Measuring Preferred Family Size

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Structure

- Motivation
  - The theoretical and political significance of reproductive preferences
- Theoretical considerations
  - Preferences and reproductive decision-making
  - Preferences versus intentions
- Questions about reproductive preferences: state of the art
  - The preferred number of children as a one-single number
  - Ranges of desired family size
  - Hierarchies of preferred family size
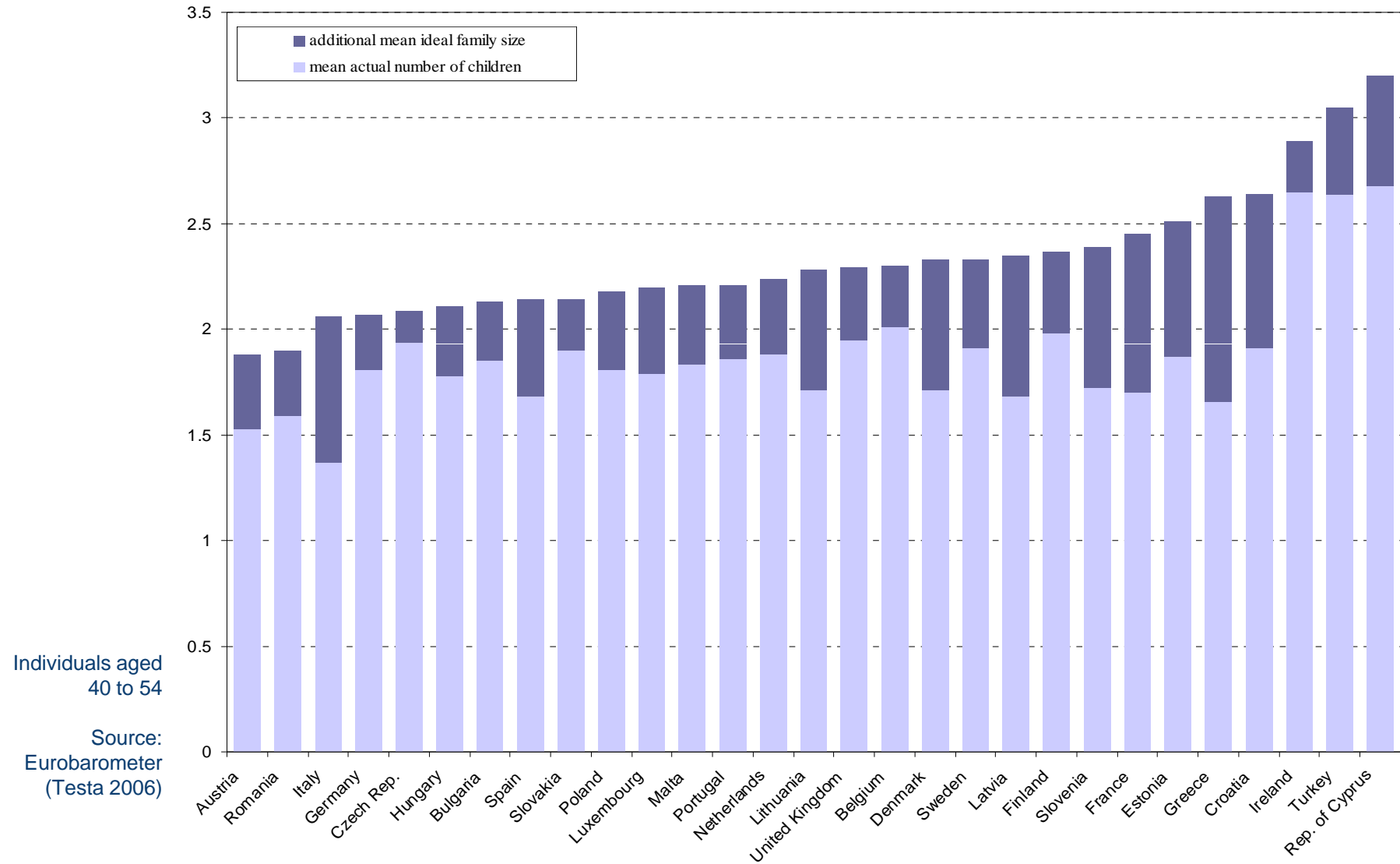- Conclusion and recommendations

