

Welfare Assessment of Default-Setting Policies

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The Argument

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- i. *Default effect* an empirical regularity between context and behaviour
- ii. Explanation of this regularity controversial: 5 different accounts
- iii. Welfare assessment of default policies dependent on which explanation is assumed to be correct

The Argument

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- i. *Default effect* an empirical regularity between context and behaviour
 - ii. Explanation of this regularity controversial: 5 different accounts
 - iii. Welfare assessment of default policies dependent on which explanation is assumed to be correct
- ⇒ Non-robustness, context-dependence of welfare assessment.

What is a Default Effect?

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Default:

"Choose between A,B,C. If you do not indicate a choice, you will receive the default option"

What is a Default Effect?

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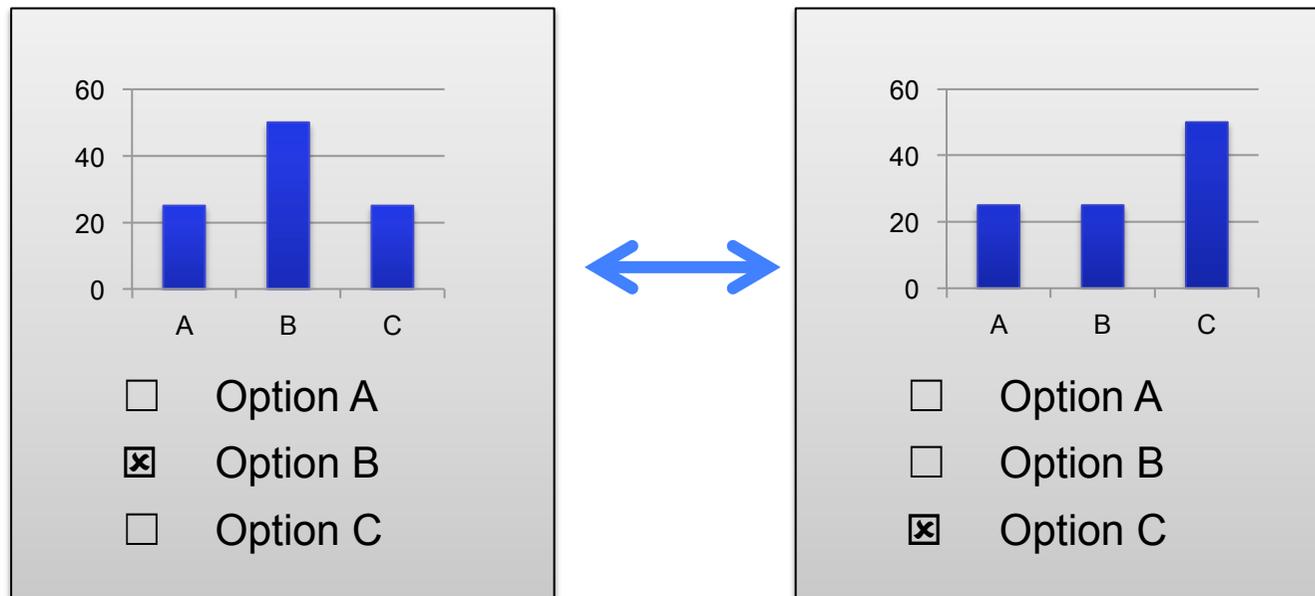
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Default effect:



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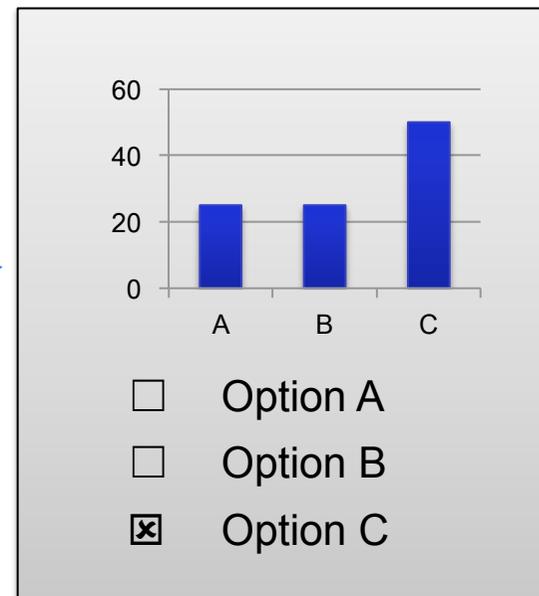
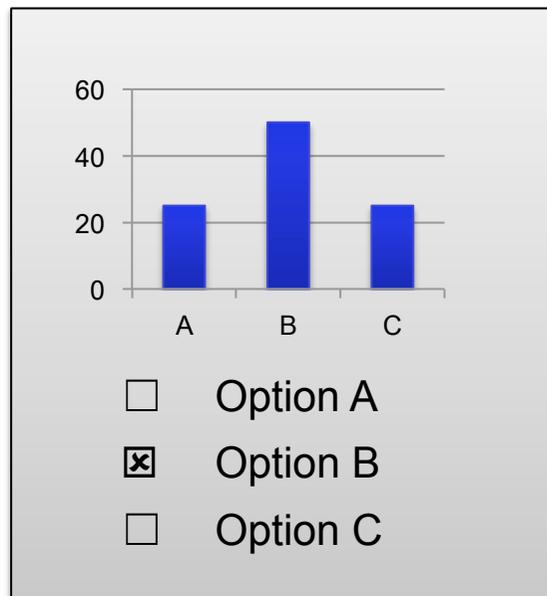
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Default:

"Choose between A,B,C. If you do not indicate a choice, you will receive the default option"

Default effect:



*Empirical effects:
25 - 70%*

What are Default Policies?

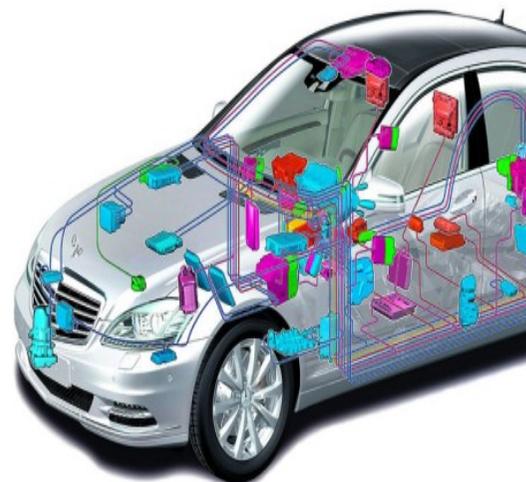
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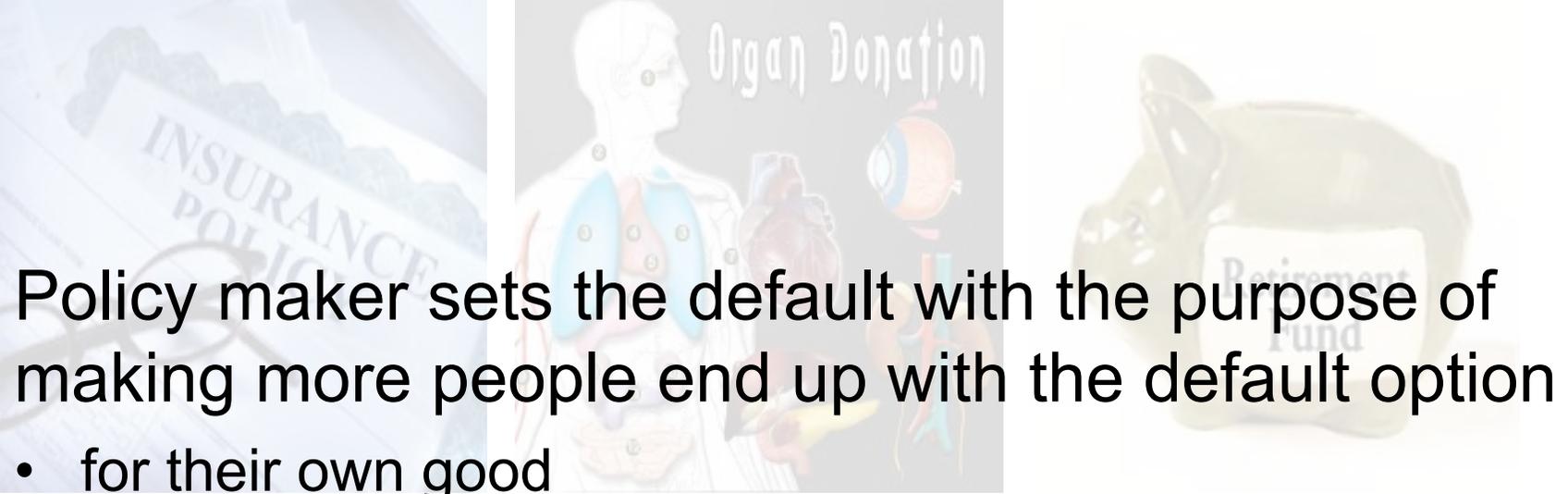
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Policy maker sets the default with the purpose of making more people end up with the default option

