% \$10	80% \$0
----------	---------

D1

C2

D2

• Many people choose C1 and D2

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The Common Ratio Effect

100% \$8

vs

80% \$10	\$0
----------	-----

C1

25% \$8	75% \$0
---------	---------

vs

20% \$10	80% \$0
----------	---------

D1

C2

D2

Option	Percentage
C1	~95%
D1	~65%

Option	Percentage
C1	~80%
D1	~65%

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The Common Ratio Effect

100% \$8

vs

80% \$10	\$0
----------	-----

C1

25% \$8	75% \$0
---------	---------

vs

20% \$10	80% \$0
----------	---------

D1

C2

D2

• Claim:

- C1 and D1 consistent with EU (55%)
- C2 and D2 consistent with EU (14%)
- C1 and D2 inconsistent with EU (22%)
- C2 and D1 inconsistent with EU (9%)

• Significant violations of EU

- These violations are not random

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Common Consequence Effect

100% \$16 vs 89% \$16 | 1% \$0

10% \$18

– Which would you choose?

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Common Consequence Effect

\$0 vs \$0

11% \$16 | 10% \$18

– Which would you choose?

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Common Consequence Effect

A1: 100% \$16 vs 89% \$16 | 1% \$0 A2

B1: \$0 vs \$0 B2

11% \$16 | 10% \$18

- Many people choose A1 and B2

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Common Consequence Effect

A1: 100% \$16 vs 89% \$16 | 1% \$0 A2

B1: \$0 vs \$0 B2

11% \$16 | 10% \$18

2015 2017

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Common Consequence Effect

A1: 100% \$16 vs 89% \$16 | 1% \$0 A2

B1: \$0 vs \$0 B2

11% \$16 | 10% \$18

- Claim:
 - A1 and B1 consistent with EU (3%)
 - A2 and B2 consistent with EU (61%)
 - A1 and B2 inconsistent with EU (33%)
 - A2 and B1 inconsistent with EU (3%)
- Significant violations of EU
 - These violations are not random

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And the winner is....

- Jillian Knoll
- Randomly Selected Question: A
- You Chose A2

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And the winner is....

- Jillian Knoll
- Randomly Selected Question: A
- You Chose A2

1% \$0 A2
89% \$16 10% \$18

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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 10% \$18	A2
B1	\$0	vs	11% \$16 10% \$18	B2

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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

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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

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

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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

C1	D1	E1
80	65	80

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