Motivation

- The 'demand for children' shapes fertility in modern societies
  - Situational opportunities and restrictions for having children
  - Desire or preference for having a particular number of children
- Reproductive preferences play a central role for evaluating low fertility
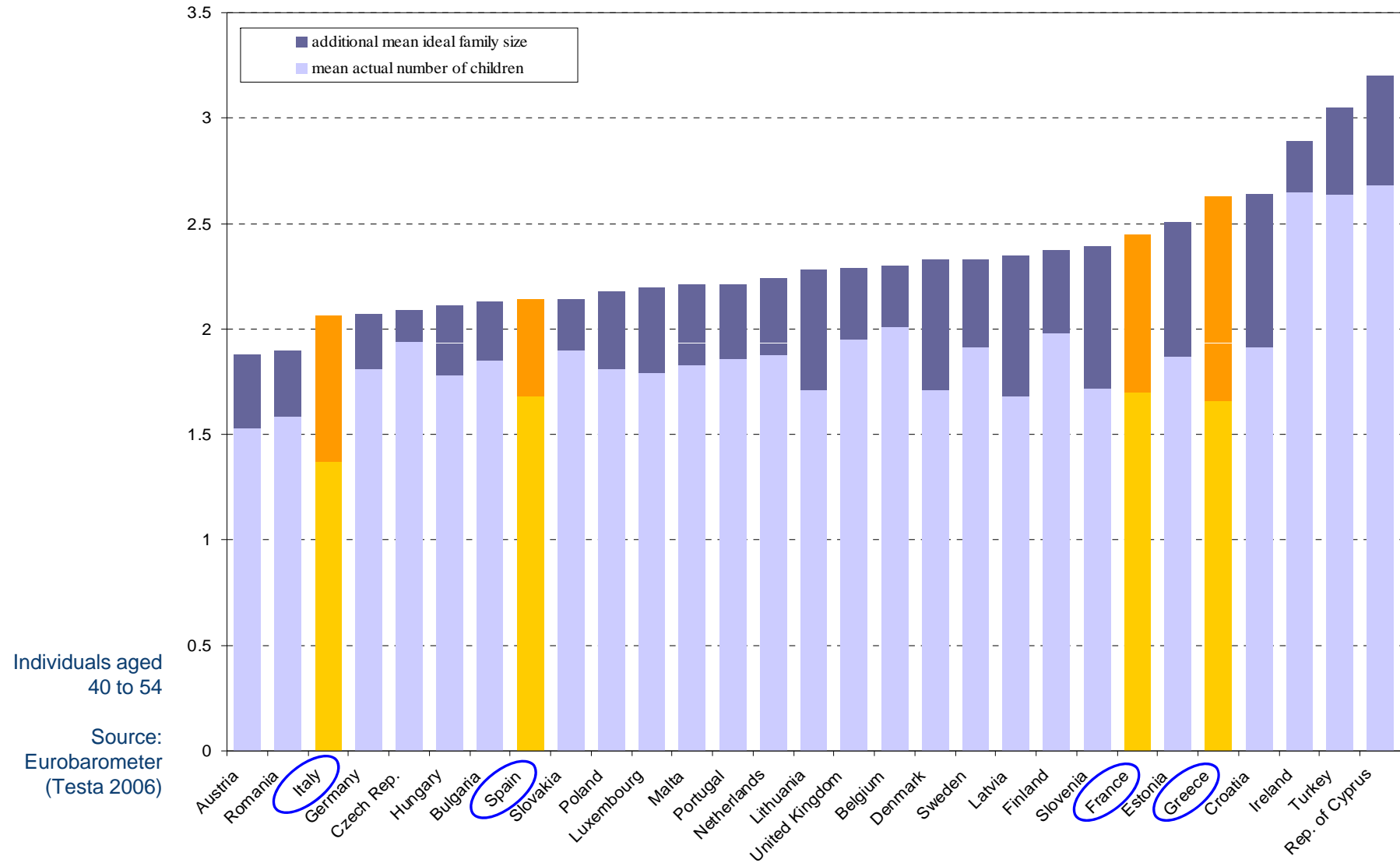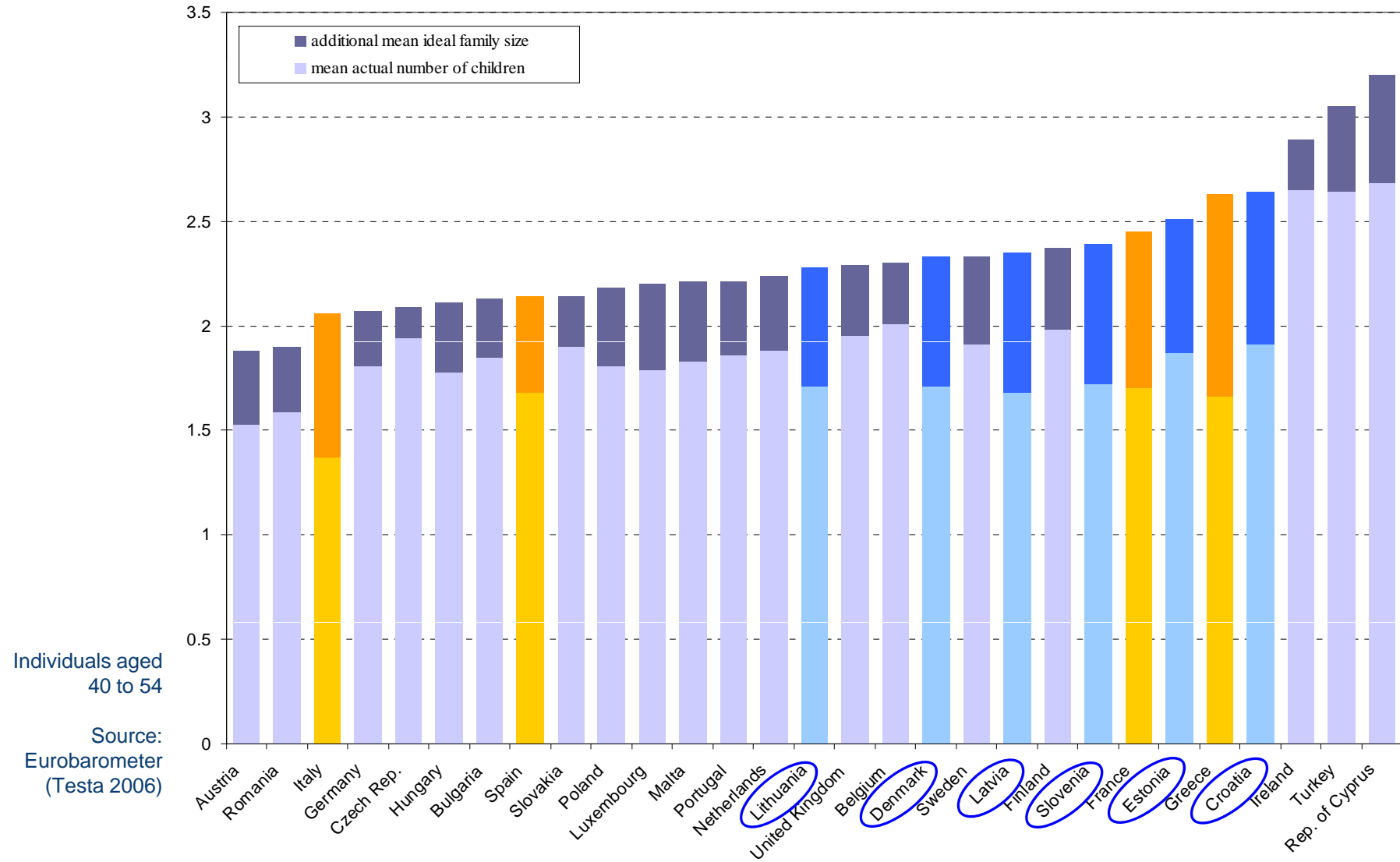
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Actual and Desired Family Size in Europe in 2006

