INSURANCE IN THE HOUSEHOLD: INDIVIDUAL RISK, HOUSEHOLD RISK AND INTRA-HOUSEHOLD INEQUALITY

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Risk

Motivation

Risk taken by household characterized by two elements:

- risk level of overall lottery
- distribution of risk and payoffs across individuals

Household experiments

- Focus on risk to household without taking into account distribution on individual level.
  - Carlsson et al., 2013; Braaten and Martinsson, 2015; Abdellaoui et al., 2013; Bateman and Munro, 2005
- Spouses care about own earnings and do not necessarily maximize household income:
  - Iversen et al. 2010 (Uganda, 57%); Munro et al. 2010 (Nigeria, 8%); Munro et al., 2014 (India, 17%)

Aim

Q 1: Does inequality matter for decisions in risk situations?

Q 2: How do households react to asymmetries?

- Note: we are specifically focusing on household preferences (not individual preferences)

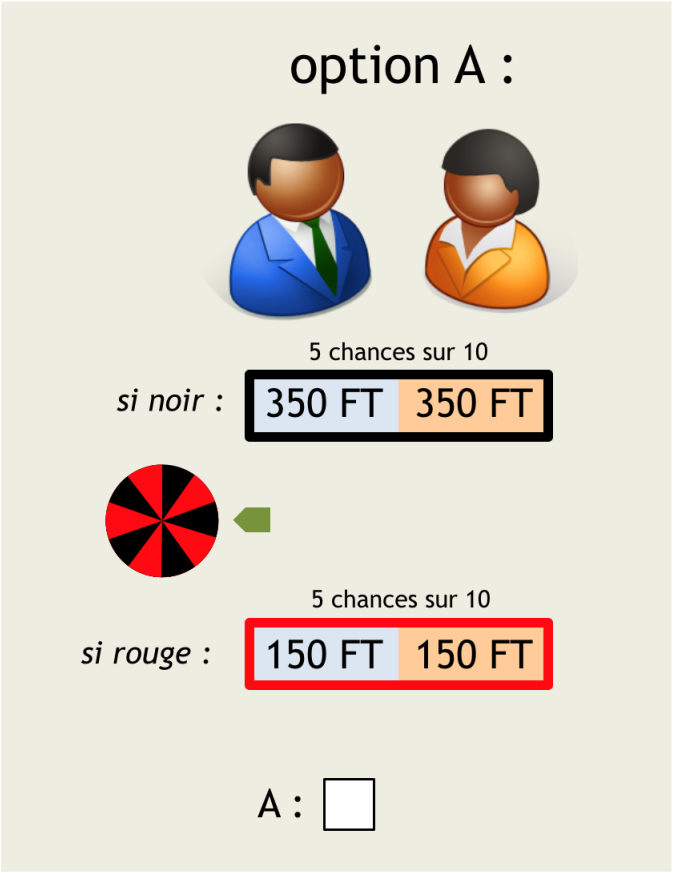
This paper

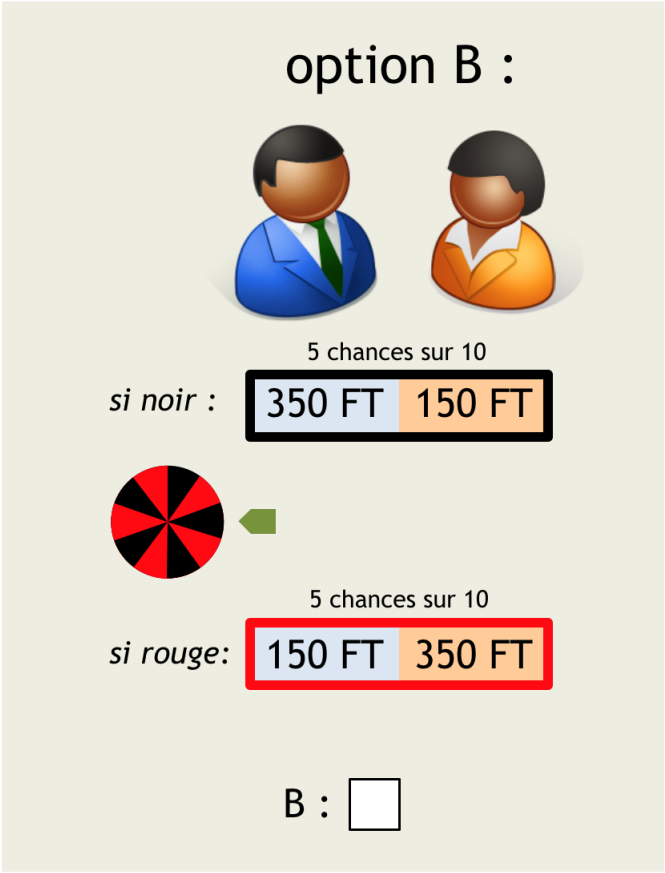
- Study in a laboratory experiment, behavior by real spouses in a joint risk-taking task.
- Results:
  - Inequality aversion has a small but significant impact on household risk taking
  - Most couples act risk averse.

    But when only men carry risk in the low risk option, 51% of couples prefer an allocation reducing inequality *at the cost of increased risk.*

Joint risk task – symmetric version

- risk taking by couples (choices 1 to 4):





