Basic income policies: theory and empirical evidence

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Outline

• Focus on Unconditional Basic Income
• What is it?
• Why is UBI interesting?
• Theory:
  • Efficiency
  • Equity
• Problems: costs, incentives etc
• Evidence:
  • Quasi-experiments
  • Experiments
  • Simulations
Focus on UBI

• UBI = Unconditional Basic Income

• Other names: Citizen’s Income, Social Dividend etc.

• What is it?
What is it?

• Compare UBI with:

  • Conditional Basic Income (CBI) or Means-tested or Guaranteed Minimum Income

  • Negative Income Tax (NIT)

  • In-Work Benefits (IWB) or Wage subsidies or Tax Credits etc.
CBI

Net

G

Gross

G

G
UBI as a special case of NIT
UBI as a special case of NIT
UBI as a special case of NIT
Mixed recipes: CBI + IWB
Mixed recipes: UBI + IWB
Why is UBI interesting?

• End of 2° WW to mid-70s: some sort of CBI in most Western Countries
• 80s and 90s: introduction of some sort of IWB
• New millenium: Globalization, Automation, Big Crisis.
• Welfare dependency, poverty trap, precarization etc.
• Need for a redesign of welfare
• Cuts on welfare and/or more sophisticated CBI and IW
• But also a return of interest in UBI…
• … Old idea: Paine, George, Hayek, Lange, Simon, Meade etc.
Theory: Efficiency

• Basic universal endowment to promote individual responsibility and freedom (Hayek, *The Road to Serfdom*, 1944)

• Simplification, individual responsibility, «Get rid of burocrats», etc. (M. Friedman, *Capitalism and Freedom*, 1962)

• Left-Libertarian: Van Parijs, *Real Freedom for All*, 1995

• No stigma, low administration costs, no take-up problems,, less errors, less corruption etc. (A. Atkinson, *Inequality. What Can Be Done*, 2015).
Theory: Efficiency (cont’d)

• No «poverty trap» (implicit in non means-testing)

• Larger opportunity sets lead to better (more efficient) choices – educational, occupational, productive

• Incentive to entrepreneurship through reduction of risk-aversion

• Risk-averse individual should prefer a lump-sum certainty equivalent to contingent payments

• Efficient redistribution: it approximates Lump-Sum transfers (2° Welfare Th.)
Theory: Equity

• Globalization and Automation
  - Polarization (T. Cowen, *Average is over*, 2013)
Theory: Equity (cont’d)

• Distributing the benefits and compensating the losses of growth
  • UBI helps the re-allocations required by automation and globalization
  • UBI as a buffer against the precarization and systematic risks intrinsic in globalization (G. Standing, *The Precariat*, 2012)
Theory: Equity (cont’d)

• The «share» version of UBI

  o  T. Paine, Agrarian Justice, 1797
  o  J. Meade, Agathotopia: The Economics of Partnership, 1989
  o  D. Ray, The Universal Basic Share (2016 post on Ray’s blog Chhota Pegs)
Thomas Paine

• T. Paine (Agrarian Justice, 1797). A modern reformulation:
  o Common resources (land, air, water, spectrum etc.) belong to everyone in principle.
  o Free access to common resources is inefficient.
  o Private property or centralized management more efficient.
  o The original owners (everyone) should be compensated by the equivalent of the «produce» obtainable under free access ⇒ UBI
  o An implementation: Alaska Permanent Fund Dividend (about $2000)
Theory: Equity (cont’d)

• Compensating unpaid work

• Compensating the general contributions to «common knowledge», «social capital» et similia: theory of cognitive capitalism, social production etc.: possibly starting with Marx’s General Intellect (*Grundrisse*)
Theory: Reversed trade-off Equity vs Efficiency

• The «too poor to be efficient» argument (P. Hill, *Population, prosperity and poverty*, 1977)

• Some degree of universal and unconditional redistributions saves on wasteful rent-seeking (Milgrom & Roberts, *The Efficiency of Equity in Organizational Decision Processes*, *American Economic Review*, 1990)
Problems

• How do we pay for UBI?
  o Income or wealth taxes
  o Flat Tax
  o Taxes on privately-owned common resources (back to T. Paine?)
  o Taxes on externalities (close to the last point)
  o Redesigning welfare: reduce or drop other welfare policies
  o “Selective Universality”: UBI limited to sub-population defined by exogenous characteristics (e.g. age, gender, family background)
Problems (cont’d)

• Bad incentives for labour supply?
  o Income effect on low income people
  o Substitution effect on high income people

• Gives money to the rich «surfers»?
  o false problem:
    o with a flat tax rate = t, the transfer is «exhausted» at gross income UBI/t

• The poor can’t handle the money
  o «… After all, if they knew how to manage money, how could they be poor in the first place?…»
Quasi-experiments

• Imbens et al. (1999)
  o Study on lottery winners in the US. No effect on labour supply for amounts around $15000 per year. Minor effects for larger amounts (around $80000)

• Marx et al. (2008)
  o Study on winners of Win for Life lottery (Belgium). Minor or insignificant effects on labour supply.

