

# **Working hours and worker's health: Evidence from a national experiment in Sweden**

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## WHY THE QUESTION IS IMPORTANT?

- The effect of working hours on health is important as markets may not reach efficient outcomes
- The welfare costs of market failures in labor-health tradeoffs could be substantial:
  - Workers might systematically underestimate long-term mortality risks from overwork
  - Employers don't internalize healthcare costs that fall on public systems and families
  - Workers cannot effectively bargain for optimal hours due to limited outside options
- These market failures provide economic justification for government intervention and it's welfare benefits will depend on the empirical relationship that Nikolaos studies.

## SUMMARY

- Nikolaos examines the effect on the introduction of the 8-hour working day in Sweden in 1920 on mortality from 1911 until 1970!
- The reform led to a reduction in around 30% hours works of individuals in manufacturing jobs.
- Data
  - Swedish Population Census in 1911: detailed occupation (eligible/ineligible)
  - Death certificates including cause of death since 1911 (gold mine) matched to census using probabilistic record linkage (Rural-urban migration?).

## RESULTS

- Short-run effects: DiD specification for male individuals aged 21-55 in 1910 from 1911-1926
  - After the introduction of the policy, the probability of dying for individuals in the treatment group decreases by 14%
- Long-run effects: DiD using average hazard rates for individuals aged 45-65 in 1911 until 1970
  - The policy increased LE by 1 year
- Doubts:
  - 1 The authors mention that focusing on cumulative mortality introduces bias as these fail to account the ceiling of the outcome.
    - Are short-term effect biased?
  - 2 Given that the hazard also converges to unity.
    - Are long-term effect biased?

## COMMENTS

- Specification: duration model?
- Max difference in av hazard is at age around age 75
- This means max difference in the hazard rate needs to be earlier than that.
- Useful to understand if benefits limited to working age versus retirement.
- It would also shed light on the mechanisms.
- Younger individuals working in non-affected occupations have higher incentive to switch to treated occupation: heterogeneity across age (+ structural transformation).