A Basic Income Experiment in Finland

How (not) to run societal field experiments

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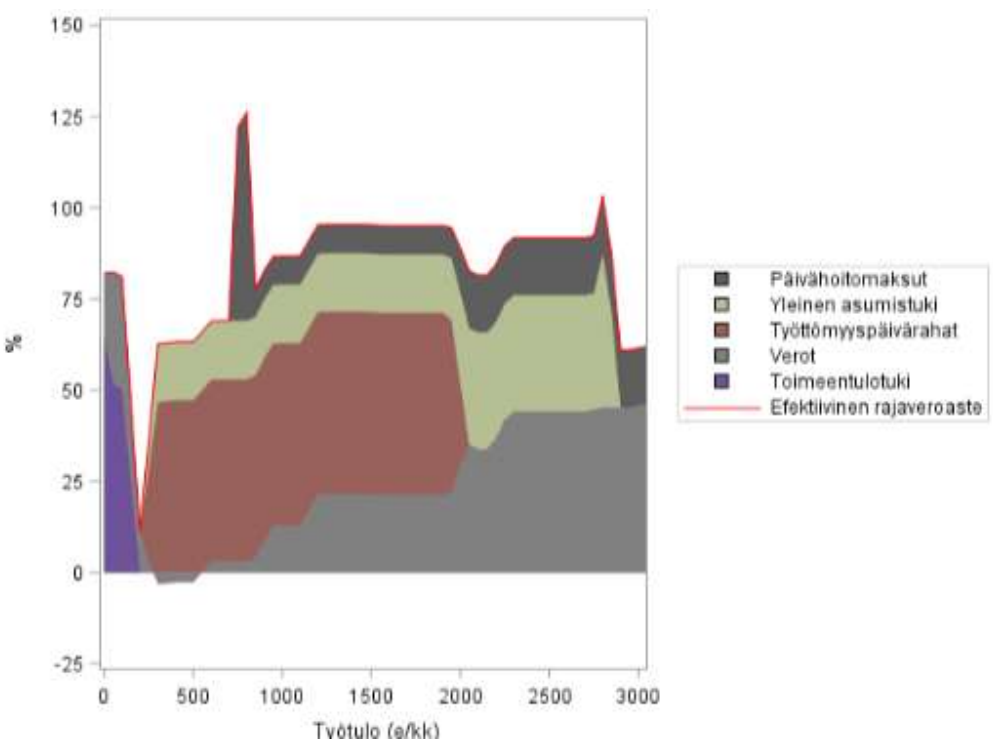
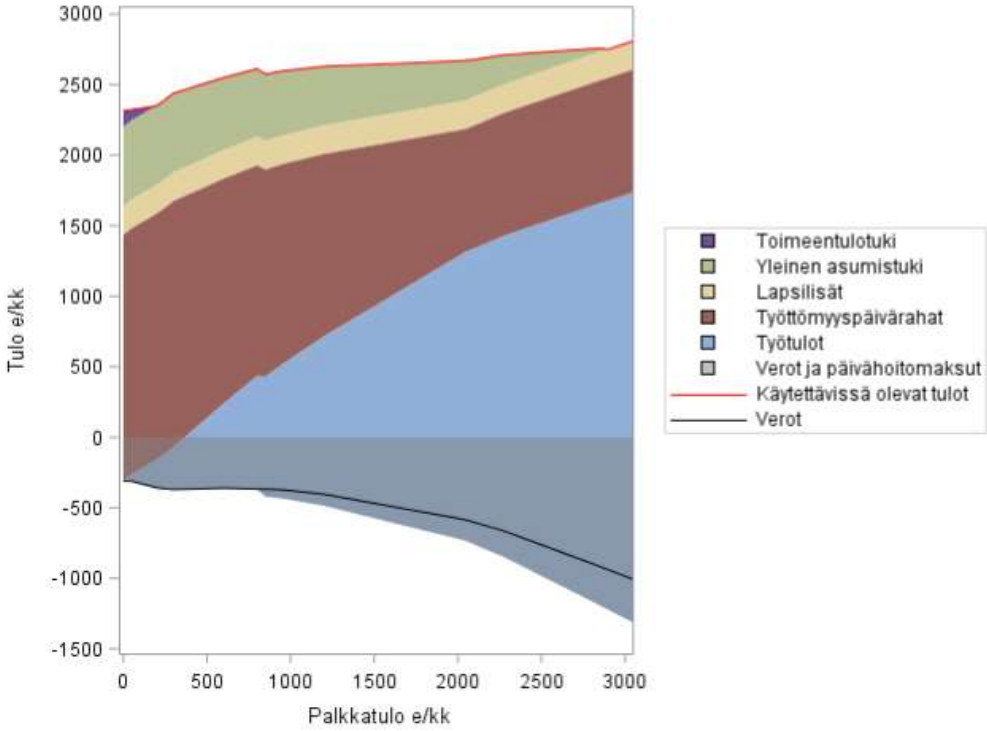
Finnish welfare state