- for their own good
- for some other (e.g. social or commercial) reason



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Policy maker sets the default option to make more people choose it

- for their own good

- for some other (e.g. social or commercial) reason

What welfare criterion?



What Welfare Criterion?

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*"In some cases individuals make inferior decisions in terms of **their own welfare**— decisions that they would change if they had complete information, unlimited cognitive abilities, and no lack of self-control." (Sunstein and Thaler 2003, 1162)*

What Welfare Criterion?

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*"In some cases individuals make inferior decisions in terms of **their own welfare**— decisions that they would change if they had complete information, unlimited cognitive abilities, and no lack of self-control." (Sunstein and Thaler 2003, 1162)*

*"Note that defaults can lead to two kinds of misclassification: **willing donors who are not identified** or **people who become donors against their wishes**." (Johnson and Goldstein 2003, 1339)*

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*"Note that defaults can lead to two kinds of misclassification: **willing donors who are not identified** or **people who become donors against their wishes**." (Johnson and Goldstein 2003, 1339)*

W = Proportion of people who have their optimum (according to their true preferences) satisfied.

3 Differential Effects of Defaults on W

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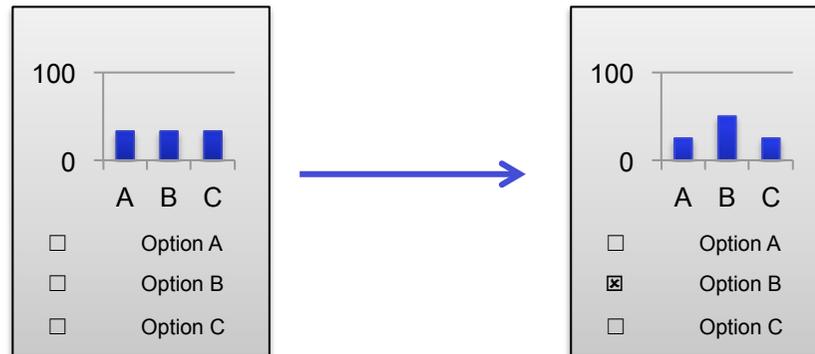
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1. Individual Welfare Relevance



3 Differential Effects of Defaults on W

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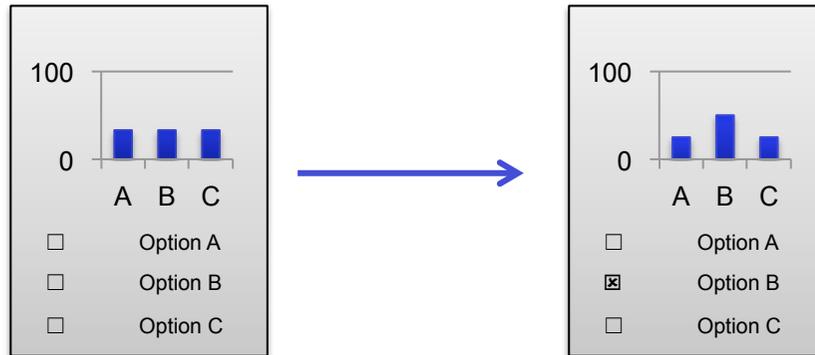
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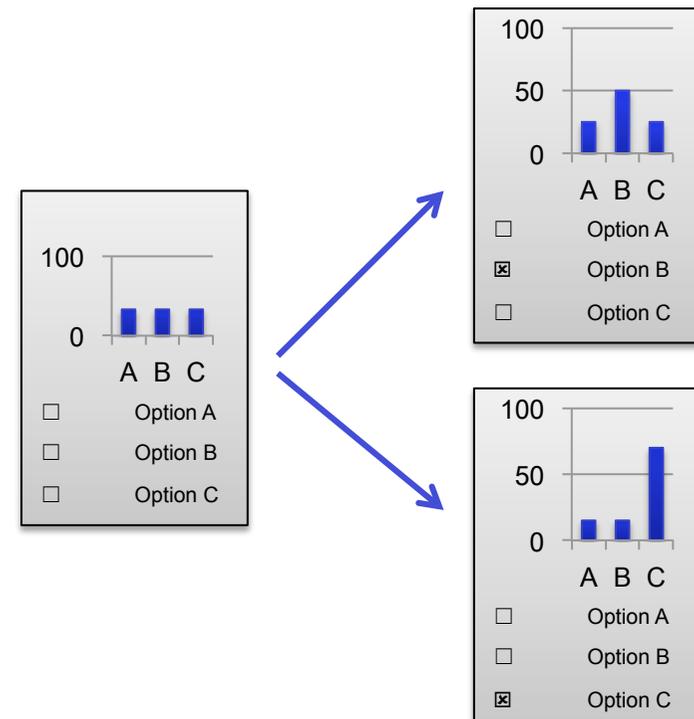
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1. Individual Welfare Relevance