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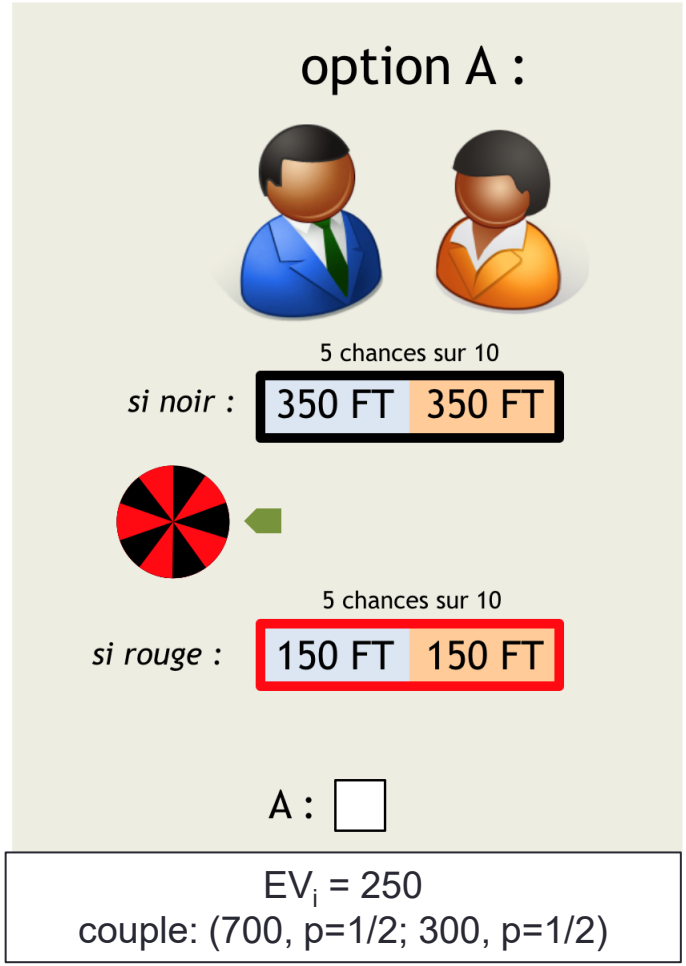

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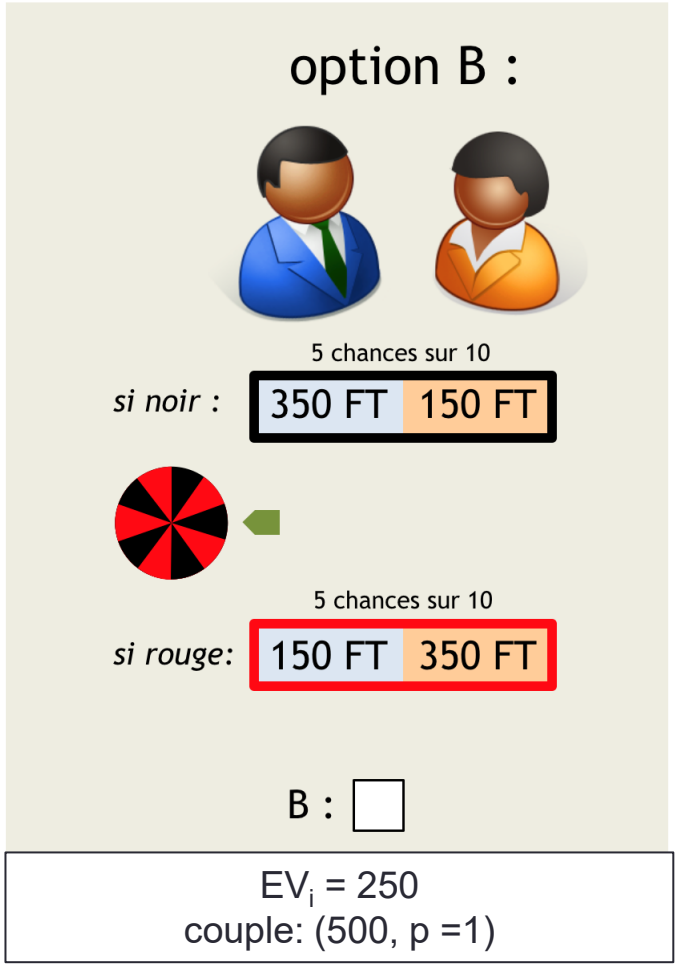
couple: (700, p=1/2; 300, p=1/2)



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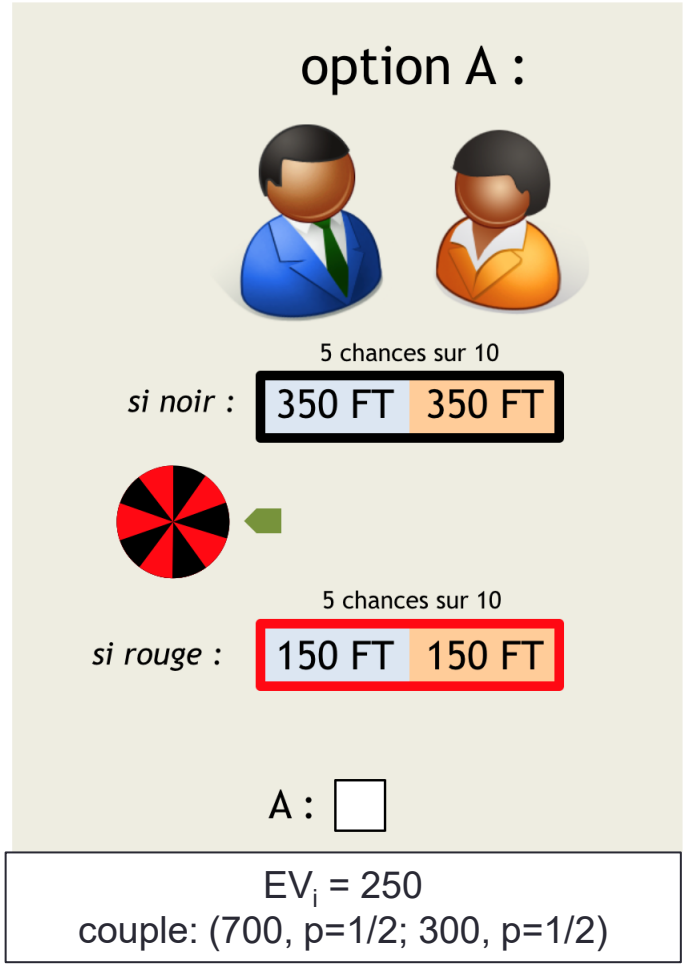