Individuals aged 40 to 54

Source: Eurobarometer (Testa 2006)

Legend:
- additional mean ideal family size
- mean actual number of children

Countries (left to right): Austria, Romania, Italy, Germany, Czech Rep., Hungary, Bulgaria, Spain, Slovakia, Poland, Luxembourg, Malta, Portugal, Netherlands, Lithuania, United Kingdom, Belgium, Denmark, Sweden, Latvia, Finland, Slovenia, France, Estonia, Greece, Croatia, Ireland, Turkey, Rep. of Cyprus

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Actual and Desired Family Size in Europe in 2006

Legend:
- additional mean ideal family size
- mean actual number of children
- mean number of children desired at age 20

Individuals aged 40 to 54

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Motivation

- The ‚demand for children' shapes fertility in modern societies
  - Situational opportunities and restrictions for having children
  - Desire or preference for having a particular number of children
- Reproductive preferences play a central role for evaluating low fertility
  - People *cannot* have the children they want to have
  - Do people postpone childbearing?
- However: How good is our knowledge about reproductive preferences?
  - No systematic discussion about appropriate empirical instruments
  - Mixture with intentions

Preferences

- Purposeful decision-making rests on situational opportunities, desires, and rules of decision-making
- Preferences
  - Desire $\rightarrow$ values/benefits of a goal
  - Different goals $\rightarrow$ different benefits $\Rightarrow$ preference order

Preferences

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  - Different goals $\rightarrow$ different benefits $\Rightarrow$ preference order
- Measurement of preferences
  - Ordinal information
    - Degree of desirability of *goals*
    - Weak ordinal structure
    - Relative distances
  - *Ex ante*, i.e. independently from behavior

Preferences versus Intentions

- Preferences
  - *"[…] are psychological states that represent what someone wishes for or wants. In other words, desires represent feelings about possible goals or objectives."* (MILLER 1994: 228)
  - Expression of desired *goals*
  - *Part* of a decision-making process
  - Long-term perspective
- Intentions
  - *"Intentions are psychological states that represent what someone actually plans to do. They are based on desires but take into consideration what others desire and what actually can be achieved."* (MILLER 1994: 228)
  - Expression of planned *behavior*
  - *Outcome* of a decision-making process
  - Short-term perspective

Problematic questions

- Questions on intentions that address goals
  - GGS: *"Do you intend to have a/another child during the next three years?"* (VIKAT ET AL. 2005)
  - Eurobarometer: *"How many children do you (still) intend to have?"* (TESTA 2006)
- Problems
  - Goal except behavior is addressed
  - Intentions are too specific to inform about the general desirability of goals $\Rightarrow$ overestimation of the dynamics of goals
  - Goals are too general to inform about intentions $\Rightarrow$ underestimation of predictive validity

Desired Family Size as a One-Number Preference: Designs

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retrospective	hypothetical	prospective

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Example	*"When you were married, how many children did you want?"* (PRATT & WHELPTON 1955)		
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Problems	• accurate remembering • rationalization • changing preferences		

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Idea	• preference at the beginning of reproductive life • unmet desires • changing preferences	• 'unbiased' preferences • avoidance of retrospective problems	
Problems	• accurate remembering • rationalization • changing preferences	• fuzzy stimulus • bias due to biography and current situation	

