

Education and 'youth bulge' effects on violent conflict

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Intro

- ‘youth bulge’ theory of conflict
- empirical evidence emerging
- obvious variable missing so far: formal education

Intro

- little theoretical guidance what to expect:
 - **low schooling** implies low opportunity cost to conflict participation **implies high conflict potential?**
 - **high schooling** implies high expectations implies high frustration **implies high conflict potential?**

Defining 'youth bulges'

- initial approaches: 15-24(or 29) year-old males relative to **total** population
- led to inconclusive results
- not surprising: theoretically flawed since size of child cohorts affects the measure but presumably not conflict propensity

Defining 'youth bulges'

- better measure: relative to **adult** population
- term 'bulge' may be inaccurate: a pyramid has no 'bulge', but may have many youths per adult
- neutral descriptive term: Relative Youth Cohort Size (RYCS)

Different RYCS measures

- 'relative' to what?
 - Measure A: 15-24 / 15+
 - Measure B: 15-29 / 30-45
- very high correlation: > 0.95 , results below refer to Measure A
- more on this later

Conflict data

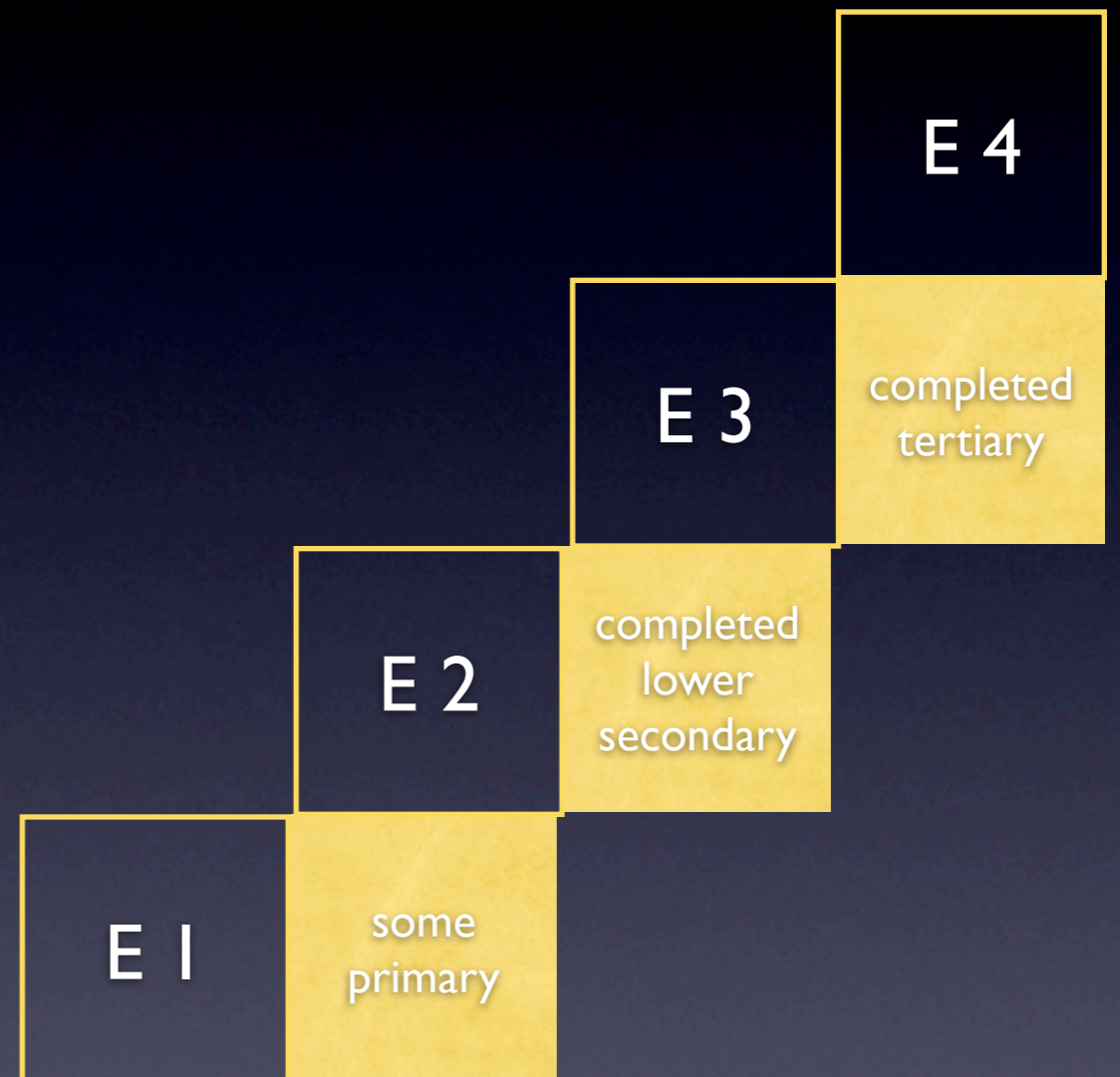
- Uppsala/PRIO Dataset of domestic armed conflict
- occurrence of domestic armed conflict if
 - more than 25 fatalities in a year
 - in armed violence
 - between government and other group over a **political** dispute

