

# Fertility Response to Crises

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Session: Health – Continuing,  
New, and Future Crises



- Demography: Fertility rate
- Proximate Determinants of Fertility Framework (Hill and National Research Council 2004; Davis and Blake 1956; Bongaarts 1978)
- Crises affects one or more of the proximate determinants of fertility
  - Exposure to sex: eg Formation and dissolution of unions
  - Conception: eg Use and Nonuse of contraception
  - Childbearing: eg Stillbirth, abortion
- Analytic examples: War in Angola (Agadjanian 2002); Tsunami in Indonesia (Nobles, Frankenberg, Thomas 2015); War in Palestine (Fargues 2000); War in Eritrea (Blanc 2004)

- Economics: Fertility behavior
- Examine the fertility response to crises as a
  - shock in the decision making process
  - Difference in different empirical approach
- How does the crises affects fertility through:
  - Preferences for children (Baez 2010)
  - Marriage market (Millan 2014)
  - Children as insurance (Finlay 2009; Portner 2008)
- Fertility response to three high mortality earthquakes (Finlay 2009)
  - Izmit, Turkey 1999. 17K killed
  - Gujarat, India 2001. 20K killed
  - Kashmir, Pakistan 2005. 87K killed

- Bernadette

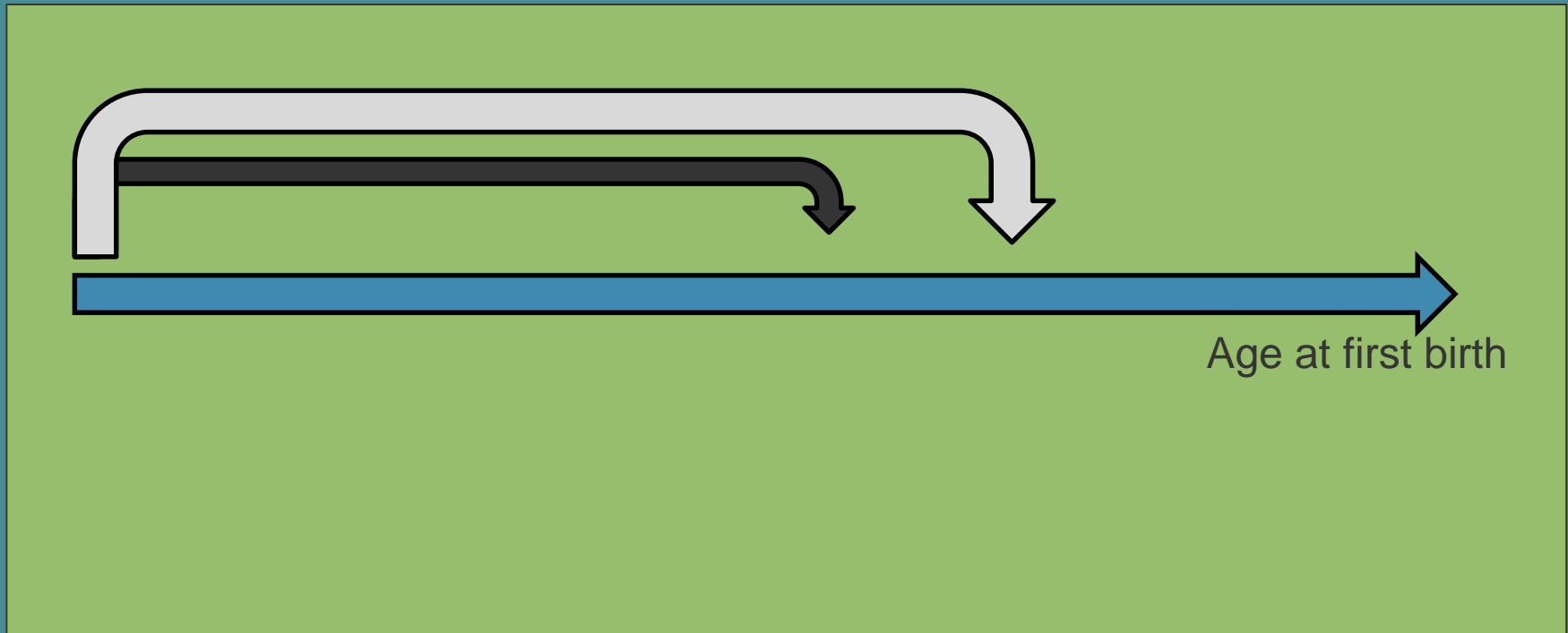


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- Resilience
  - Adaptive
  - Transformative
- Is Bernadette's story observable at a population level?
- Examine the fertility response to crises in the resilience framework
- How does exposure to a crises affect adolescent childbearing as girls seek to build resilience?
- Do women -- born into war -- go on to have their first child at a younger age?
- Yes they do.
- Let's take a closer look.