- Targeted, conditional, means-tested, in-kind and cash
  - Y$= T - t(wh)$
- Social insurance (Social Insurance Institution of Finland, KELA)
  - Sickness insurance & disability insurance (4.24% of salary)
  - Pension (24.0%)
  - Unemployment insurance (0.8–3.15%)
  - Accident insurance (0.1–7%)
- Healthcare, education

Effective marginal tax rates and Household disposable income (2015)

- Unemployed couple, two daycare-aged children





Basic income

- Basic income (BI): Income transfer system based on an unconditional monthly payment
  - basic income guarantee
  - negative income tax (NIT)
  - citizen's dividend

- Y$= BI - t(wh)$
  - universal (with age limits)
  - non-targeted
  - unconditional
  - not means-tested
  - cash

- Iran, Alaska, Cherokees (USA)

- 69% support among Finns (BI = €1000/month, 2015)

BI models

- Full basic income
  - replace all insurance-based benefits
- Partial basic income
  - Replaces all basic benefits but almost all insurance-based benefits left intact
- Negative income tax (NIT)
  - Income transfers via taxation

	The Seattle/Denver Income-Maintenance Experiments	The New Jersey Graduated Work Incentive Experiment	The Rural Income Maintenance Experiment	The Gary Income Maintenance Experiment
Location	Seattle & Denver, USA	New Jersey & Pennsylvania, USA	Iowa & North Carolina, USA	Gary (Indiana), USA
Year	1970–1977	1968–1972	1970–1972	1971–1974
Expenses (of which administrative and research)	$77.5 M (74%)	$7.8 M (69%)	$6.1 M (61%)	$20.3 M (73%)
Treatment groups	11	8	5	4
Treatment group size	93 - 346 families (total: 2414)	46 - 138 families (total: 725)	30 - 70 families (total: 269)	198 - 314 families (total: 1028)
Control group size	1715 families	632 families	318 families	771 families
Duration	3 and 5 years (small proportion 20 years)	3 years	3 years	3 years
Size of income guarantee	95% - 140% of poverty line	50% - 125% of poverty line	50% - 100% of poverty line	75% or 100% of poverty line
Marginal tax rate	50%, 70% & 80%	30%, 50% & 70%	30 %, 50 % & 70 %	40 % & 60 %
Target group	Small income families, head of family 18-58 years and in the labor force.	Small income (max. 150% of poverty line) families, at least one male 18-58 years and in the labor force.	Rural small income families, who ex ante get S > 0.	Black families, with at least one child 18. 60% single families.
Research question	- Labor supply - Family breakdown	- Labor supply	- Labor supply - Health - Education - Consumption	- Labor supply - Education - Child mortality and morbidity - Housing
Problems/challenges	- Seattle was in a recession - Underreporting of income - Randomization was income-dependent	- Underreporting of income - Randomization was income-dependent - Different standards in reporting for treatment and control groups	- Low sample size - Non-typical families overrepresented in the sample - Underreporting of income	- Job market was dominated by steel industry with few part-time jobs
Observations	- 5 year treatment gave stronger results than 3 year treatment	Poverty line in 1970 for household of 2 under 65: $2604 (1970 $)		

- Burtless (1986)
  - Uncompensated Wage elasticity (substitution effect)
    - ~0 for men
    - Inexactly estimated for women
  - Income elasticity: [-0.07,-0.18]

Aims of this talk

- Describe in detail the experiment (control and treatment)
- Discuss the political, legal and intellectual process behind the experiment
- Empirical strategy and potential effects
- Discuss what we have learned about running societal field experiments