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Idea	• preference at the beginning of reproductive life • unmet desires • changing preferences	• 'unbiased' preferences • avoidance of retrospective problems	• consideration of biography and current situation • parity-specific preferences
Problems	• accurate remembering • rationalization • changing preferences	• fuzzy stimulus • bias due to biography and current situation	• mixed predictive validity

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ideal	real	societal

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Idea	• 'pure' preference • reference point		
Problems	• mix with realistic expectations • 'ideal number' or 'ideal conditions'		

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Idea	• 'pure' preference • reference point	• preferences under 'realistic' conditions	
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Idea	• 'pure' preference • reference point	• preferences under 'realistic' conditions	• normative expectations • societal perceptions of an ideal family
Problems	• mix with realistic expectations • 'ideal number' or 'ideal conditions'	• complex tasks • bias towards past and current living situations	• mix with realistic expectations • 'personal ideal number' or 'societal ideal number'?

Desired Family Size as a One-Number Preference: Limitations

- Do reproductive desires equal to a one-number preference?
  - Conflicting preferences (ideal, real, socially expected)
  - Uncertainty, no clear preferences
  - Decisions child by child
  - Preferences change over the life-course
  - Sensitive topic
- Conclusion
  - Single questions on one-number preferences tend to overestimate the accuracy and certainty of reproductive goals
  - Reproductive preferences are located in ranges of numbers of children ('moving target')

Desired Family Size as a Range of Children: Approaches

- Joint questions on ideal, real, and socially expected family size

> *(1) "How many children do you expect to have altogether?"*
>
> *(2) "Thinking about families in general, what do you think is the ideal size for the average family in Germany—a husband, a wife, and how many children?"*
>
> *(3) "How many children would you like to have yourself if financial and other conditions of life were very good?"*
>
> (FREEDMAN ET AL. 1959)

Desired Family Size as a Range of Children: Approaches

- Questions on limits of acceptable family size

A. What do you think is the **ideal number of children** for a family to have? Indicate what you regard as the ideal or most acceptable number of children by placing a **double check** (√√) on the appropriate alternative.

| None | One | Two ✓✓ | Three | Four | Five | Six | Seven or More |

B. Are there any other number(s) of children which you would regard as **also acceptable**? If so, indicate any such alternatives with a single check (√) on the appropriate alternative(s).

| None | One ✓ | Two | Three ✓ | Four | Five | Six | Seven or More |

C. What is the number of children you would find **most undesirable** for a family to have? Indicate what you regard as most undesirable by placing a **double xx** on the appropriate alternative.

| None | One | Two | Three | Four | Five | Six | Seven or More xx |

D. Are there any other numbers of children which you regard as **also undesirable**? If so, indicate any such alternatives with a single x.

| None | One | Two | Three | Four | Five | Six x | Seven or More |

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GRANBERG (1982)

Desired Family Size as a Range of Children: Limitations

- Rough hierarchical information:
  - Mostly preferred goal, range of acceptable numbers of children
  - However:
    - All alternative family sizes have the same weight
    - Individuals differently evaluate smaller and larger families
- Conclusion
  - How are deviations from the ideal family sizes towards smaller or larger families evaluated?
  - $\Rightarrow$ preference order of numbers of children

Hierarchies of Desired Family Size: The Coombs-Scale

- General design
  - First question about ideal family size

> *"The number of children people expect and want aren't always the same. If you could choose and have just the number of children you want by the time your family is completed, how many children would that be?"*
>
> (GOLDBERG & COOMBS 1963, COOMBS 1974)

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Hierarchies of Desired Family Size: The Coombs-Scale

- General design
  - First question about ideal family size
  - Subsequent questions:
    - Forced decisions between alternative family sizes
    - The numbers of children addressed depend on the answers given before

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(1) *"The number of children people expect and want aren't always the same. If you could choose and have just the number of children you want by the time your family is completed, how many children would that be?"*