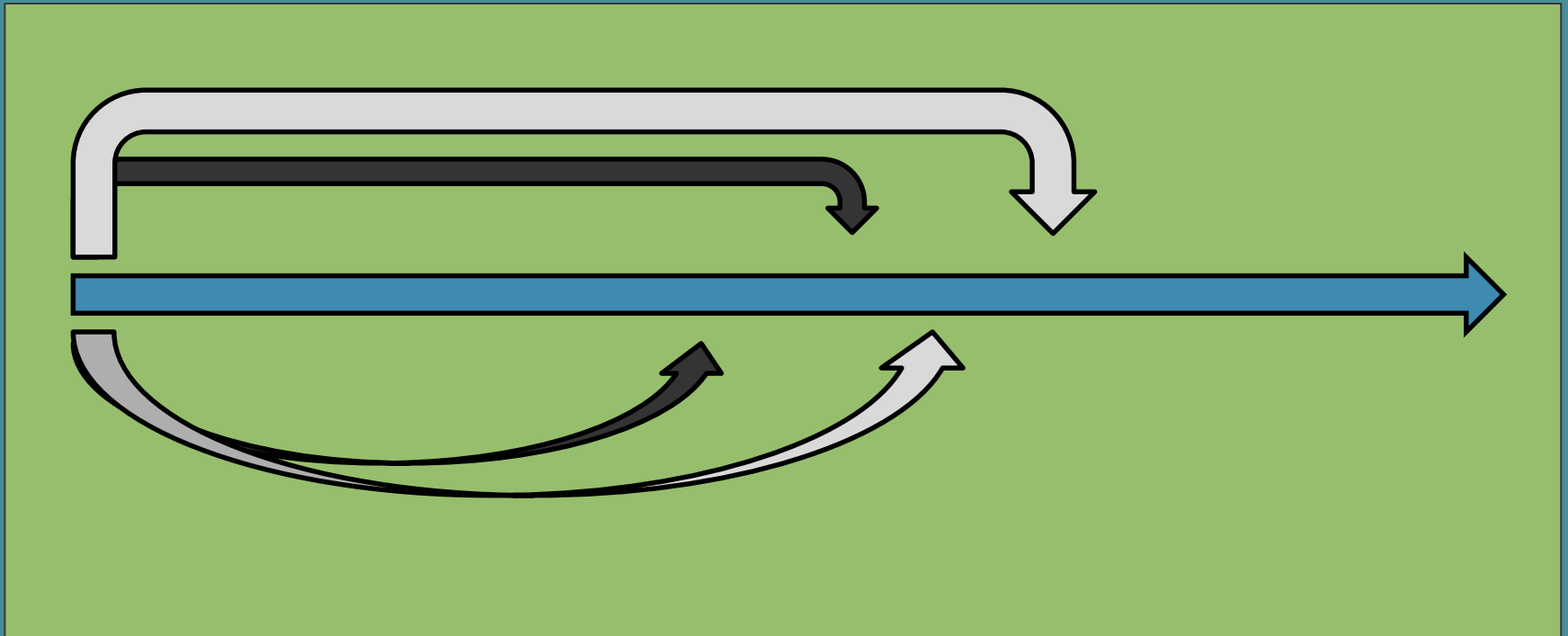
- Resilience framework: the fertility response to crises
- Fertility: maternal age, birth intervals and limiting
- Life course analysis of maternal age for girls born into war: exposed to war at age zero
- Demographic and Health Surveys for sub-Saharan African countries
- PRIO dataset on armed conflict events
- Treatment:
  - Those women in SSA exposed to armed conflict at age zero
- Control:
  - Those women in SSA who are not exposed to armed conflict at age zero

