

HEALTH IMPACTS OF ECONOMIC INSECURITY:

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Expert Group Meeting

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What is “Economic Insecurity”?

- “economic insecurity is the anxiety produced by a lack of economic safety, i.e. by an inability to obtain protection against subjectively significant potential economic losses”; (Osberg, 1998).
- “the anxiety produced by the possible exposure to adverse economic events and by the anticipation of the difficulty to recover from them”. Bossert and D’Ambrosio, (2013)
- “economic insecurity arises from the exposure of individuals, communities and countries to adverse events, and from their inability to cope with and recover from the costly consequences of those events”; (UNDP, 2008).

Why might Economic (In)security matter?

1. Worrying about the future subtracts from enjoyment of the present

- Economic (in)security should be part of measurement of economic well-being
- INDEX OF ECONOMIC WELL-BEING (IEWB) [Osberg (1985); Osberg / Sharpe since 1995; RIW 2002]
= α_1 CONSUMPTION + α_2 SUSTAINABILITY + α_3 POVERTY/INEQUALITY + α_4 **SECURITY**
- Security enables stability & the maintenance of social relationships (essential for health)
- **Stress of Economic Insecurity is bad for the health (more mental illness, obesity)**

2. COSTLY : Risk Averse individuals insure &/or change behaviour to avoid Welfare State Social Insurance + Regulation + Avoidance + Private

3. Economic Security = Human Right

UN Universal Declaration of Human Rights (Article 25) + many other covenants

4. Political Economy Implications – the Nativism of the Insecure

- Public & Private Risk Mitigation least available for citizens of poor nations – i.e. Most of humanity live Poorer and More Insecure lives

Economic Insecurity & Obesity Rates

- Why did “Obesity Epidemic” break out where & when it did?
 - 1980s – strongest increase in U.S., U.K.
- Why is obesity prevalence so different among rich countries?
 - Range = 5% to 32% of adult population
 - Offer, Pechey. Ulijaszek. 2010a,b
 - All developed countries have been calorie rich for a long time
 - Common access to fast foods technology & marketing

Obesity Onset coincided with Reagan & Thatcher cuts in U.S. & U.K.
Obesity Increase has been least in extensive welfare states

Declining Welfare State Hypothesis – but is cause greater inequality or more insecurity?

- Cross-country Macro regressions:
- Osberg/Sharpe insecurity index “explains” 14 of 27 percent point gap in obesity prevalence