2. Effect Asymmetry



3 Differential Effects of Defaults on W

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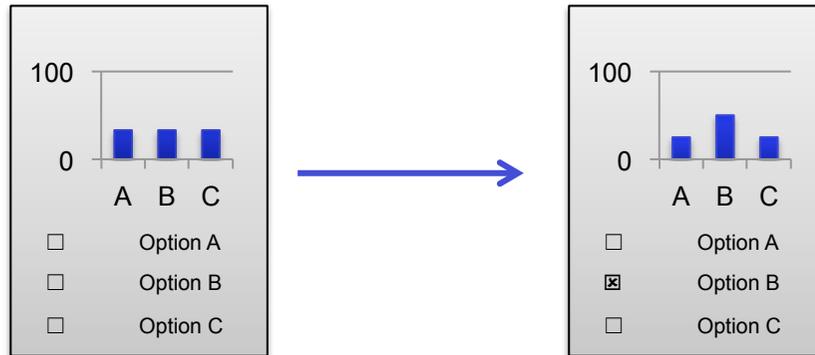
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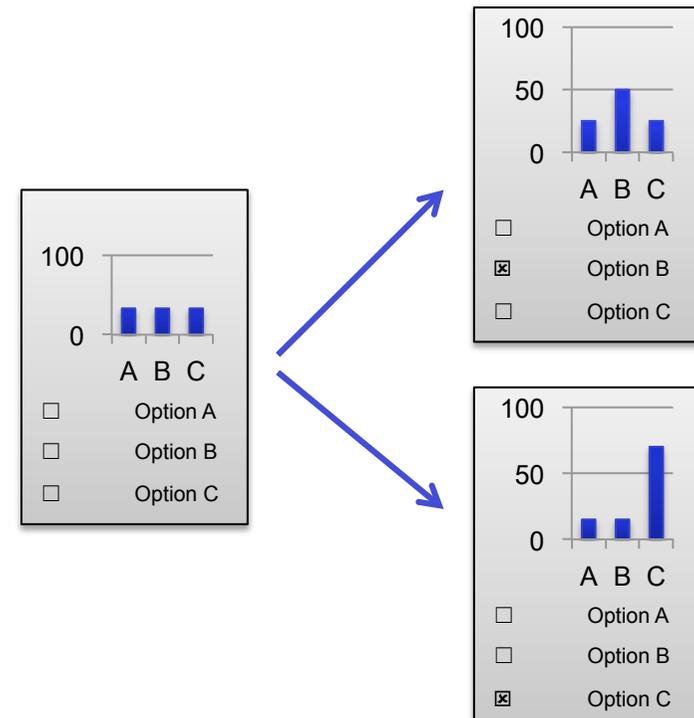
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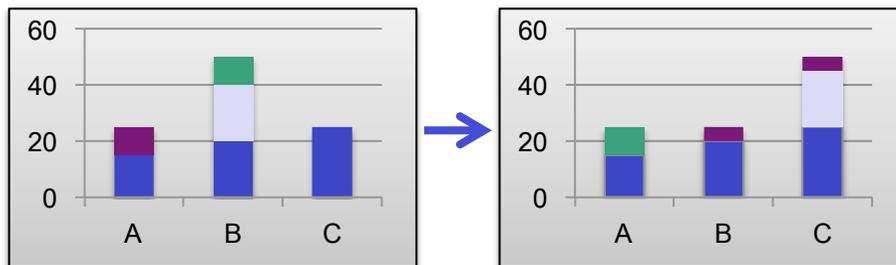
1. Individual Welfare Relevance



2. Effect Asymmetry



3. Heterogeneous Switching



What Brings About Default Effects?

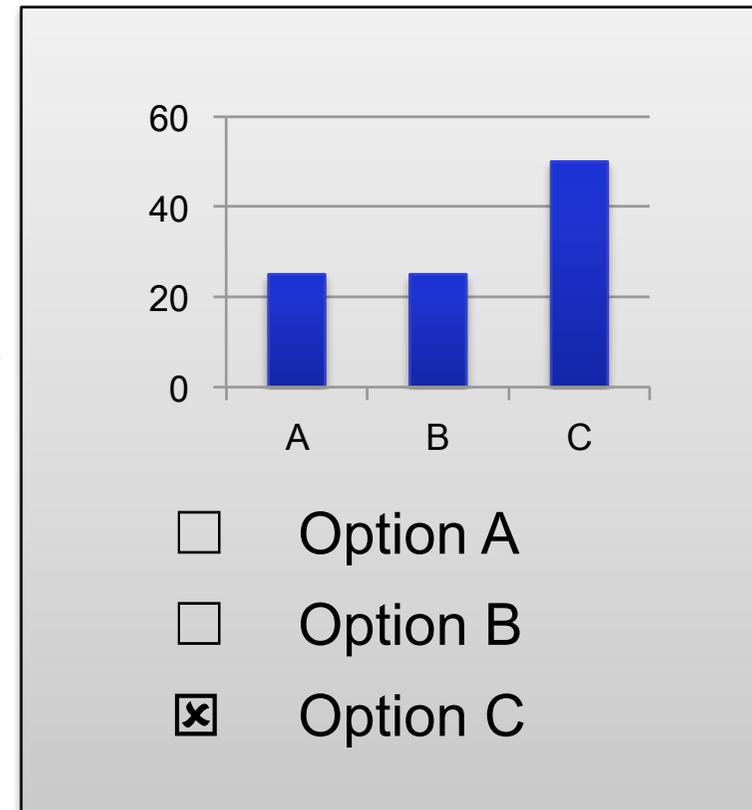
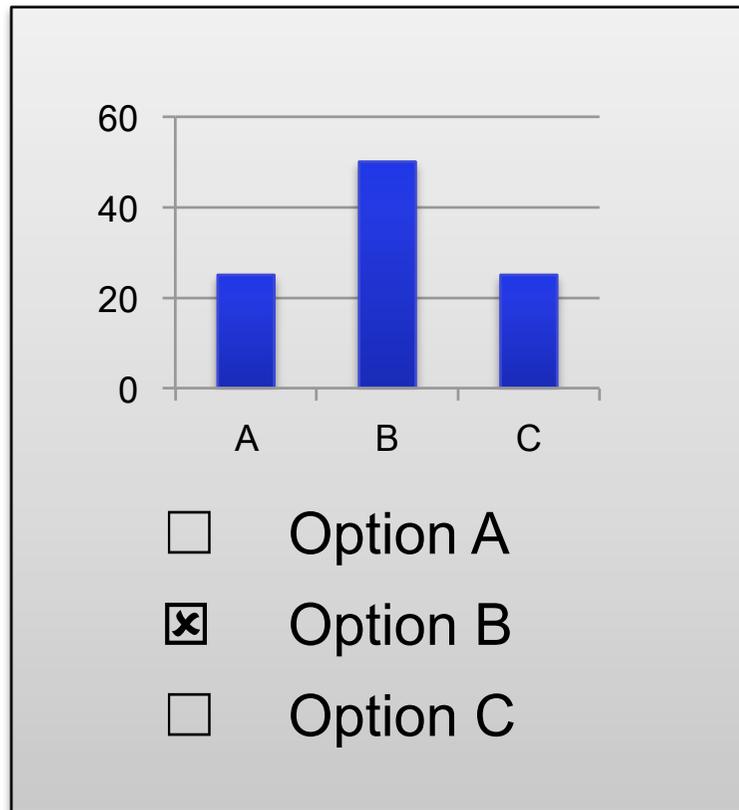
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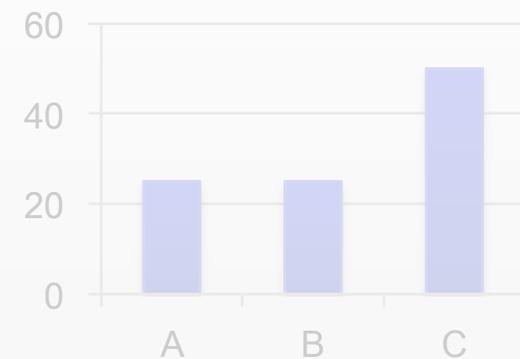
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5 competing explanations:

1. Cognitive effort
2. Switching costs
3. Loss aversion
4. Recommendation effect
5. Change of meaning



- Option A
- Option B
- Option C

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5 competing explanations:

1. Cognitive effort
2. Switching costs
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Resolution of preference conflict too much effort. Choose with default heuristic instead: *"If there is a default, do nothing about it"*.