Conflict data - Limitations

- discretisation in time
- threshold criterion for a count phenomenon
- absolute threshold indep. of population size
- judgemental criteria (political motivation of rebels etc.)
- no government, “no conflict” !

Schooling data

- IIASA, 2007
- 1970-2000, backprojected from 2000
- 124 countries
- 4 attainment levels by 5-year age groups

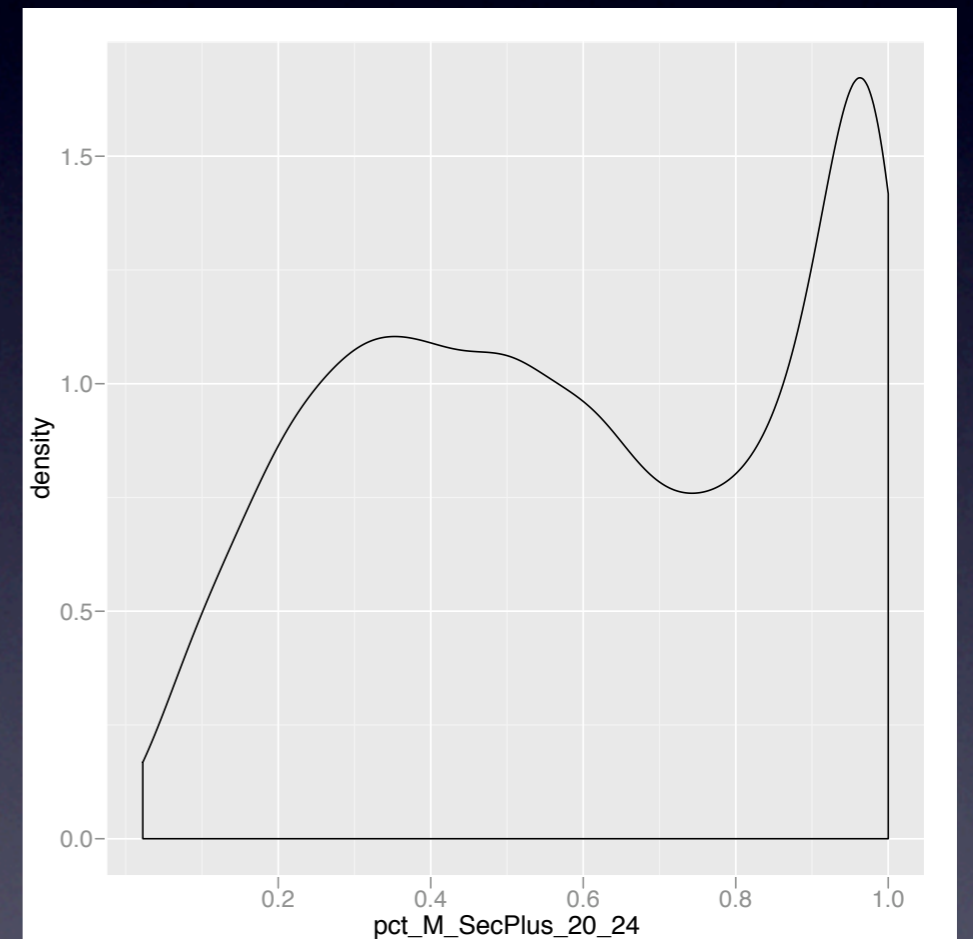


Schooling data - Limitations

- timing of transitions assumed, not observed
 - especially problematic for transition E3 to E4 (age of tertiary)
- E2 group (at most some primary) very broad, potentially mixing complete illiterates and those with almost 10 years of schooling.