Timeline in the Finnish BI discourse

- Early propositions since 1970's
- Forss & Kanninen (Nov 2014, Tänk): "A basic income experiment should be conducted"
- Government program (May 2015): "A basic income experiment will be conducted"
  - Government: Center/Center-right/Populist
  - A research team commissioned to suggest an experiment (fall 2015)
- 2016: The experimental law
  - The government proposed a law (summer 2016)
  - A constitutional check was passed (fall 2016)
  - The law passed in the Parliament
- Jan 2017: Start of experiment

Finnish political discourse

- Labor supply
- Bureaucracy trap
- Underutilization of the means-tested benefit
  - €50-€300 million annually, up to 100,000 individuals (KELA)
  - Expenditures ~€700 million annually
  - Optimal vs non-optimal?
- Housing benefit
- Future of work
  - part-time, temporary and entrepreneurs/freelance workers

The experiment

- A randomized controlled trial
  - population: the unemployed at the end of 2016
  - compulsory treatment

- Y $= BI - t(wh)$
  - BI $= 560€/\text{month}$
  - t did not change
  - Some non-BI transfers remained

- A duration of at least 2 years

- Budget (gross): €10 million / year

- Conducted by Social Insurance Institution of Finland (KELA), headed by Olli Kangas

Aim of the experiment

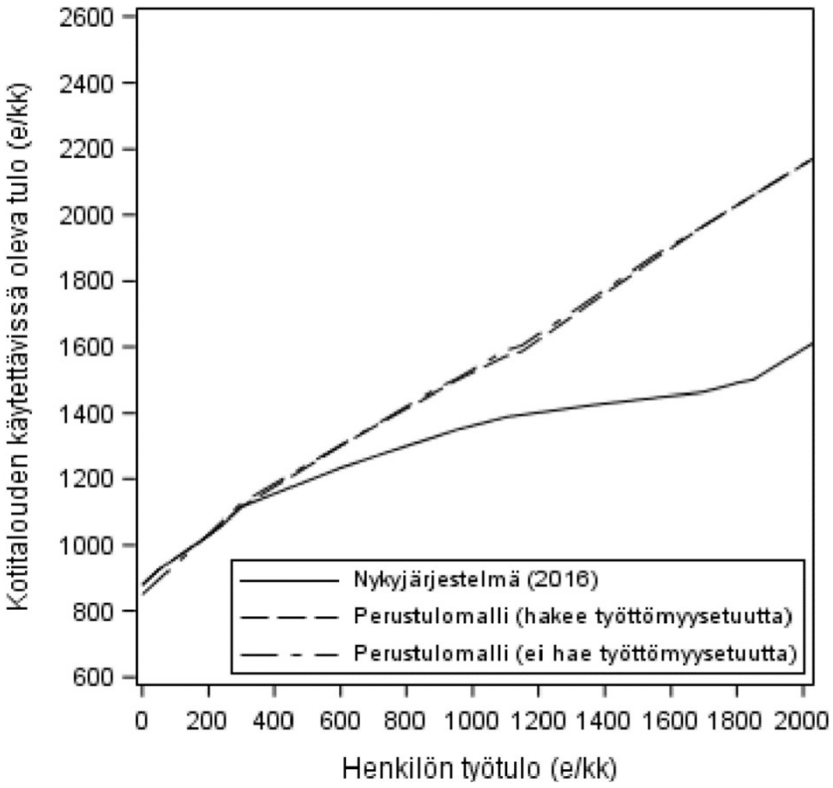
- Official aim: “To be able to make sufficiently credible estimates of the effects of basic income on different groups and to make a total estimate of the costs”
  - Focus on labor market outcomes

- Research questions (pre-analysis plan)
  - What are the labor supply effects (not in active labor market programs employment)?
  - What are the effects of the Finnish welfare state vs BI on multiple margins?
    - Registers
      - Annual earnings, annual income, labor market participation, entrepreneurship
      - Benefit take-up rate
      - Participation in active labor market programs
      - Enrolment in an educational institution
      - Usage of antidepressant drugs and other drugs
      - Internal and external migration
      - Having a child / marital status
    - Survey
      - Labor market behavior, stress, subjective health, subjective well-being, etc.
  - What are the revenue neutral levels of BI and t?