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Resolution of preference conflict too much effort. Choose with default heuristic instead: *"If there is a default, do nothing about it"*.

-
1. Not welfare relevant
 2. Symmetric
 3. Heterogeneous switch

What Brings About Default Effects?

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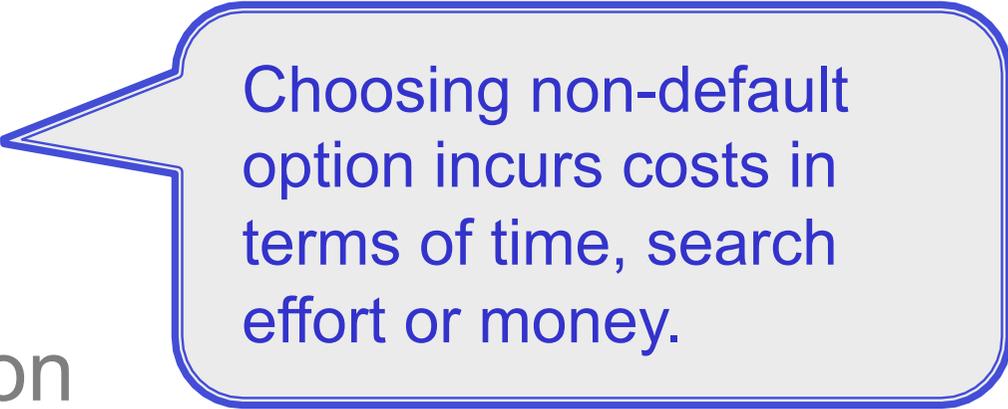
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5 competing explanations:

1. Cognitive effort
2. **Switching costs**
3. Loss aversion
4. Recommendation effect
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Choosing non-default option incurs costs in terms of time, search effort or money.

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5 competing explanations:

1. Cognitive effort
2. **Switching costs**
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1. Not welfare relevant
 2. Symmetric
 3. Homogenous switching

What Brings About Default Effects?

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5 competing explanations

1. Cognitive effort
2. Switching costs
3. **Loss aversion**
4. Recommendation effect
5. Change of meaning

Preferences between options involve trade-off between dimensions. Default setting increases impact of those dimensions that are considered a "loss" on preference judgment.

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5 competing explanations

1. Cognitive effort
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1. Not welfare relevant
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5 competing explanations:

1. Cognitive effort
2. Switching costs
3. Loss aversion
4. **Recommendation effect**
5. Change of meaning

Chooser interprets default as signal from policymaker that default option is particularly recommended.

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5 competing explanations:

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5 competing explanations:

1. Cognitive effort
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5. Change of meaning

Setting default affects meaning of options. E.g. under opt-in, being a donor means something different than being a donor under opt-out.

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5 competing explanations:

1. Cognitive effort
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Setting default affects meaning of options. E.g. under opt-in, being a donor means something different than being a donor under opt-out.

-
1. Prob. welfare relevant
 2. Asymmetric
 3. Heterogeneous switch

Summary: Differential W-Effects by Explanation

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| | Individual welfare relevance | Asymmetric effect | Heterogeneous Switching |
|------------------|------------------------------|-------------------|-------------------------|
| Cognitive effort | No | Symmetric | Heterogeneous |
| Switching costs | No | Symmetric | Homogenous |
| Loss aversion | No | Asymmetric | Heterogeneous |
| Recommendation | Yes | Asymmetric | Homogenous |
| Meaning Change | Probably yes | Asymmetric | Heterogeneous |

A Numerical Example

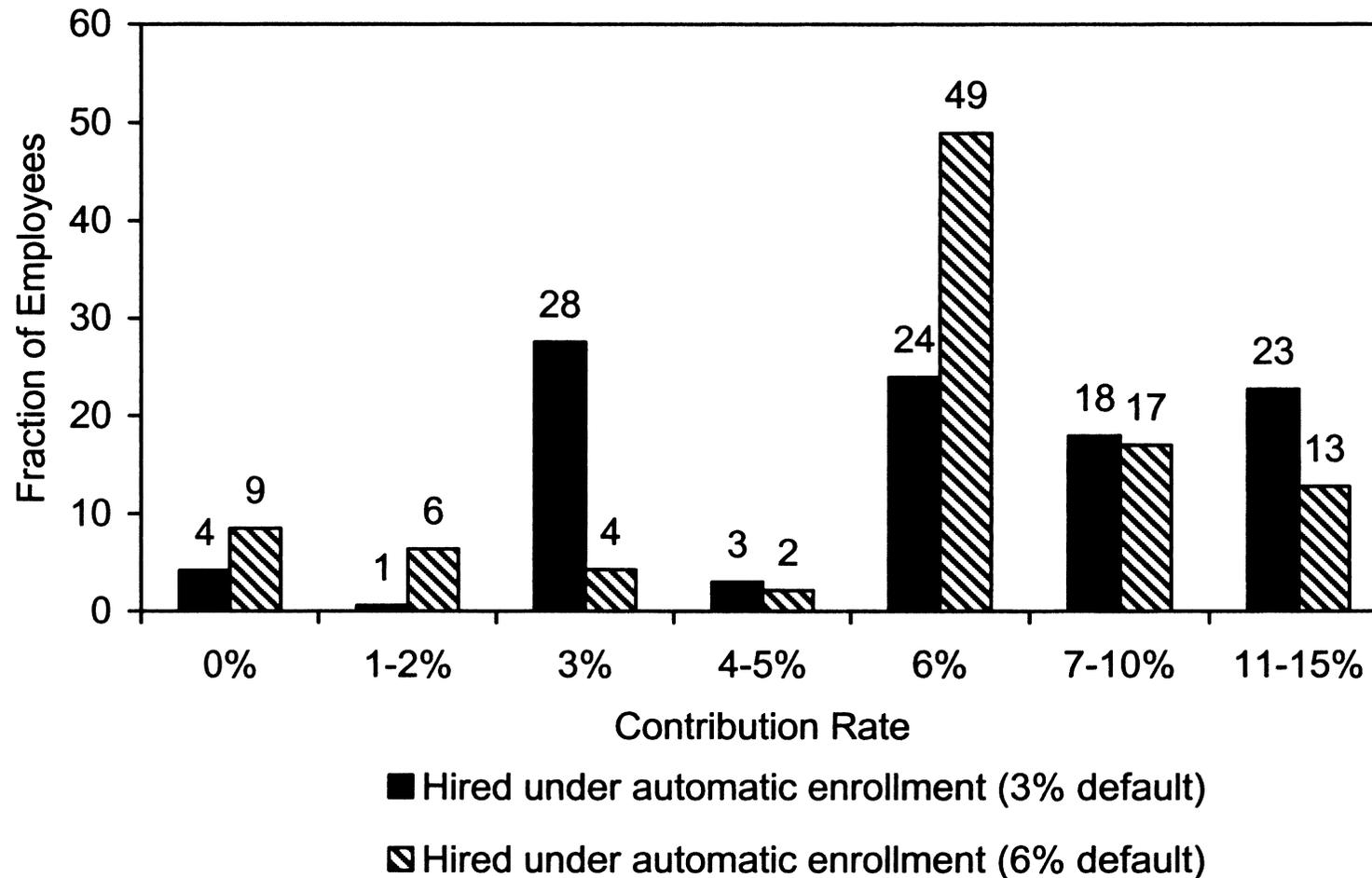
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Distribution of 401k contribution rates under two defaults (Beshears, Choi, Laibson and Madrian 2009, 173)

