

Minimum Wages and Health

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Mechanisms (short-run)

- Income effects
 - Health care: afford copays, better insurance
 - Stress: physiological, also via coping behaviors (smoking)
 - Nutrition: food insecurity ... versus obesity
- Time allocation: ambiguous, depends on employment
- Price effects
 - Food price increase – especially fast food?

Evidence from related research beyond minimum wage: Adults

- Identification challenging: health shocks have big effects on income (Smith)
- Conflicting results:

Study	Intervention	Direction	Outcome
Lindahl 2005 JHR	Lottery (Sweden)	Better Health	Life-expectancy
Case et al 2001	Pension Reform (S. Africa)	Better Health	Self reported health
Elesh & Lefcowitz, 1977	Negative Income Tax	No effect	Chronic illnesses, hospitalization, sick days, physician visits
Snyder & Evans 2002	Social Security notch	Worse Health	Mortality
Schmeiser 2009	EITC	Worse Health	Obesity
Fernald et al. 2008	Progresa/Oportunidades	Worse Health	Obesity

Evidence from related research beyond minimum wage: Children

- Consumption of health goods appears more productive for kids
 - Nutrition critical in-utero and early life
 - Use of health care might be more beneficial for children

Study	Intervention	Direction	Findings
Hoynes et al. 2015	EITC	Better Health	Birth weight
Jones-Smith et al. 2014	Casino openings	Better Health	Obesity/BMI
Fernald et al. 2008	Progresa/Oportunidades	Better Health	Child growth
Case et al. 2001	Pension Reform	Better Health	Child growth
Duflo 2003	Pension Reform	Better Health	Child growth
Maccini and Yang 2009	Rain Fall	Better Health	Self-reported adult health

Minimum wage evidence: Adults

- Literature slowly expanding – mixed results, but still few strong studies

Results:

- Benefits:
 - Lowers BMI (Meltzer and Chen, 2011 NBER book)
 - State-year DD, BRFSS 1984-2006
 - Improves mental health/financial stress (Reeves, 2017 Health Economics)
 - 1999 UK event study, panel compared to earners just above min wage
 - Improves self-reported health (Lenhart, 2017 JPAM)
 - Same UK design
- Adverse effects:
 - Worse self-reported health (Horn et al., 2016 NBER WP)
 - State-year DD, BRFSS 1993-2004
 - Weak result: \$1 MinWage increase raises fair/poor health 1%, only among men. Multiple testing concerns.
 - Increase teen alcohol-related traffic deaths (Adams et al., 2012 REStat)
 - State-year DD, 1998-2006
 - Small effect size (100 deaths/year for 10% MinWage increase), could offset with beer tax

Meltzer and Chen (2011)

- Declining MinWage associated with increased BMI.
- Income effect?
 - Unlikely. Effects smaller at low incomes.
- Price effect:
 - MinWage labor accounts for $\sim 1/3$ of cost of fast food (much higher than for groceries)?
- Effect size:
 - Could explain 10% of 1968-2006 BMI increase (from 25 to 27).
 - \$1 MinWage increase: lowers BMI .07 ... live 15 days longer?
 - At \$100k/QALY: \$50 billion/year welfare gain from longer life.
 - Compare to \$200 billion/year wage transfer in this period. Thus adult obesity effects important to consider in social cost/benefit.

Minimum wage evidence: Children

- Literature slowly expanding. Effects positive, but still few strong studies

Results:

- Improved infant mortality, birthweight (Komro et al., 2016 AJPH)
 - State-year DD, 1980-2011 Vital Stats data. Lacks key control variables.
- Improved prenatal care, maternal smoking, birthweight (Wehby et al., 2016 NBER WP)
 - State-year DD, 1988-2012 Vital Stats data for low educated. More control variables.

Effect sizes: Smallish for \$1 increase, but substantial if extrapolate to high MinWage

- Komro et al. (2016 AJPH)
 - \$1 MinWage increase nationwide:
 - 2790 fewer low birthweight births (1-2% decrease) and 518 fewer postneonatal deaths (4% decrease).
 - Infant deaths averted swamp teen traffic death increase.
 - But at \$10 million VSL, this \$5 billion value is much lower than Meltzer and Chen's estimated \$50 billion adult obesity welfare gain.
- Wehby et al. (2016 NBER WP)
 - \$1 MinWage increase:
 - 2% decrease low birthweight (similar to Komro), but analyzed only for those with \leq HS education
 - ToT from \$1,000 income increase (effect sizes similar to Hoynes et al. from EITC, assuming income is only pathway of MinWage effect):
 - 0.2 pp decrease low birthweight
 - 1 pp decrease in low prenatal care (<5 visits); 1 week earlier initiation
 - 1 percentage point decrease in prenatal smoking

Summary and Future Agenda

- Summary:
 - Based on related literature such as EITC, overall health benefits for children are more likely than for adults, at least for short-run effects
 - Meltzer and Chen suggest adult obesity welfare effects are larger than infant estimates to date – but this is sensitive to controversial magnitude of obesity effects on mortality
- Further studies needed:
 - Better identification and specification testing, using labor econ state-of-art
 - Replication studies
 - More health outcomes and mechanisms
 - Long-term lagged effects
 - Recent, larger MinWage increases
 - New data with large N of families, focused on labor and health