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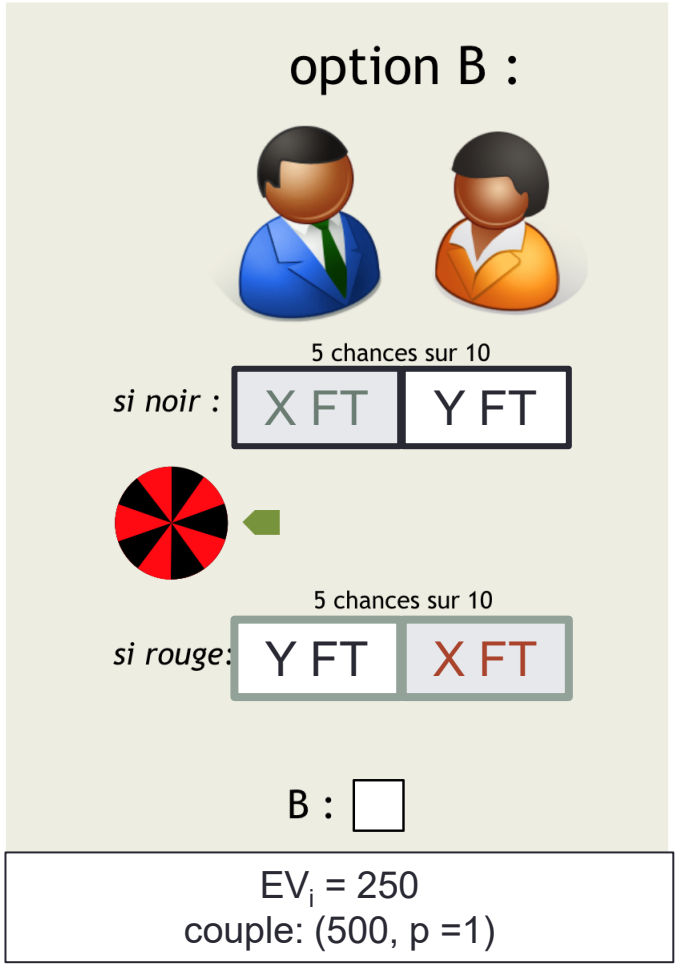

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1:
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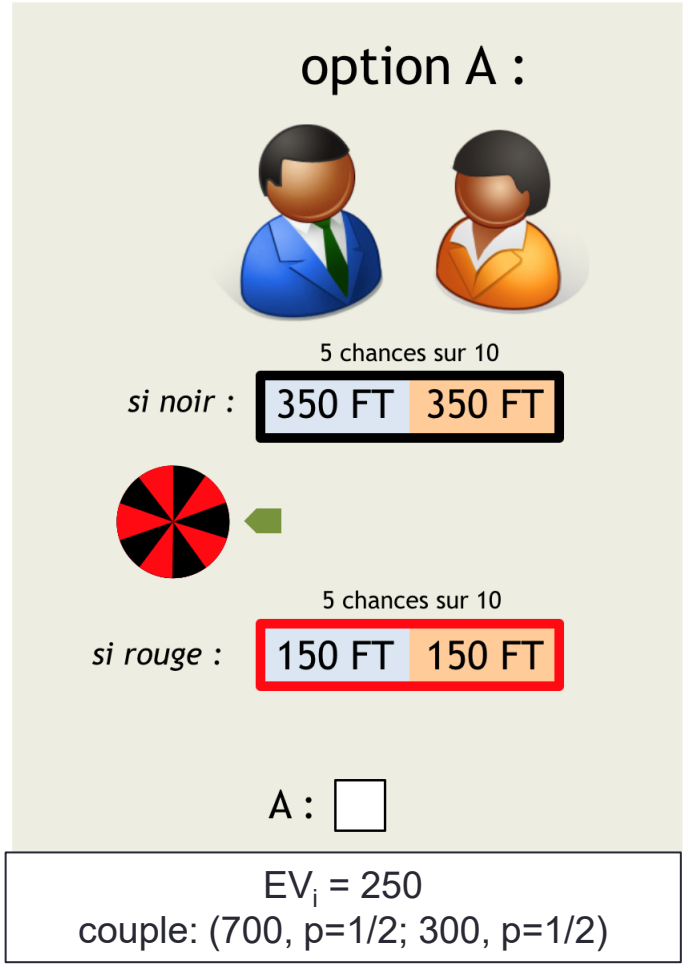

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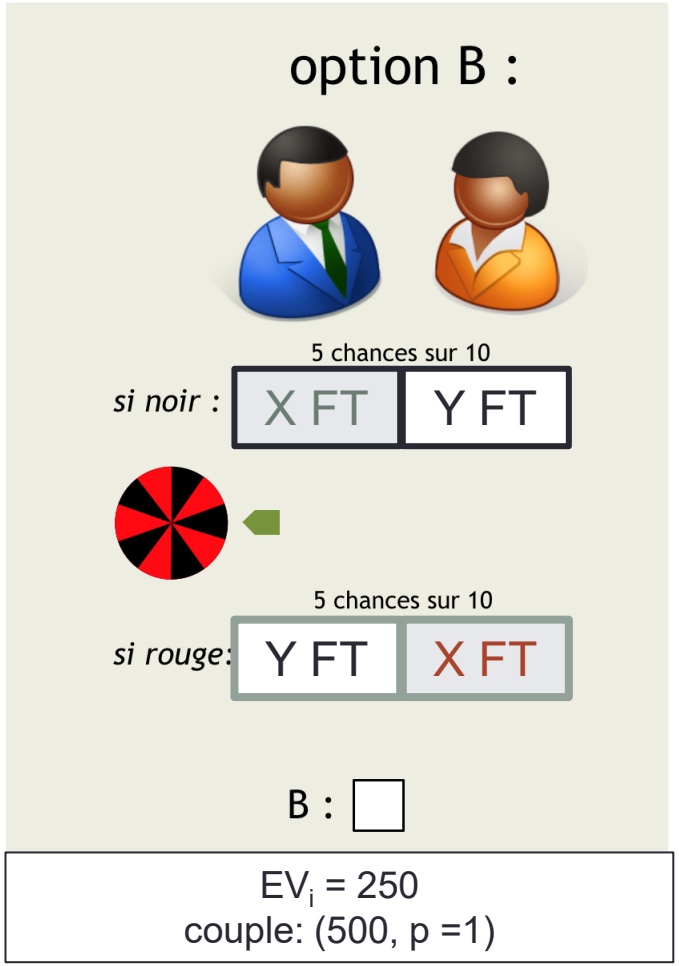