Schooling indicator used in analysis

- share of males 20-24 with secondary+
- avoids data limitations
- theoretically attractive
- good separation



Matching of schooling and conflict data

- scope (country-year episodes) determined by the smaller data-set, namely schooling
- country splits, mergers
- 5-yearly education data repeated, not interpolated

Other data/variables

- years since last conflict
- (\log_n) population size
- polity index (-10: autocracy, +10 democracy)
- infant mortality rate (as proxy for 'general development')

Methodology

- survival analysis: model duration of peace spells
- implemented as logistic regression
 - to model: probability of conflict **onset**
 - observations conditionally independent given 'age of peace spell' variable
 - multi-spell dependencies ignored

Methodology

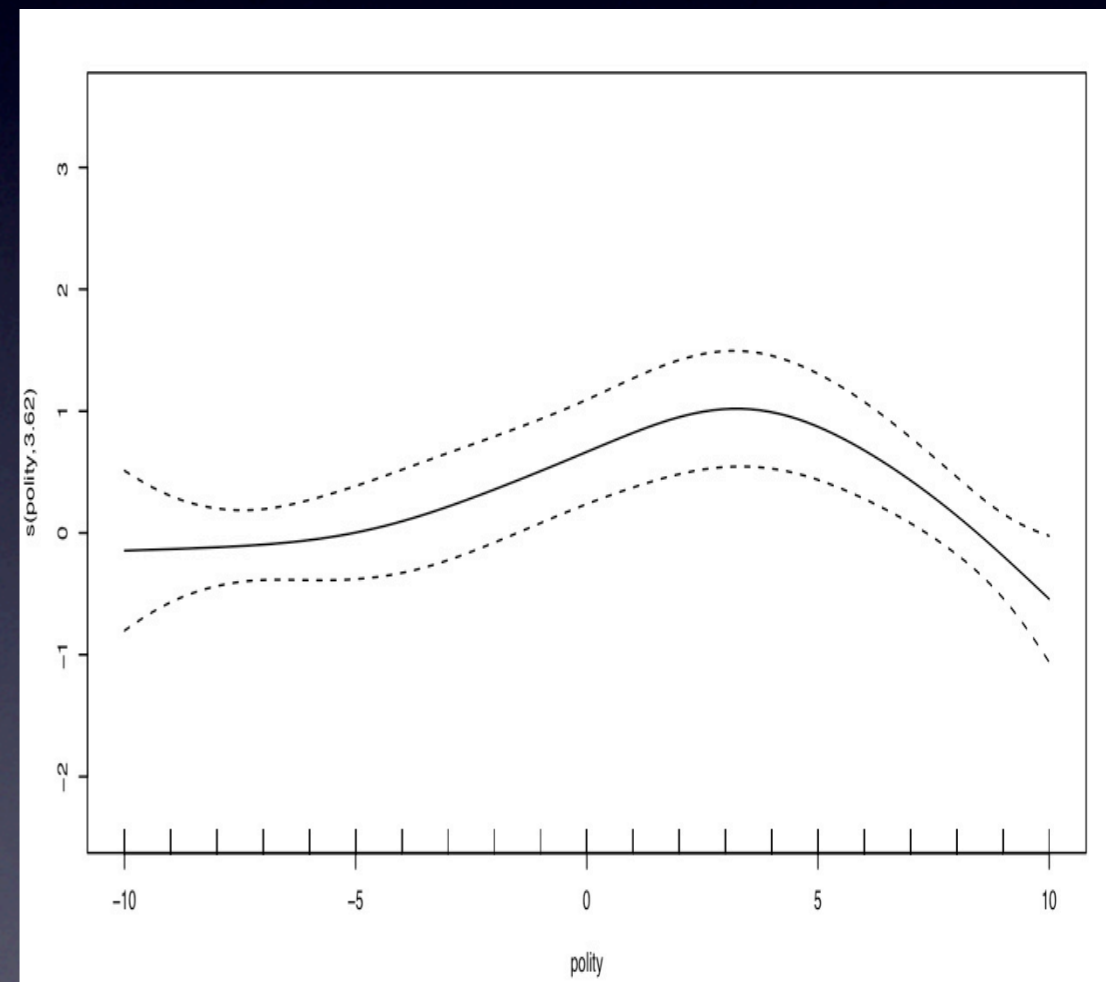
- noisy data, complex issue: can only hope to uncover strong, clear-cut effects
- when looking for big effects, keep it simple!
- however, some niceties: semi-parametrics, low probability bias correction