(2) *"Suppose you couldn't have that number, but had to choose between ... and .... Which would you choose?"*

(GOLDBERG & COOMBS 1963, COOMBS 1974)

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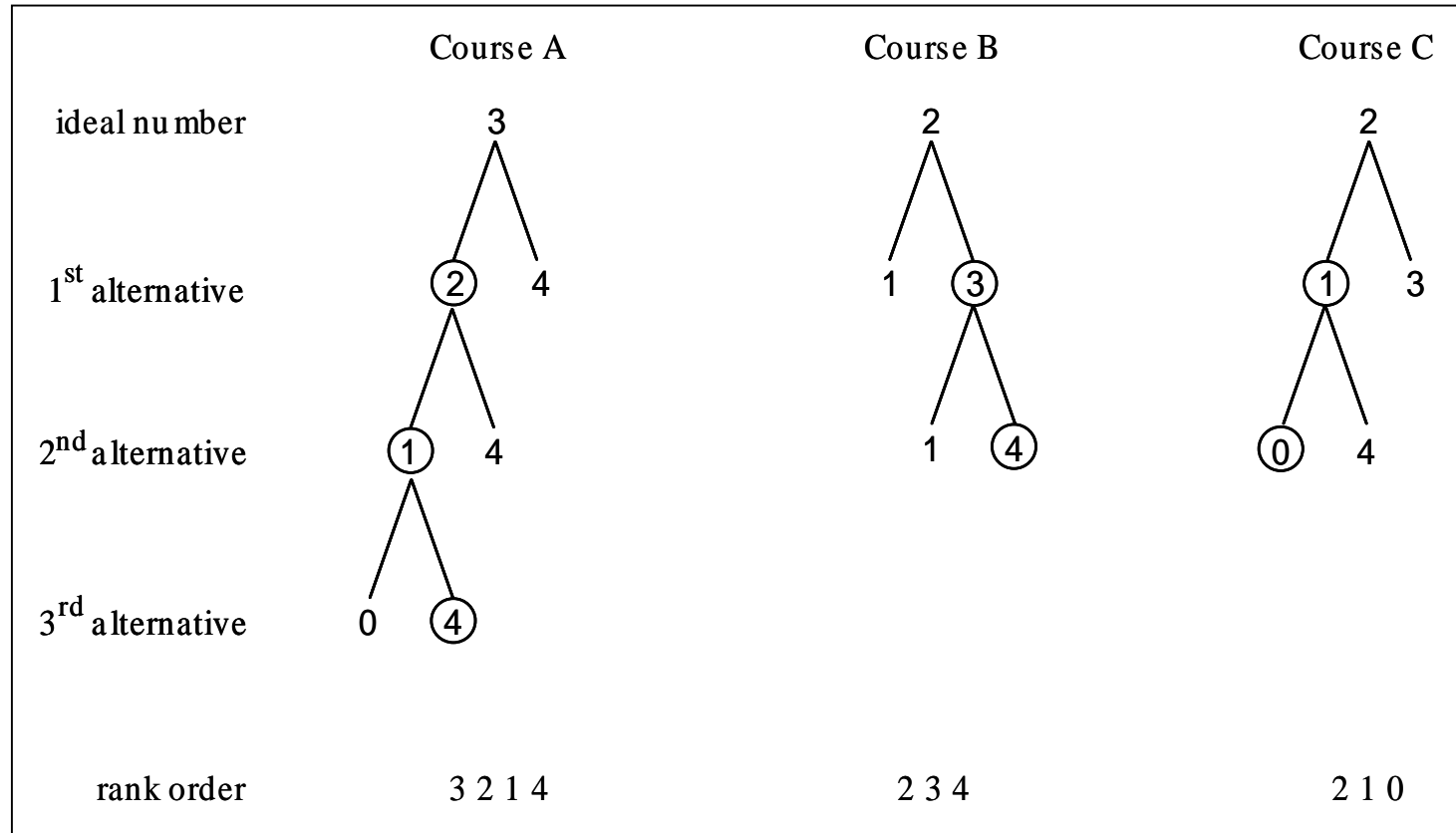
(2)"Suppose you couldn't have that number, but had to choose between ... and .... Which would you choose?"