A Numerical Example

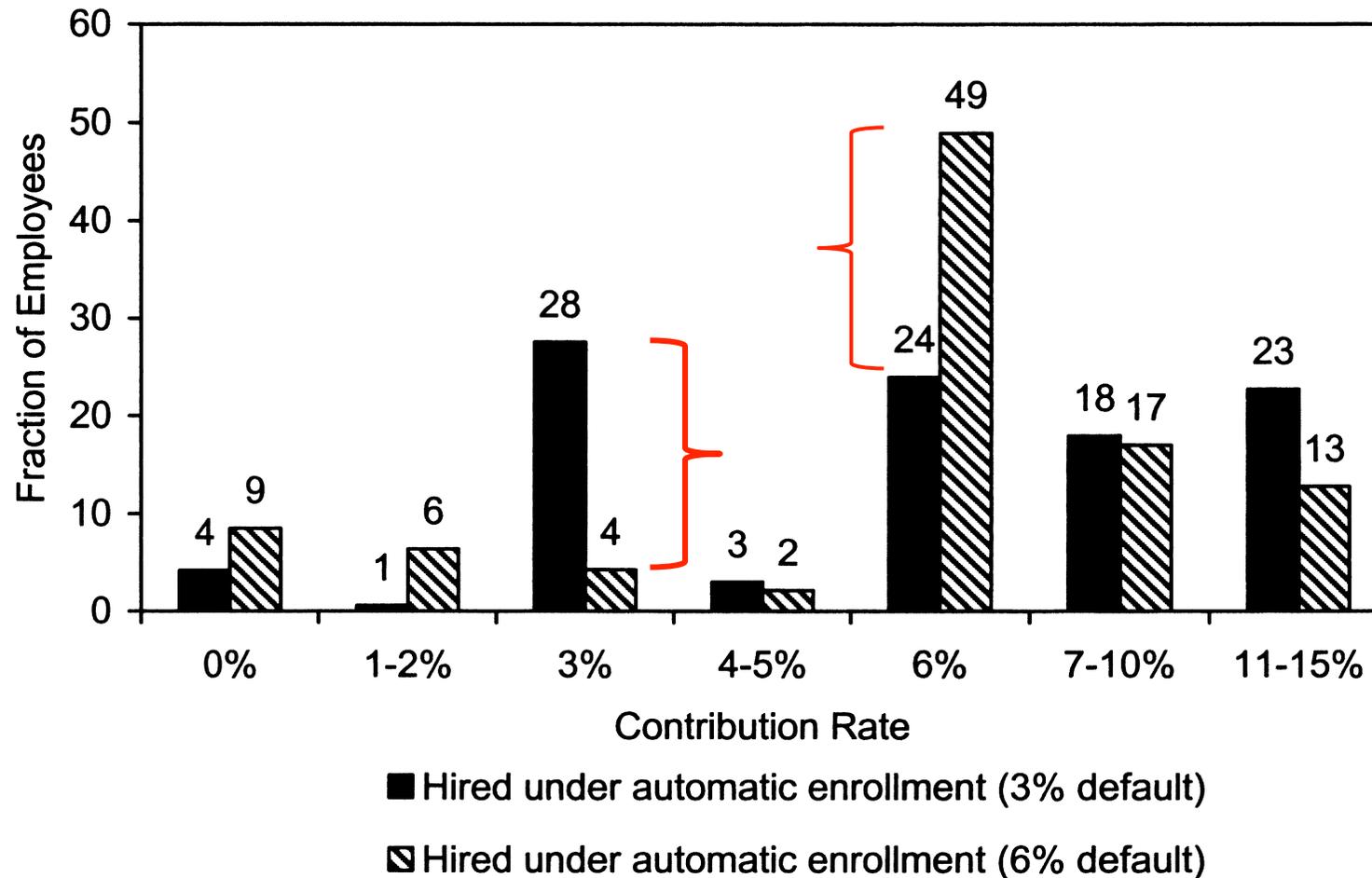
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A Numerical Example