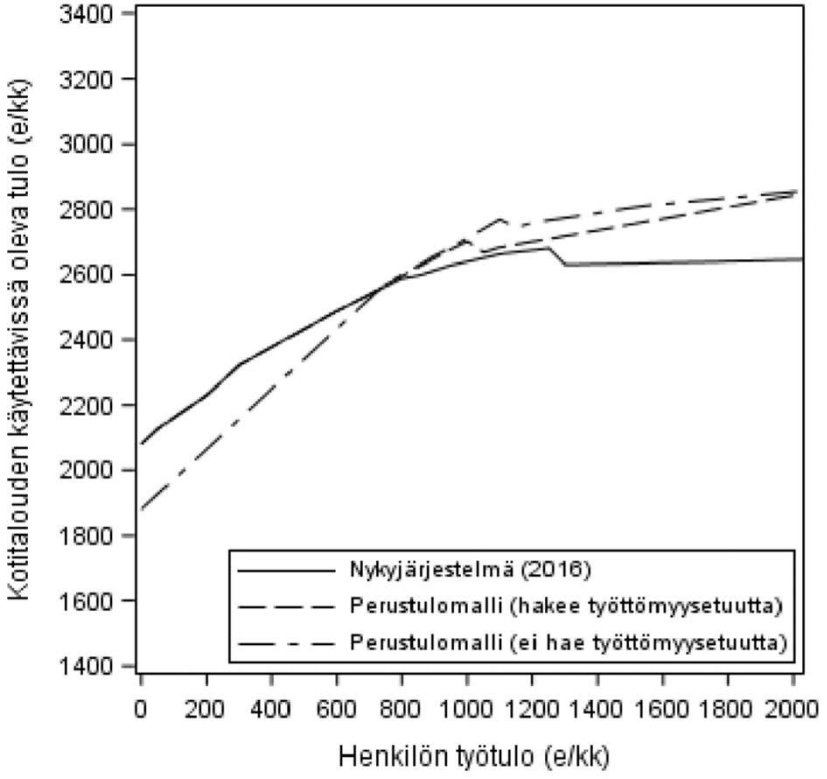
- To offer a blueprint for future experiments

Disposable income, treatment vs control

Single person household



Single parent, 2 children



Mechanisms of labor supply effects

- At least 5 possible mechanisms (1.-3.: vitamins A, B and C)
  1. Incentives
     - Income effect (-)
     - Substitution effect (+)
  2. Lower bureaucracy burden (+)
  3. No active labor market programs policies (-)
  4. Hawthorne effect
     - Participating in an experiment (+/-)
     - Media (+/-)
       - Anecdotally:
         - up to 10% of sample interviewed by media
         - one individual with 300 interviews in the first year
     - Filling surveys (+/-)
     - Direct line to Kela
  5. Spillovers (Crepon et al. 2013)

- To separate the effects
  - Multiple treatment groups (1.-4.)
  - Variability in pre-treatment levels (1.-3.)
  - Block/cluster design (5.)