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1:
X = 350
Y = 150

2:
X = 400
Y = 100

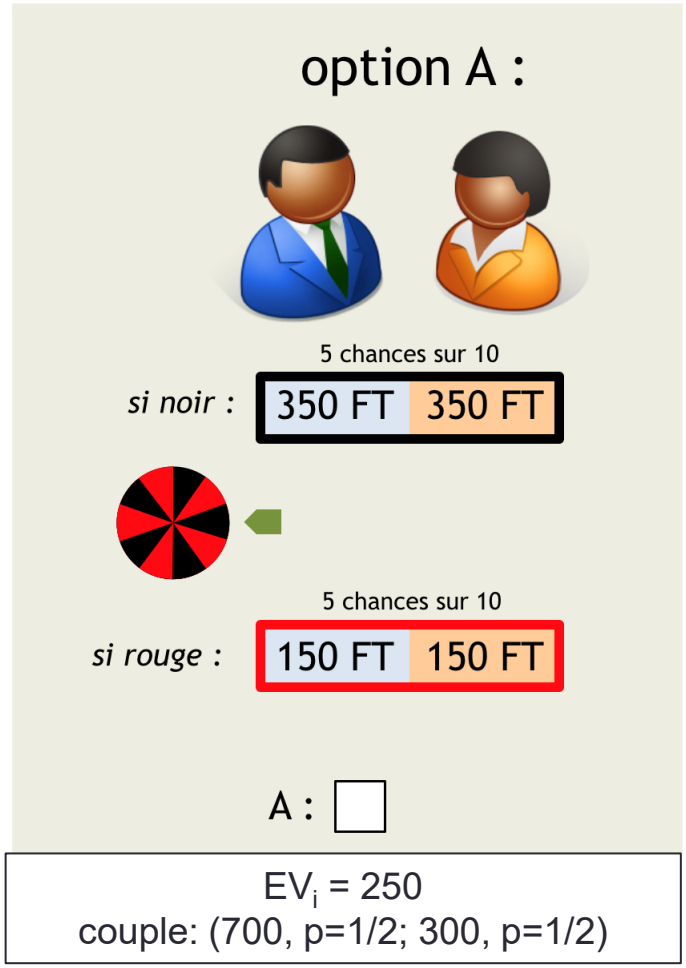
3:
X = 450
Y = 50

4:
X = 500
Y = 0

Joint risk task

- risk taking by couples (choices 1 to 4):

Does an increase in inequality increase choice of A?



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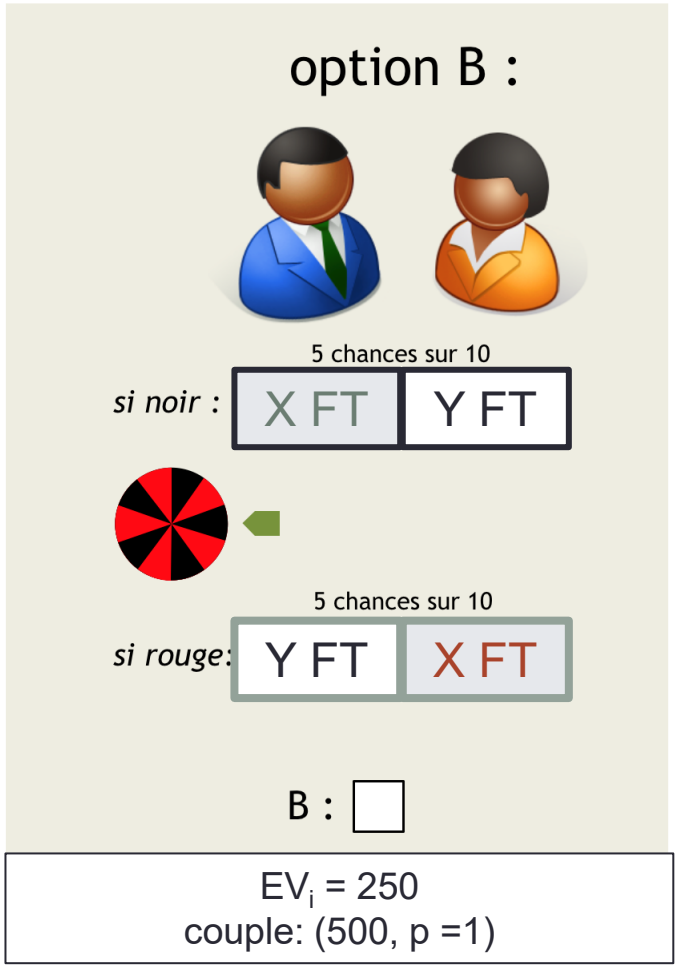

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Methods

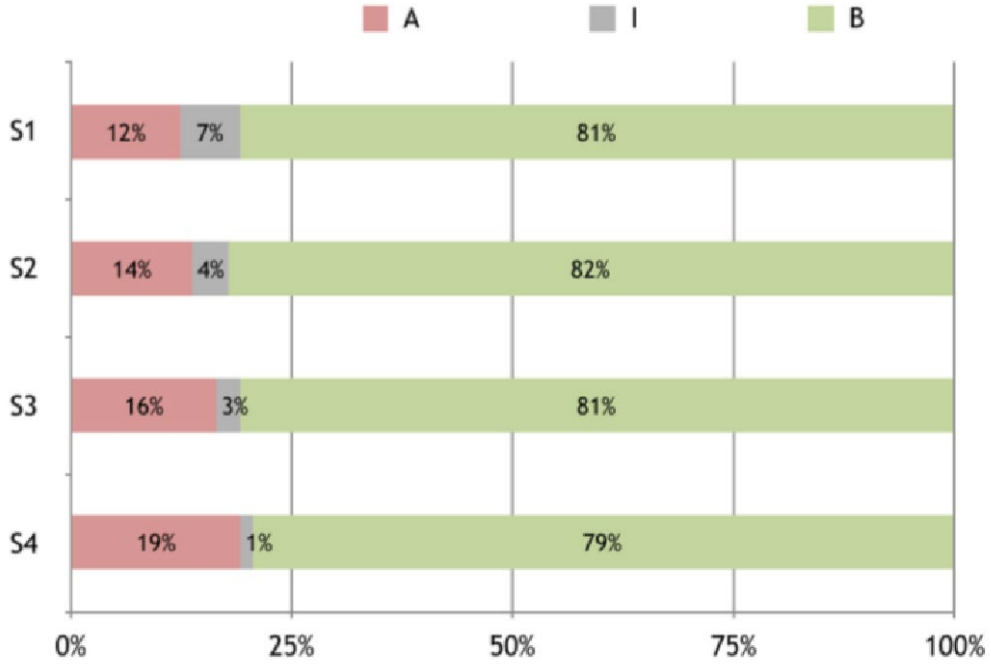
- Conducted by paper and pencil in Toulouse, France
  - Part of larger study on efficiency, cooperation and equality.
  - Overall 2h
- 101 established heterosexual couples:
  - Age distribution:
    - 44 % (20-29); 33 % (30-39); 11 % (40-49); 12 % (50-59)
    - Average couple duration approx. 8 years
  - 40 % have common children
  - 44% married, 11% PACS
- Individual earnings between 20 and 60 euros.
- We will focus on:
  - Joint risk-taking task for spouses
    1. When payoffs are symmetric
    2. When one partner holds less risk (in one option)