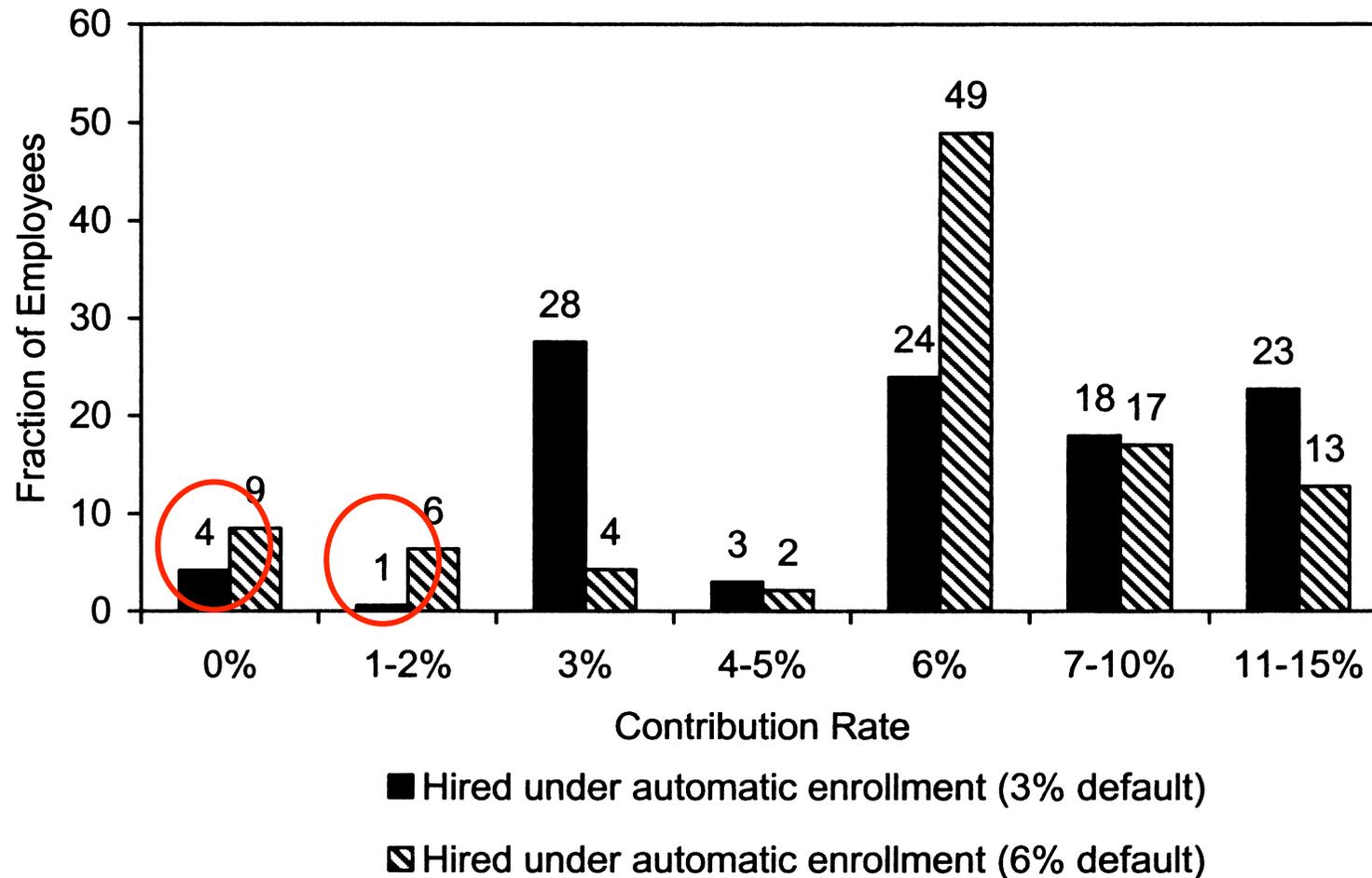
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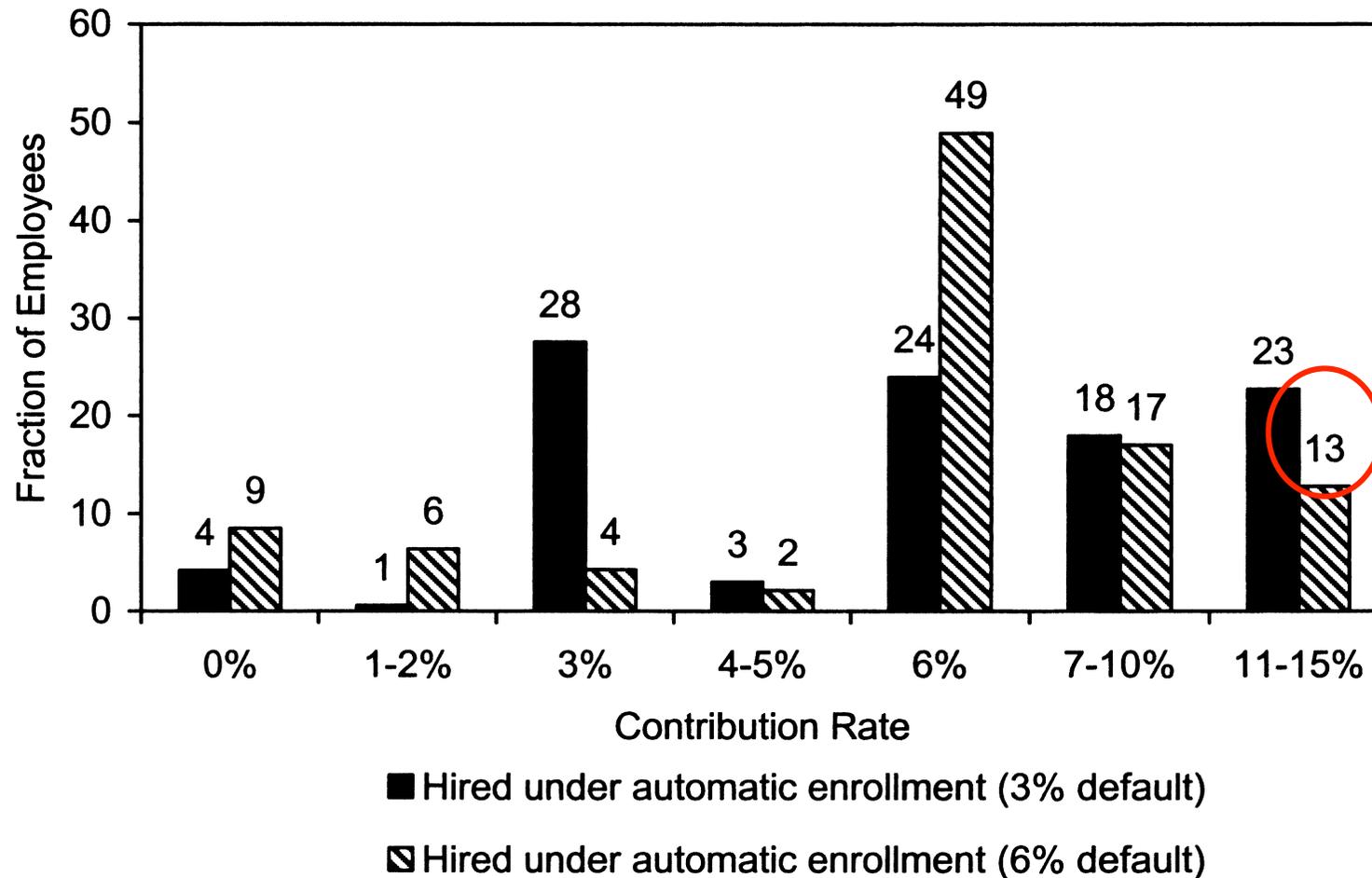
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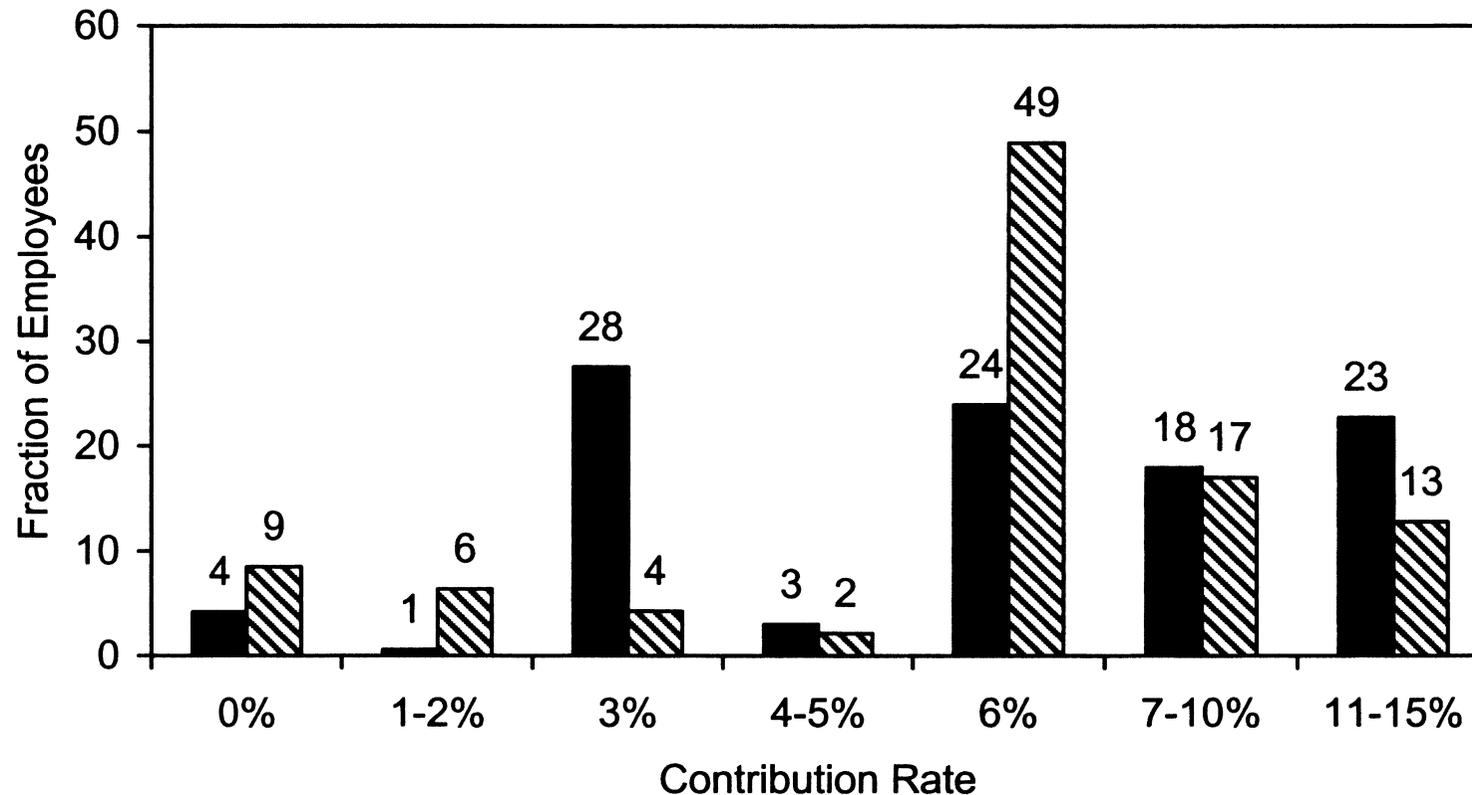
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Mean: 6.88% ■ Hired under automatic enrollment (3% default) $\sigma=3.97$