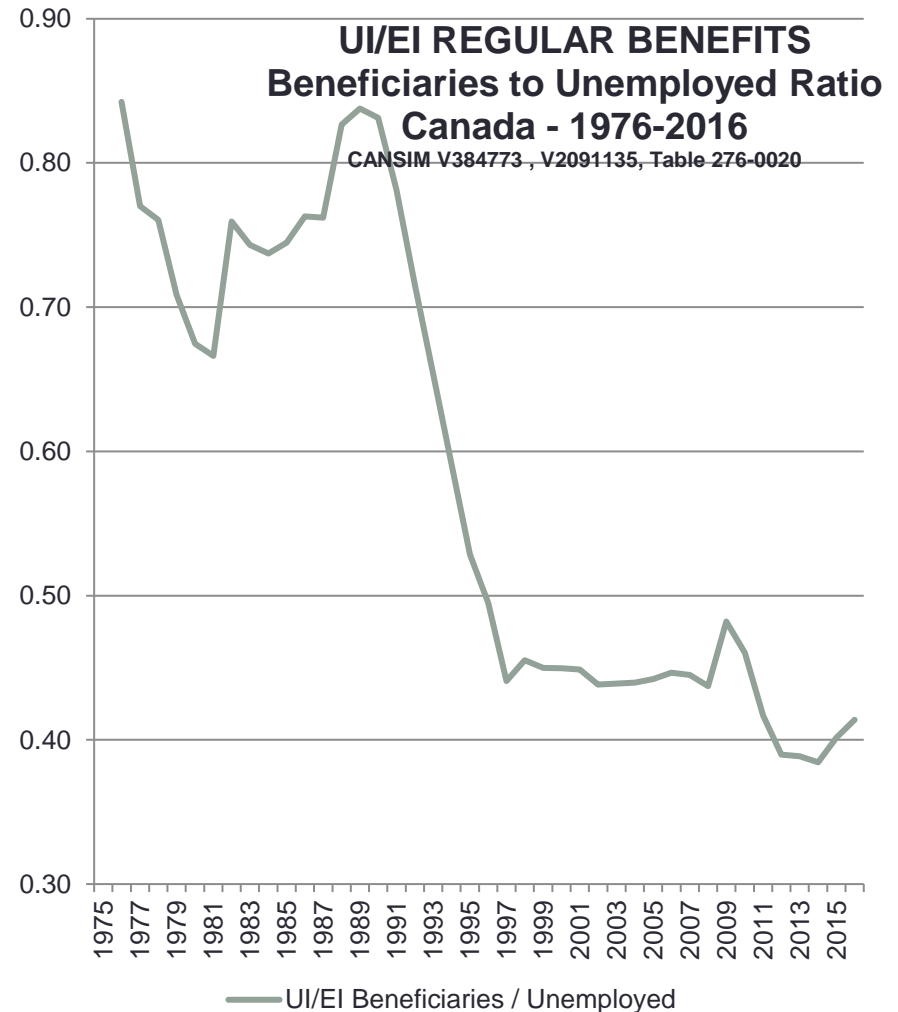
Micro-Data: Obesity & Insecurity

- “Why the Poor get Fat” – Smith, Stoddart & Barnes (2009)
 - Food scarcity = recurrent risk for most humans for millenia
 - Food storage: costly & often infeasible
 - Over-eating & putting on weight was an adaptive response to scarcity
 - Adaptive responses over millenia become “Hard – wired”
 - Anxious? Worried about the future? – “Comfort Food” makes you feel OK
 - BUT a continually calorie rich environment + recurrent stress implies the over-eating response to stress produces obesity
 - More stressful social environment => more weight gain
 - NLSY 1988-2000; 1% ↑ Prob (unemp) => + 0.6 lb; ↓ .5 Income => +12 lb

Unemployment Insurance Cuts: Causal Obesity Impacts of More Insecurity

"Economic Insecurity and the Weight Gain of Canadian Adults: A Natural Experiment Approach" Watson, Osberg, Phipps, *Canadian Public Policy* June 2016 Pp.115-131,

- Panel Micro Data + Natural Experiment
- Diff in Diff + Individual Fixed Effects
- (Un)Employment Insurance in Canada
 - NPHS – weight gain difference before/after policy change
 - Post-policy, Unemployment => more insecurity => 3.2 ↑ BMI
 - Males < High School – 20 lb. @ mean



“Is It Vulnerability or Economic Insecurity that matters for Health?”

Rohde, Tang, Osberg & Rao *Journal of Economic Behavior & Organization* 2017, 134: 307-319

- Vulnerability = risk of future absolute material deprivation
- Insecurity = threatened by losses in relative status
 - Competing models of “hazard” =>. Beveridge vs Bismarck social insurance.design
- 11 waves of Australian HILDA panel (7,000 households since 2001)
- 4 alternative measures of real or perceived downside economic risk
 - [1] Estimated Prob (50% ↓ individual income); [2] Estimated Prob (job loss in next year)
 - [3] Subjective: Agree (1-7) “secure job); [4] Difficulty obtain emergency funds quickly?
- Impacts on SF-36 mental health and physical health indices
- Polynomial interactions allow effect sizes to vary non-linearly with income.
- Baseline estimates:
 - Economic risks: consistently negative consequences for mental & physical health
 - Mental health effect consistently around “three times” the size of physical.health impact
- Main finding: increasing incomes do little to mitigate the sensitivity of health to these risks.
- Mostly the prospect of loss rather than deprivation that impacts wellbeing.