Joint risk task

- Spouses joined their partner at a table.
- Open discussion to reach a common decision.

Joint risk task – symmetric version

- In each choice approx. 80% of couples choose B.



Note: Only considering couples with two consistent spouses (73 couples).

- 72% of couples choose the same option in all four choices
  - 65% choose option B in all four choices

Joint risk task – symmetric version

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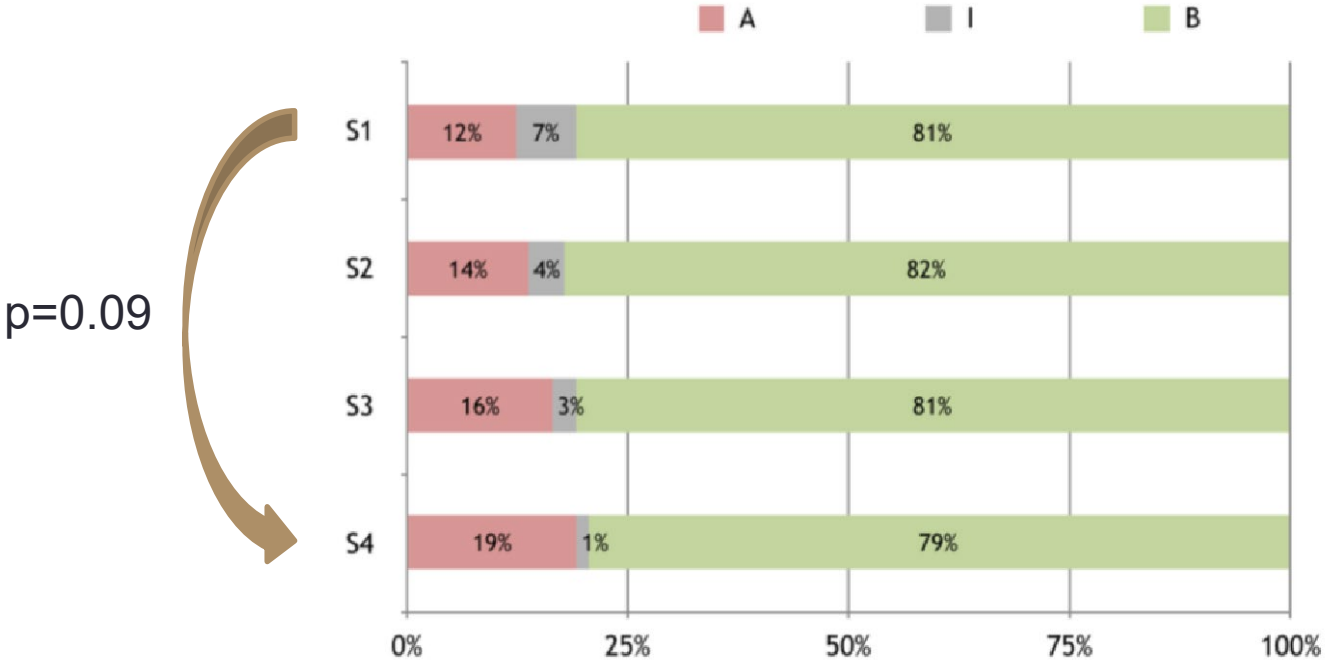

Note: Only considering couples with two consistent spouses (73 couples).

- 72% of couples choose the same option in all four choices
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Joint risk task

=> A large proportion of couples (65%) shows consistent preferences to hedge risk: independent of inequality.