Mean: 6.31% ▨ Hired under automatic enrollment (6% default) $\sigma=3.47$

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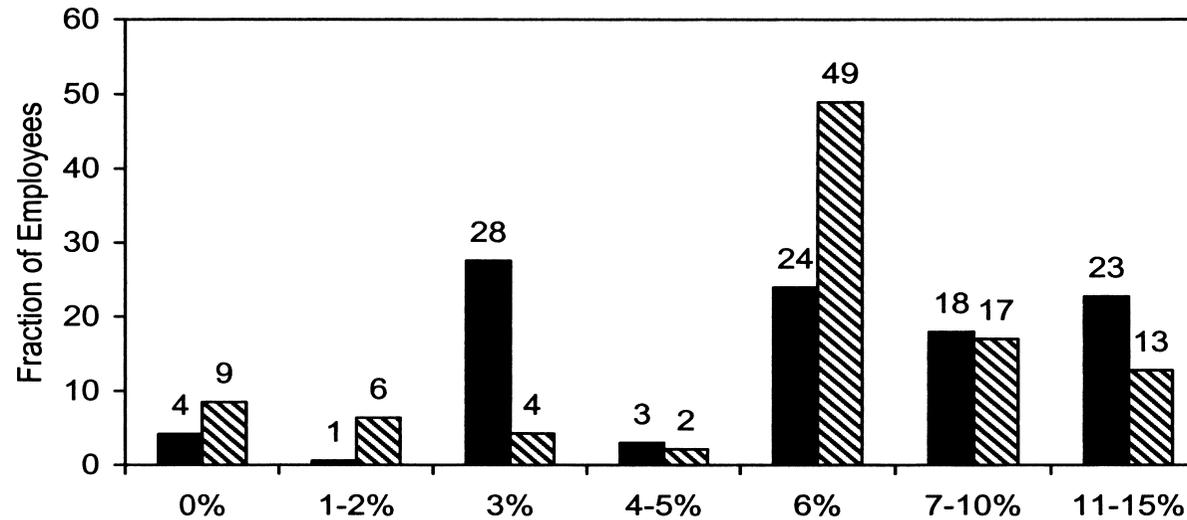
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Worst-Case Scenario: e.g. Loss Aversion

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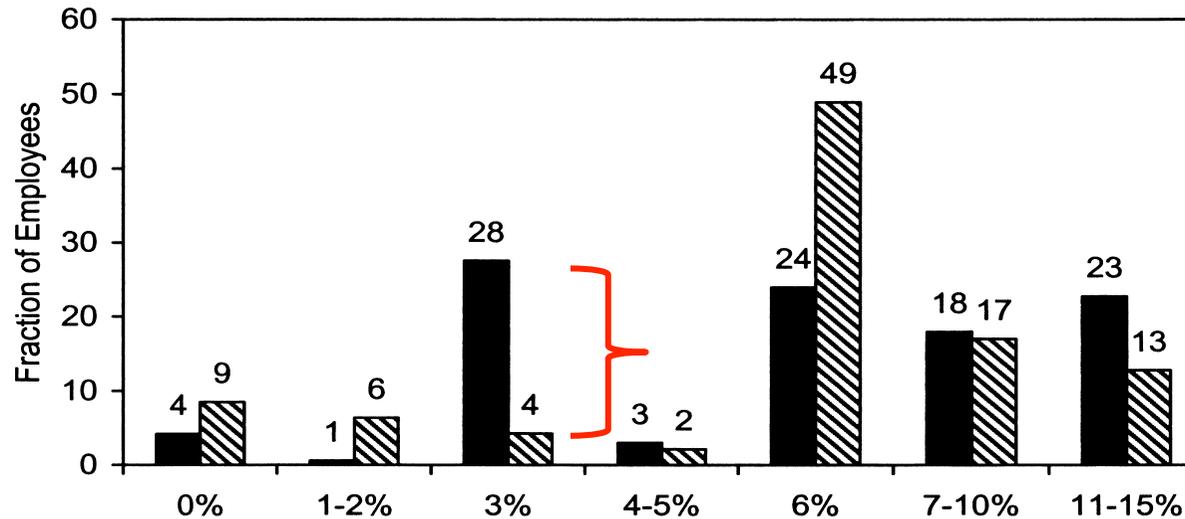
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Worst-Case Scenario: e.g. Loss Aversion

- Default set at 3%: 24 individuals choose against their preferences

A Numerical Example

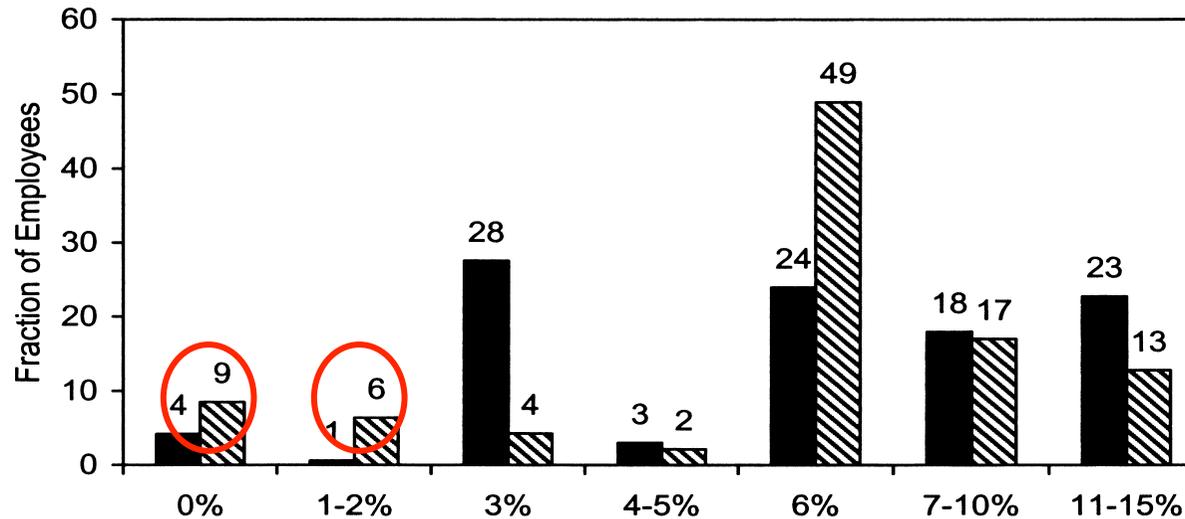
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Worst-Case Scenario: e.g. Loss Aversion