Baseline results

- replication of HU's previous result on reduced data-set
- adding schooling as **individual** predictor:
no effect

Baseline results

- effect of polity index on conflict onset

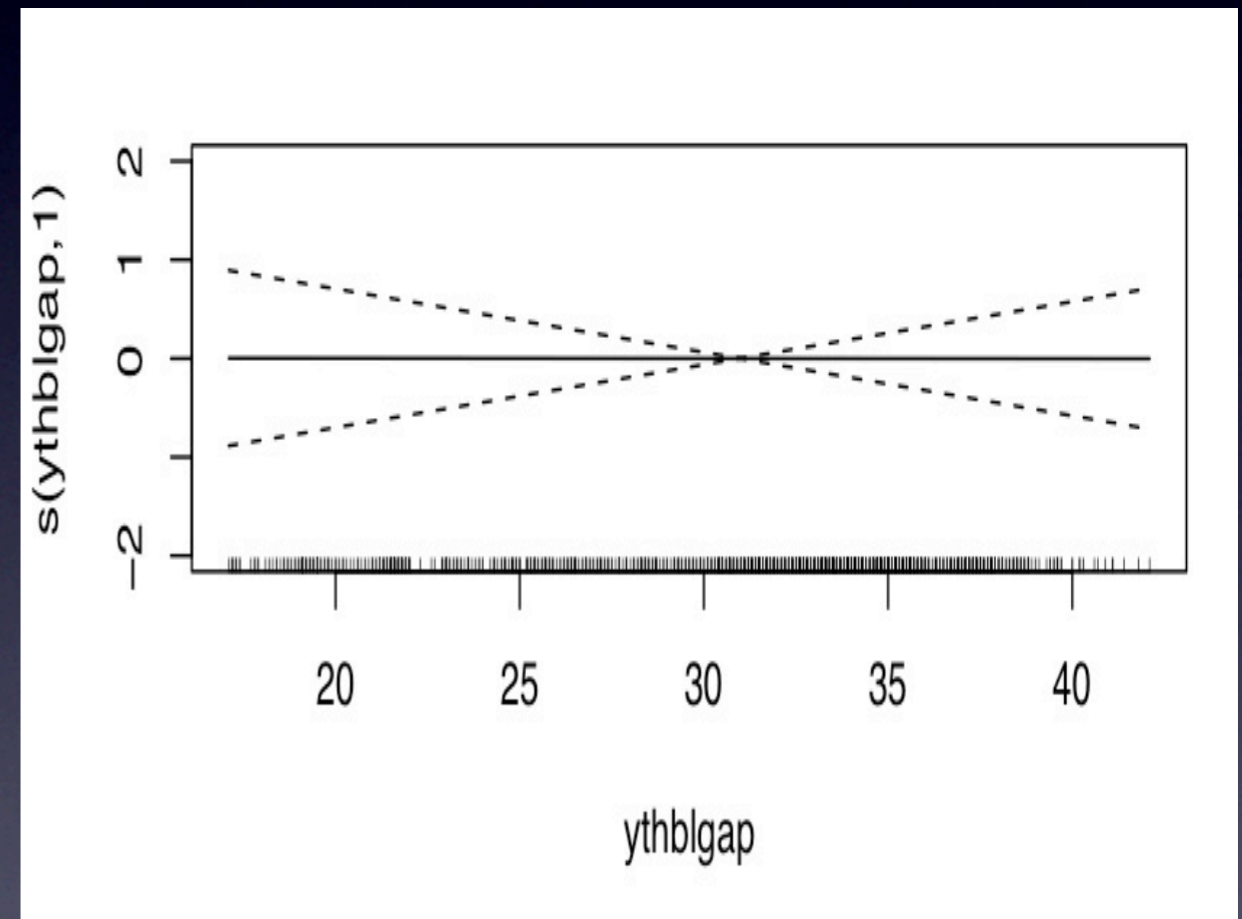


Results

- focus on **interaction**
- separate analyses in low, medium, high youth education contexts
- **result:** clear interaction of level of youth's formal education with RYCS