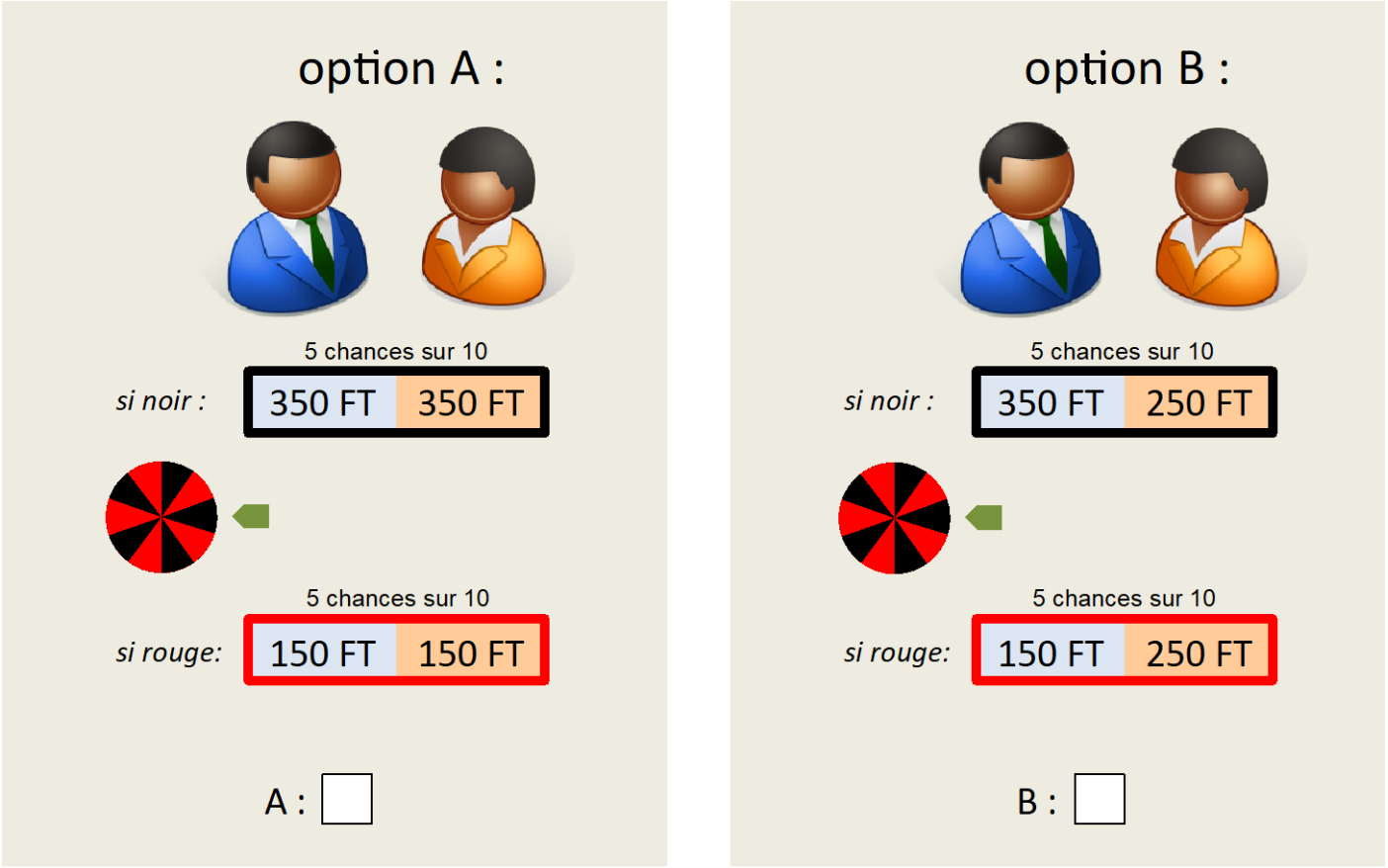
=> Hedging is only possible if both spouses are exposed to risk.

=> Removing individual risk for one spouse

- => increases risk for household
- => might bring focus to individual risk of uninsured spouse

Joint risk task – asymmetric version

- risk taking if one partner is insured (choices 5-6):



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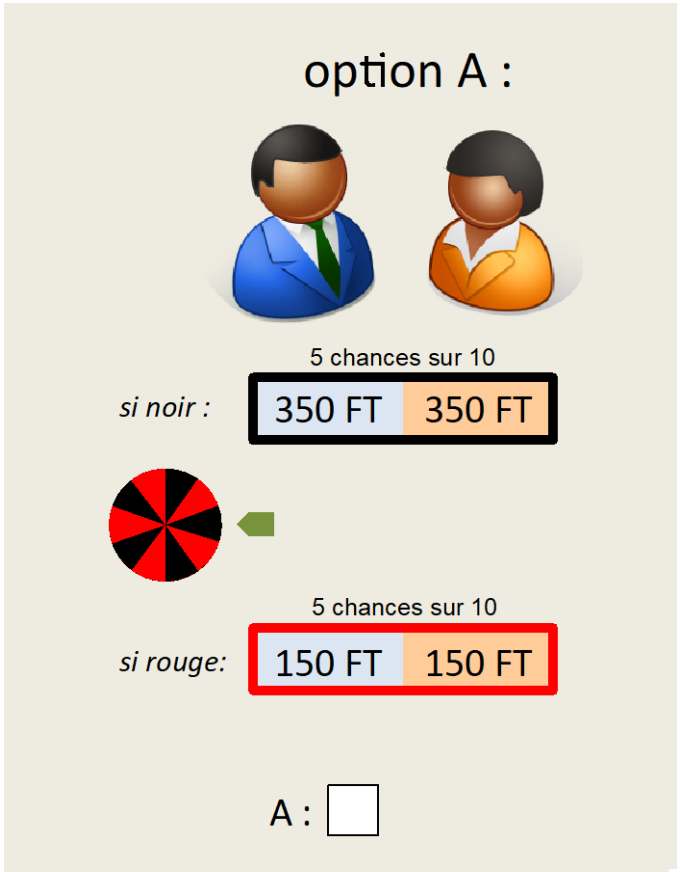

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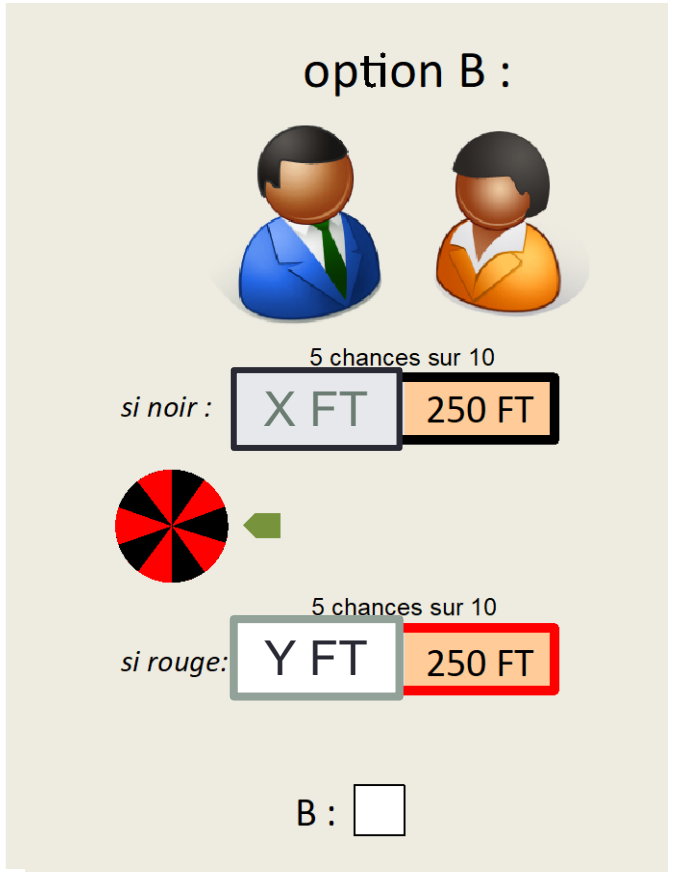