- Default set at 3%: 24 individuals choose against their preferences
- Default switched to 6%:
 - $5+5=10$ switch from default to non-default

A Numerical Example

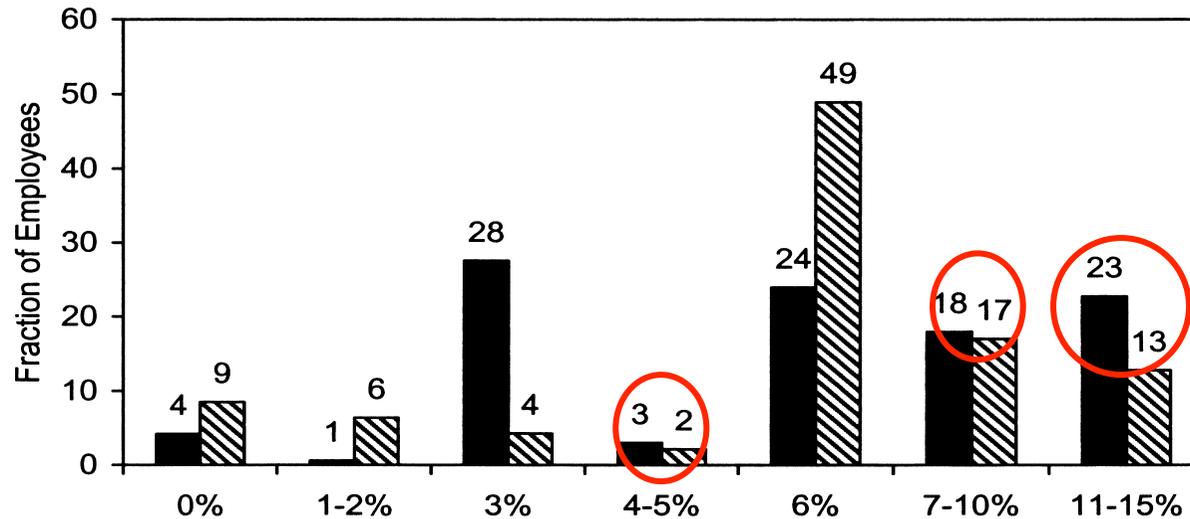
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Worst-Case Scenario: e.g. Loss Aversion

- Default set at 3%: 24 individuals choose against their preferences
- Default switched to 6%:
 - $5+5=10$ switch from default to non-default
 - $1+1+10=12$ switch from non-default to default

A Numerical Example

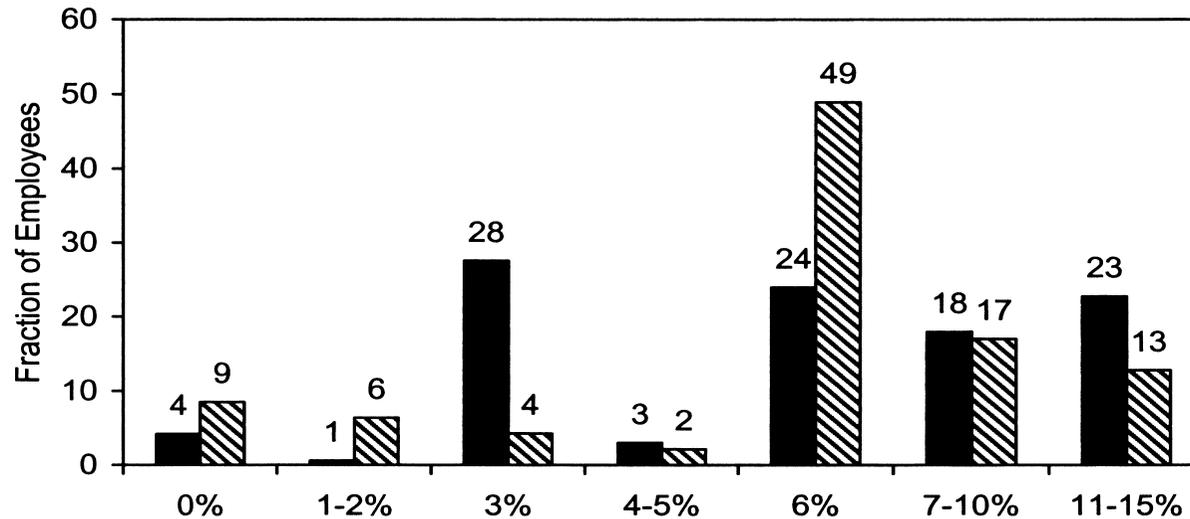
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Worst-Case Scenario: e.g. Loss Aversion

- Default set at 3%: 24 individuals choose against their preferences
- Default switched to 6%:
 - $5+5=10$ switch from default to non-default
 - $1+1+10=12$ switch from non-default to default

Altogether 46 individuals choose against their true preferences

A Numerical Example

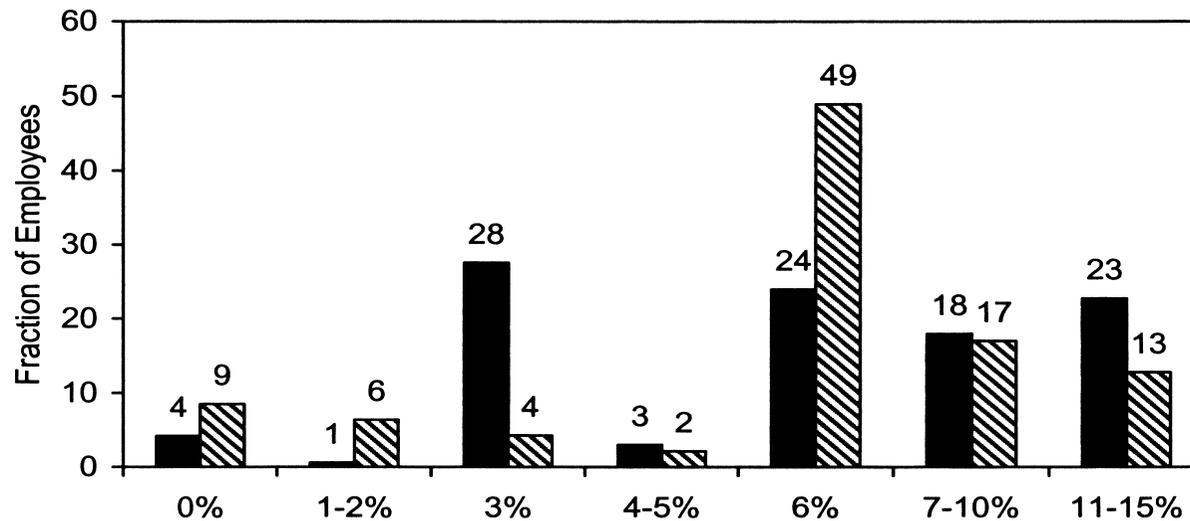
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Best-Case Scenario: e.g. Recommendation Effect

- Default set at 3%: 24 adjust their preferences according to recommendation
- Default switched to 6%:
 - For 10, new recommendation isn't strong enough to choose default
 - For 12, recommendation is strong enough to choose default

Everybody's welfare-relevant preferences are satisfied

Conclusion

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- Non-robustness result: welfare assessment of default policy depends on assumption about underlying causal mechanisms
- Need for detailed investigation of context before policy is implemented
- A welfare economics that relies only on choices and ancillary conditions (e.g. Bernheim & Rangel 2009) is hopeless