Bureaucracy trap

- Lower bureaucracy trap offers a potential free lunch

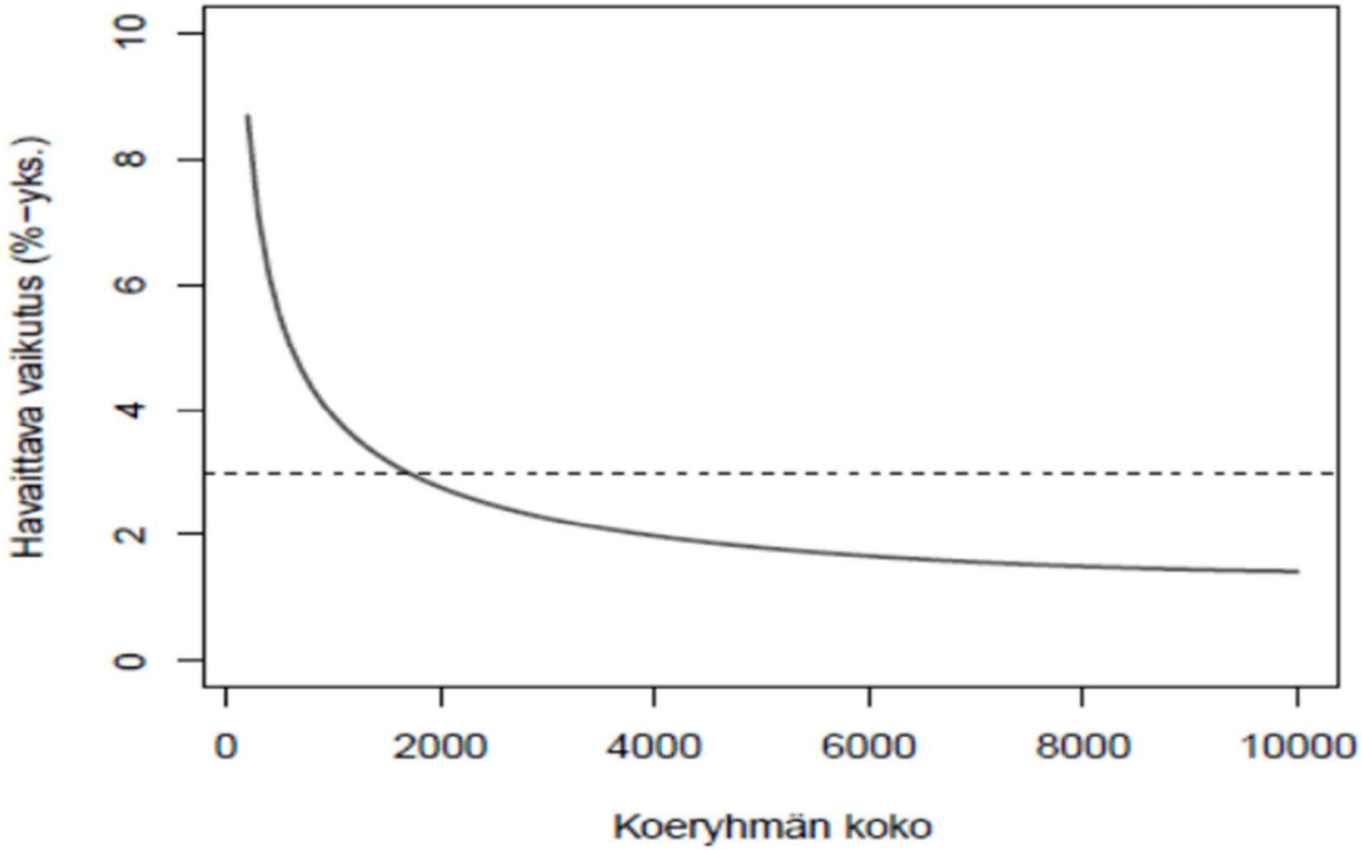
1. Administrative cost
   - Time cost
   - Subjective/psychological cost of effort
     - Annoyance
     - Stress
     - Scarcity effect
2. Uncertainty about the ultimate benefit decision
   - Actual randomness in the decision process
   - Lack of information
3. Liquidity cost of time gaps between sources of income

Duration

- 2 years vs lifetime
- Temporary vs. permanent program (Ashenfelter, 1978)
  - lower discounted value of BI -> lower income effect
  - low t -> temporary increase in the opportunity cost of leisure
- Seattle-Denver (Burtless, 1986)
  - full response: 2.4 - 4.5 years
  - In low t plans: 5-year treatment gave a stronger response at any point in time than a 3-year plan
  - In high t plans: 3-year treatment gave a stronger response

Power

- Minimum detectable effect
  - 80% power, 20% chance of false negative
  - 5% significance, 5% chance of false positive



Conclusion

- Pros
  - A bold effort to gain evidence on core policies
  - Seems to have changed the discourse toward a more intellectual direction
  - A learning opportunity for the future

- Shortcomings
  - Duration
  - Sample size
  - Lack of block design
  - Only one treatment group
  - Around half the sample not in a very effective treatment (families)
  - Research population only the unemployed (external validity)
  - Not a scalable model, far from revenue neutral (not necessarily bad)
  - Contamination (media, survey, direct line to Kela)

- Future developments
  - Early results in 2019, main results in 2020
    - Elections in April 2019, possibly over BI or future BI experiments
  - A research team considering bureaucracy and information traps
    - Exploit forthcoming real-time income registry for reforms and experiments (NIT?)
  - A new government bureau considering experiments for more informed decisions

Thank you!