The Shattered “Iron Rice Bowl”: Intergenerational Effects of Economic Insecurity During Chinese State-Owned Enterprise Reform

Kong, Osberg & Zhou *Journal of Health Economics* Volume 67, September 2019, 102220 <https://www.sciencedirect.com/science/article/pii/S0167629618309664>

- **Does parental economic insecurity imply child weight gain?**
 - Stress contagion + Parental behavior change? Exogenous event to children
- 1989-2011 CHNS panel data + Natural experiment:
- China State-Owned Enterprise (SOE) Reform (1995-1997)
 - Laid-off 34 million SOE workers, 40% employment drop (51M kept jobs)
 - People did not choose to enter SOE sector — jobs assigned, no selection bias
 - Unanticipated reform: since 1947 no layoffs
- Continuous Difference-in-Difference Methodology (CDID) with individual fixed effects & year fixed effects
- Medium-built 10-year-old, 10 % point increase in expected parental economic loss from layoff => + 4 kg (boys) + 10 cm waist (girls)
- Anticipation > Realization: greater impact if job not actually lost
- Quantile regressions: greater weight gain for heavier boys

Experimental Evidence

“Economic Insecurity Increases Physical Pain”

Chou, Pamar, Galinsky [Psychological Science](#) 2016, Vol. 27(4) 443–454 DOI:10.1177/0956797615625640

- Multiple Methodologies

1. More pain killers consumed in insecure households
2. Manipulated Treatment: bad news on local unemployment or trigger recall of past insecure times – more pain reported
3. Treatment: Job prospects for grads of non-elite colleges – glass ½ full or ½ empty description – undergrads with insecure priming tolerate less pain (ice bucket)

+ bio-physical / body chemistry + epi-genetic measurements + ...

Exploding Literature on Health Impacts of Insecurity

Google Scholar (since 2019):

16,900 hits for “mental health economic insecurity”

18,300 hits for “economic insecurity health effects”

Other Recent Refereed Journal Articles:

1. “Blown Off-Course? Weight Gain Among the Economically Insecure During the Great Recession” Angela Daley, Nick Rohde, Lars Osberg and Barry Watson Journal of Economic Psychology [Volume 80](#), October 2020, 102289 <https://doi.org/10.1016/j.joep.2020.102289>
- “Can positive income anticipations reverse the mental health impacts of negative income anxieties?” Lars Osberg and Barry Watson (2019) Economics and Human Biology [Volume 35](#), December 2019, Pages 107-122 <https://www.sciencedirect.com/science/article/pii/S1570677X19300188>
- “Job Insecurity and Mental Health in Canada” Lars Osberg & Barry Watson Applied Economics published online February 21,2018 <http://www.tandfonline.com/doi/full/10.1080/00036846.2018.1441516>
- “Healing and/or Breaking? The Mental Health Implications of Repeated Economic Insecurity” Lars Osberg & Barry Watson Social Science and Medicine [Volume 188](#), September 2017, Pages 119-127
- “The Self-Reinforcing Dynamics of Economic Insecurity and Obesity” Lars Osberg, Nick Rohde and K.K.Tang Applied Economics 49:17 1668-1678_ November, 2016
- “The Effect of Economic Insecurity on Mental Health: Recent Evidence from Australian Panel Data” L. Osberg, N. Rohde, Prasada Rao & K.K. Tang (2016) Social Science & Medicine Vol.151, February 2016, Pp. 250-258
- “Economic Insecurity in Australia: Who is Feeling the Pinch and How?” Lars Osberg, N. Rohde, K.K. Tang and P. Rao Economic Record, Vol.91, No. 292, March 2015, 1–15
- “Measuring Economic Insecurity in Rich and Poor Nations” (Lars Osberg & Andrew Sharpe) Review of Income and Wealth Vol. 60, pp. S53-S76, May, 2014
1. “Welfare-Based Income Insecurity in the US and Germany: Evidence from Harmonized Panel Data” with Nicholas Rohde, Kam Ki Tang, Conchita D’Ambrosio and Prasada Rao Journal of Economic Behavior and Organization, [Volume 176](#), August 2020, Pages 226-243

Generalities: Health & Insecurity

- Risk of Income Loss – important impacts for all but the very affluent
- Risk of Unemployment – matters mostly for poorly educated
 - Subjective Job Insecurity & Estimated Prob (job loss) both important
- Mental Health > Obesity Impacts
- Gendered impacts – e.g. Obesity of < High school Male Adults
- Anticipation Impacts often \geq Realization Impacts
- Social Insurance Protections reduce adverse health impacts
- Child Health Impacts
 - Significant, gendered – evidence for both contagion & behaviour effects
- Future Agendas:
 - Covid-19 Impacts; Epi-genetics; Birth Cohort, Race & Ethnicity impact differentials