(3)... "If you couldn't have that, would you choose ... or ...?".
(GOLDBERG & COOMBS 1963, COOMBS 1974)

	Course A	Course B	Course C
ideal number	3	2	2
1st alternative	② 4	1 ③	① 3
2nd alternative	① 4	1 ④	⓪ 4
3rd alternative	0 ④		
rank order	3 2 1 4	2 3 4	2 1 0

Source: BUEHLER ET AL. (2009)

Hierarchies of Desired Family Size: The Coombs-Scale

- Advantages
  - Hierarchical information
  - General tendency towards a larger or smaller family
    - Value of the first and second alternative family size
    - Value on the I-Scale $\rightarrow$ good predictive validity
  - Small number of questions needed
- Problems
  - Ideal number of children has to be named first
  - Forced subsequent decisions $\Rightarrow$ unclear preferences are not covered
  - Mix of ideal and realistic family size
  - No variation in the presentation of alternative family sizes

Hierarchies of Desired Family Size: Pair Wise Comparison

- **General design**
  - Pair wise comparison of randomly chosen numbers of children

> *"Now I want to learn more about your preferences for different numbers of children. I have to ask you several similar questions here to get the information we need, but this part will take only a few minutes."*
>
> *"[FOR R's WIRH CHILDREN, PRECEDE WITH: Imagine once more that you could start your married life over again.] Let's suppose you could have children when you wanted them, they could be born to you or adopted, and the mixture of boys and girls was just right."*
>
> *(1) "Suppose you had to choose between having either two children or four children. Which would you choose?"*

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TERHUNE & KAUFMAN (1973)

Hierarchies of Desired Family Size: Pair Wise Comparison

- General design
  - Pair wise comparison of randomly chosen numbers of children
  - Subsequent questions:
    - Relative distance between two family sizes

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> *"[FOR R's WIRH CHILDREN, PRECEDE WITH: Imagine once more that you could start your married life over again.] Let's suppose you could have children when you wanted them, they could be born to you or adopted, and the mixture of boys and girls was just right."*
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> *(1) "Suppose you had to choose between having either two children or four children. Which would you choose?"*
>
> *(2) "(HAND CARD TO R.) Now tell me how much you prefer ( ) over ( ) by choosing your answer from the card. If it doesn't make much difference to you, you should say a or b. If it does make a difference to you, you should choose either c, d, or e."* TERHUNE & KAUFMAN (1973)

Hierarchies of Desired Family Size: Pair Wise Comparison

- Advantages
  - Hierarchical information
  - Real pair wise comparisons
  - Indirect measurement of reproductive preferences
    - No decision about the ideal family size
    - Less rigorous decisions
  - Continuous stimulus of 'ideal numbers'
  - Circular preferences are allowed
  - Collection of additional information
- Problems
  - Larger number of repetitive questions needed

Conclusions

- **Measures of hierarchies of desired family size**
  - Advantages
    - Best fit to theoretical purposes
    - Knowledge on alternative reproductive goals …
      - … informs about general tendencies towards smaller or larger families
      - … avoids an 'either-or' evaluation related to reproductive outcomes
      - … fits to the idea of a 'moving target'
      - … leads to an improved predictive validity
    - Opportunity to consider alternative goals in other living spheres
  - However:
    - Hardly any empirical replications
    - No applications in a low fertility context

Conclusions

- What about questions on one-number preferences?
  - Combinations of questions
    - Changes in preferences: retrospective and prospective designs
    - Ranges of reproductive goals: ideal, real, and socially expected
    - Identification of conflicts: ideal vs. real, ideal vs. socially expected
  - Indicator for pronatalist attitudes
  - The ideal number of children as a reference point in the life course