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Joint risk task – asymmetric version

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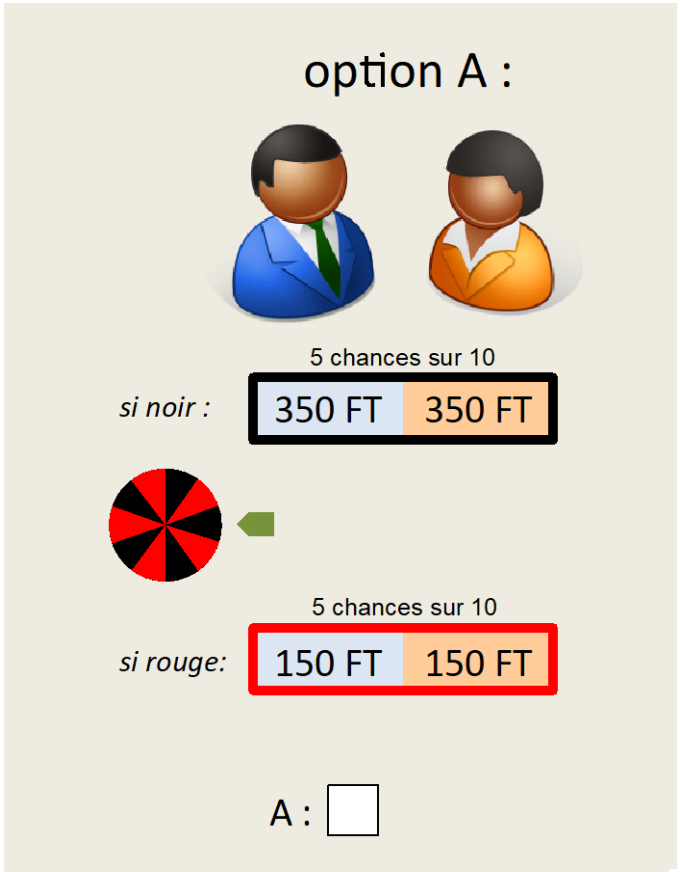

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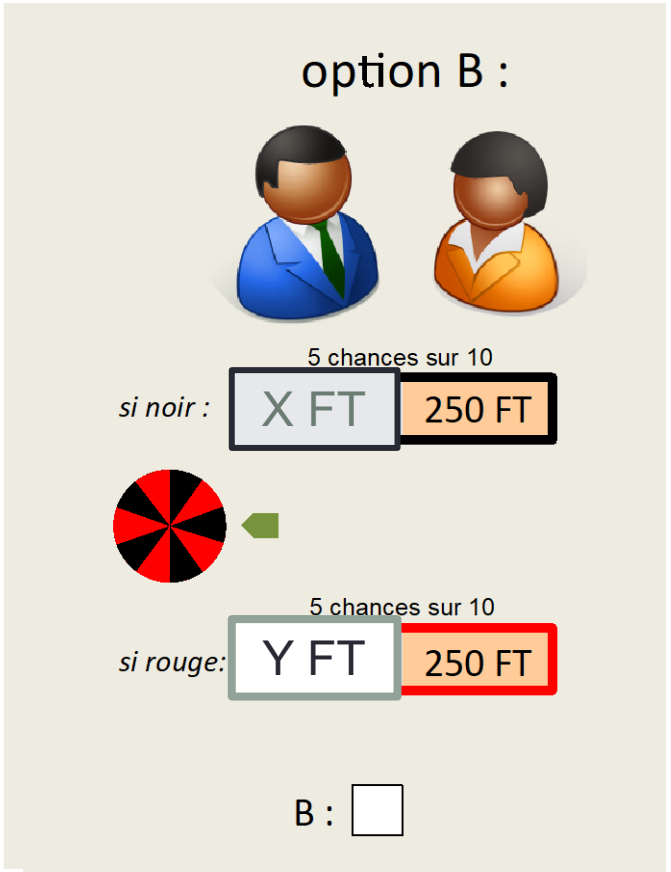

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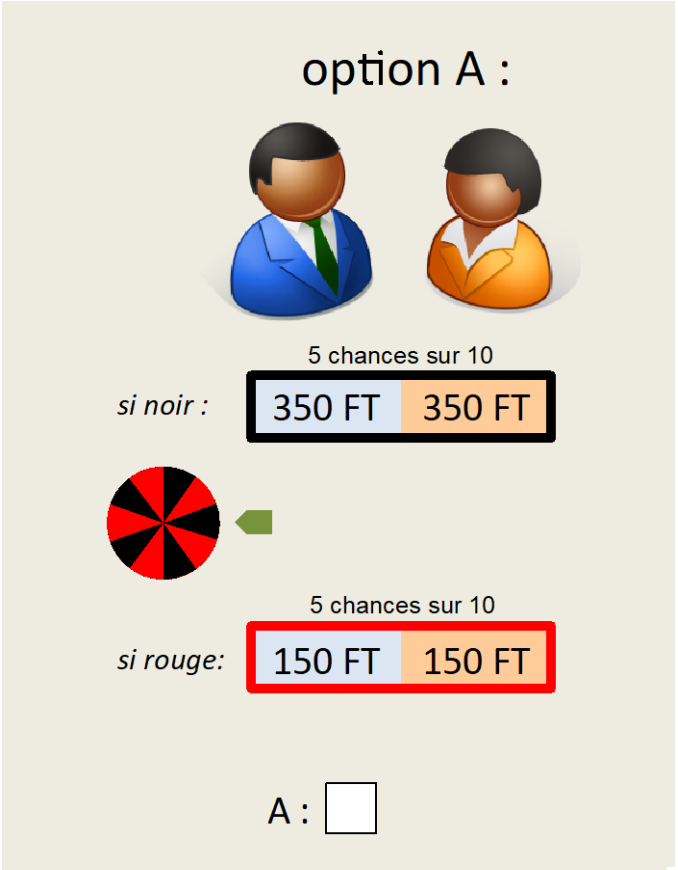