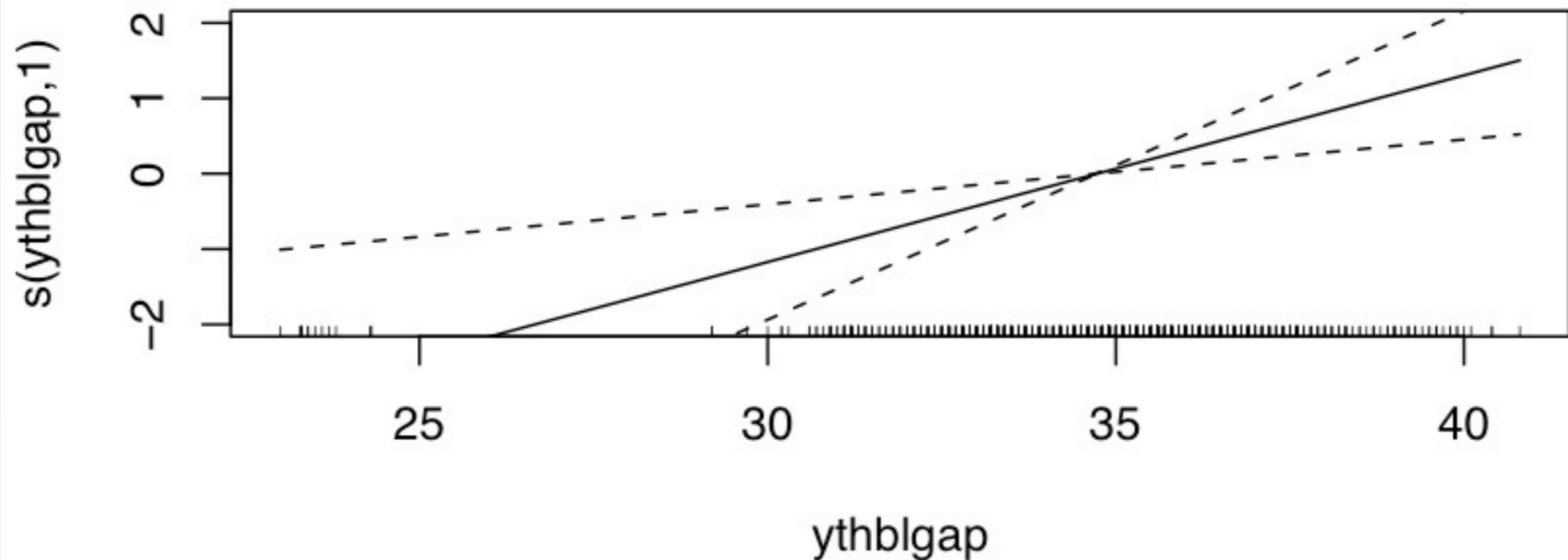
Results

- no statistical effect of RYCS on conflict risk, **medium schooling** (secondary+ 40%-80%)
- **high schooling** (secondary+ > 80%) is the similar



Results

- statistical effect of RYCS on conflict risk, **low schooling** (secondary+ < 40%)



Results

- formal education as a substantive explanation or merely proxy for general development?
- stratifying analysis by infant mortality rate shows similar result (RYCS effect present only in high-IMR context)
- however, schooling achieves better separation and offers plausible mechanism

Intepreting different RYCS measures

- reminder:
 - Measure A: 15-24 / 15+
 - Measure B: 15-29 / 30-45
- very high correlation: > 0.95
- but big difference in effect in favour of A!

Intepreting different RYCS measures

- Measure A: 'availability' of youth?
- Measure B: 'opportunity' à la Easterlin?

Tentative interpretation

- *dominant* (not exclusive) dynamic to be investigated by more in-depth research:
- domestic armed conflict driven by availability of large, under-schooled cohorts of potential recruits, not by depth of youth's lack of opportunity and resulting 'demand' for participation

Thank you.