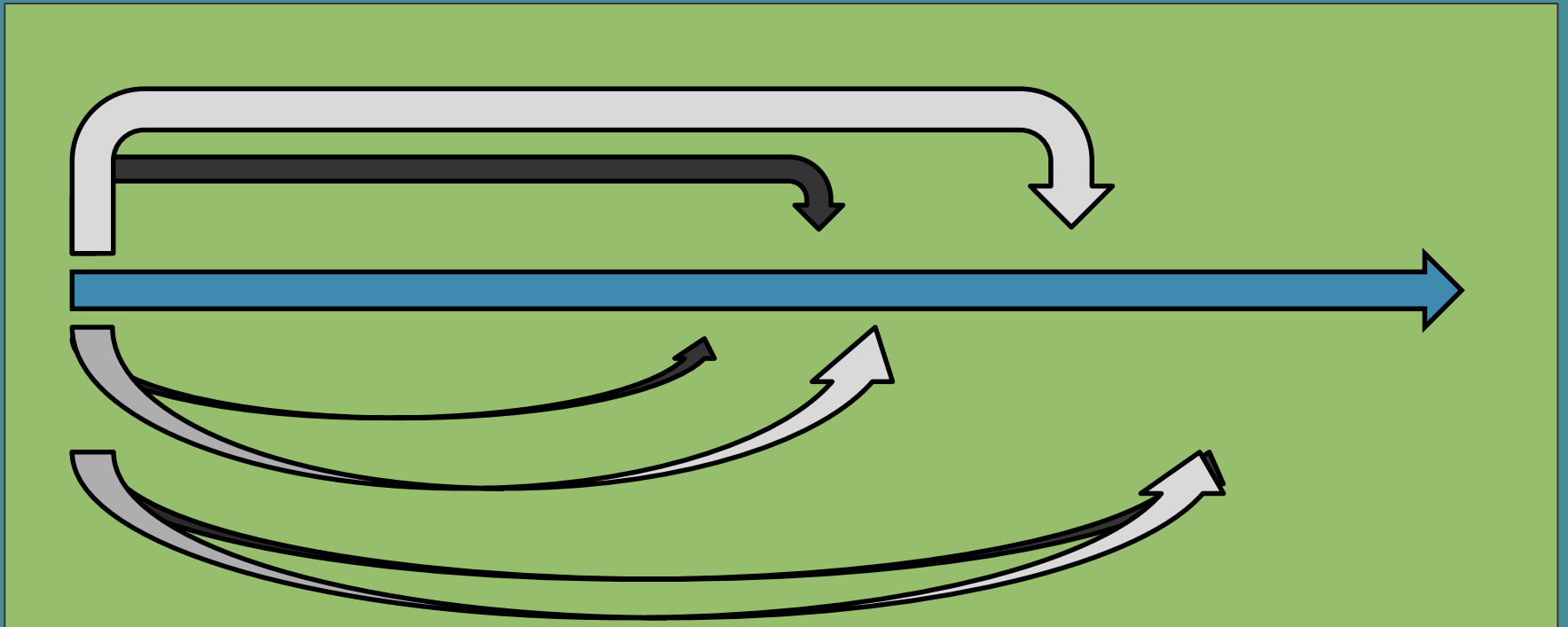
- Exclude contemporaneous exposure to conflict, capture early exposure, later life outcome.
- Others look at this kind of life course model
  - Intergenerational effect of natural disasters (Caruso 2014)
  - Dutch famine (Stein 1975)
  - Great leap forward famine (Huang 2012; Zhao Reimondos)
    - But this is the *in utero* biological channel
    - The famine event does not repeat
- Turn to economics literature on life course outcomes of early exposure
  - Recessions (Yeung 2012)
  - Pollution (Currie 2012)
- Eliminate the repeated and contemporaneous effects of repeated crises
  - Isolate treatment event
  - Balance in treatment and control groups





- Resilience
- Resilience promoting factors (Masten 2013)
  - Attachment
  - Education
  - Religion
  - Mastery
- Attachment builds resilience
  - Usually in the context of the child gaining resilience from attachment to parent
  - War and the child development literature (Betancourt 2008)
- My hypothesis: Mother builds resilience through childbearing
- Resilience framework: Education should null the attachment channel.







- Vulnerability
  - Below average
  - Trajectory for widening inequality
- ASRH Programs to reach the vulnerable in Burundi
- Policy instruments to capture vulnerable so they may opt for life course that is adaptive and transformative



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Thank you