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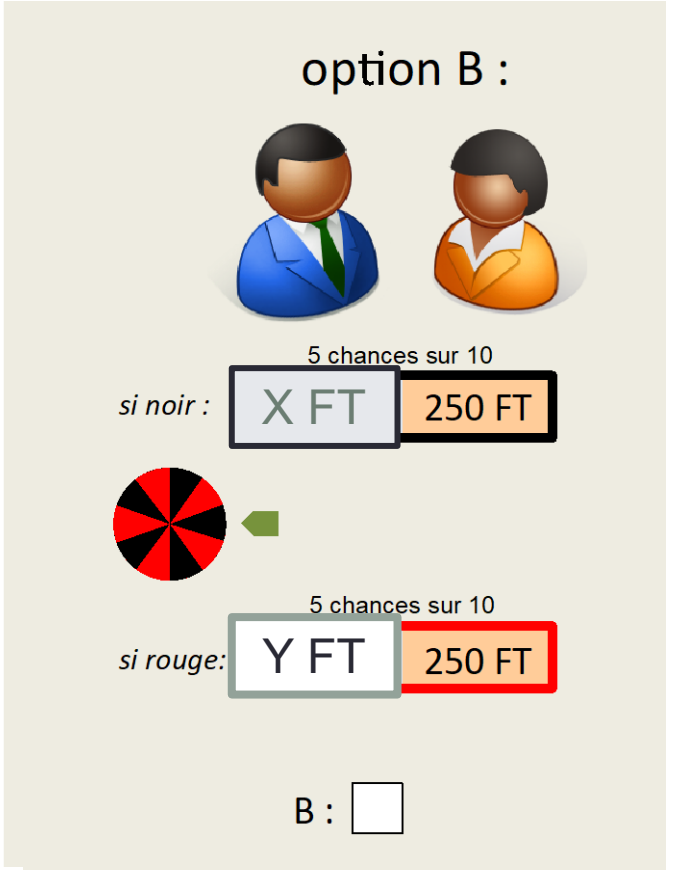

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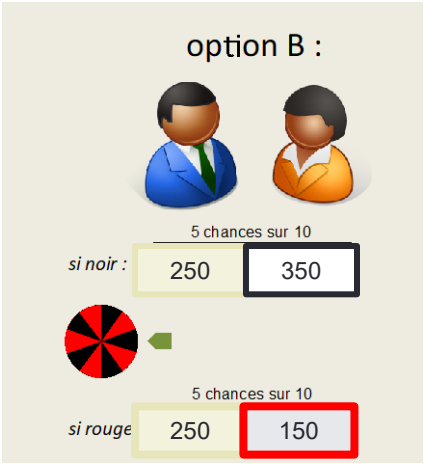
Treatments:

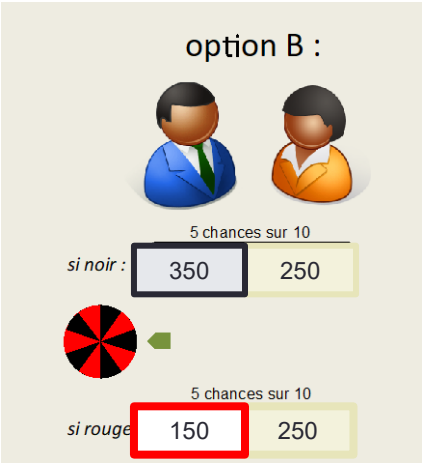
- Women insured (WI)
- Men insured (MI)

Joint risk task – asymmetric version

- when men insured:
  - choice 5: 78 % choose B
- when women insured:
  - choice 5: 65 % choose B

p=0.07



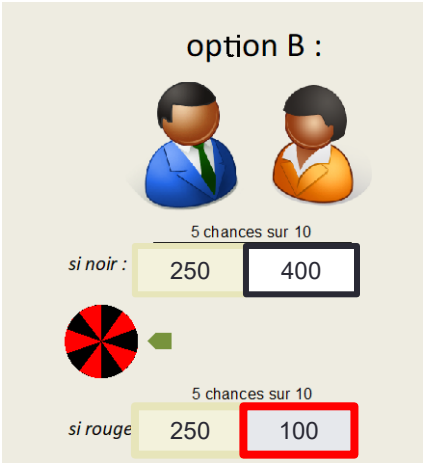


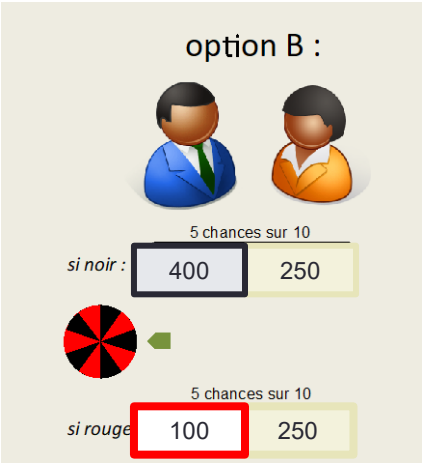
Joint risk task – asymmetric version

- when <u>men</u> insured:
  - choice 5: 78 % choose B
  - choice 6: **66%** choose B
- when <u>women</u> insured:
  - choice 5: 65 % choose B
  - choice 6: **49%** choose B

p=0.07

p=0.006





=> Spouses averse to having men hold all risk.

Conclusion

- Risk taking by couples seems to be influenced by inequality in payoffs
- Couples seem averse to situations where men hold all risk
- Open questions:
  - How does the above extend to other types of groups (e.g. pairs of individuals that do not know each other)
  - Is the stronger impact of male risk preferences due to the choices of the man, the woman or both?

THANK YOU

IAST
INSTITUTE for ADVANCED STUDY in TOULOUSE