• Akee et al. (2010)
  o Longitudinal study in North Carolina (recipients of a Government transfer). Big effects on human capital investments
Experiments

- Widerquist (2005) – survey of US experiments in the 70s
- Blattman et al. (2014) - Uganda
- Pasma (2014) – survey
- Oversee Development Institute (2016) – survey
- Mein Grundeinkommen (pilot)

- Overall, the experiments confirms some of the positive efficiency effects:
  - more efficient choices
  - increased propensity to entrepreneurship
Uganda 2008

• Blattman, Fiala and Martinez, *Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda*, QJE, 2014

• Government + World Bank experiment

• 15-35 years old, peasants: $1 per day

• 6000 treatment, 6000 control

• Lump sum transfer $365.
Uganda 2008, four years after

- Most of the $365 used to get a new skill (tailor, carpenter, auto mechanic, hairdresser ecc.).
- Treatment group income is 40% larger than control group’s
- 41% of the treatment group left agriculture. 29% in the control group
Planned experiments

- Netherlands, local pilot in Utrecht and other cities
- Finland
- Canada (Ontario), announced by Government
- Silicon Valley (Oakland), pilot (100 households) to be run by YCombinator
- New Zealand (?)
- Kenya (GiveDirectly), pilot completed, large experiment to come (A. Krueger, former Chairman of the Council of Economic Advisers)
Finland (KELA)

• 2017-18
• Assess whether UBI can be used as an alternative to current social assistance
• Focus on incentives: «poverty traps»
• 2000 unemployed
• EUR 560 per month, tax free
Simulations

- Calibrated DSGE models:
  - Van der Linden (2004), calibrated DSGE: UBI optimal
  - Fabre et al. (2014), calibrated DSGE: UBI good but traditional UI better
Simulations

• **Behavioural microsimulation**
  - Sommer (2016): Germany, positive effects of UBI on labour supply
  - Colombino (2015): Italy, UBI good (depends on welfare criterion)
  - Steiner (2015): Germany, UBI good
  - Clavet et al. (2013): Quebec, UBI too expensive
  - Horstschäer et al. (2010): Germany, unconclusive
  - Scutella et al. (2004): Australia, UBI promising
  - Colombo et al. (2008): Germany, unconclusive
• U. Colombino, Five crossroads on the way to basic income. An Italian tour, *Italian Economic Journal*, 2015, 1(3)

• Microeconometric model

• Simulation of 30 alternative reform in Italy

• Welfare evaluation
IWB

Net

G

Gross
Mixed recipes: UBI + IWB
The two best policies according to different welfare criteria

<table>
<thead>
<tr>
<th>Utilitarian</th>
<th>Gini-Sen</th>
<th>Gini-Sen-Poverty rate</th>
<th>Gini-Sen-Poverty gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>IWB\textsubscript{75}</td>
<td>UBI\textsubscript{33} + IWB\textsubscript{75}</td>
<td>UB\textsubscript{100}</td>
<td>UBI\textsubscript{100}</td>
</tr>
<tr>
<td>IWB\textsubscript{50}</td>
<td>UBI\textsubscript{50}</td>
<td>UBI\textsubscript{75}</td>
<td>UBI\textsubscript{75}</td>
</tr>
</tbody>
</table>
Effects of the two best policies according to Gini-Sen

<table>
<thead>
<tr>
<th>Policy</th>
<th>Female employment</th>
<th>Male employment</th>
<th>TMTR</th>
<th>Winners</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBI_{33}+IWB_{75}</td>
<td>-0.41%</td>
<td>-0.25%</td>
<td>51%</td>
<td>69%</td>
</tr>
<tr>
<td>UBI_{50}</td>
<td>-0.80%</td>
<td>-0.25%</td>
<td>51%</td>
<td>66%</td>
</tr>
</tbody>
</table>
CBI vs UBI: the «poverty trap»

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<thead>
<tr>
<th>Policy</th>
<th>Female employment</th>
<th>Male employment</th>
<th>Average transfer per household</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{UBI}_{75}$</td>
<td>- 1.77%</td>
<td>- 0.41%</td>
<td>9800</td>
</tr>
<tr>
<td>$\text{CBI}_{75}$</td>
<td>- 1.67%</td>
<td>- 0.25%</td>
<td>3300</td>
</tr>
</tbody>
</table>
Good alternatives to UBI

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<th>TMTR</th>
<th>Winners</th>
<th>Average transfer per household</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{CBI}<em>{33}+\text{IWB}</em>{75}$</td>
<td>49%</td>
<td>68%</td>
<td>5300</td>
</tr>
<tr>
<td>$\text{CBI}<em>{33}+\text{IWB}</em>{75}$ with Flat Tax</td>
<td>40%</td>
<td>62%</td>
<td>5300</td>
</tr>
</tbody>
</table>
• Five crossroads on the way to basic income. An Italian tour, *Italian Economic Journal*, 2015, 1(3)

• Is unconditional basic income a viable alternative to other social welfare measures? *IZA World of Labor*, February 2015