Poverty and poverty reduction (among children) by T/B-systems across countries

best-practices and mutual learning

Koen Caminada

Introduction

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Academic Director Institute of Tax Law and Economics (Leiden)

Vice-Dean Faculty Governance & Global Affairs (The Hague)

Topics

- Distribution tax-benefits social security and pensions
- Tax policy
- Reforming social and tax regulations
- Poverty reduction EU and OECD / Lisbon Agenda / Europe 2020
Empirics: global research team & data

Assembled Datasets (URL: www.economie.leidenuniv.nl)

- Budget Incidence Fiscal Redistribution Dataset on Income Inequality (2017)
- Idem, on Relative Income Poverty Rates (2019)
- Social Assistance and Replacement Rates Dataset
- Unemployment Replacement Rates Dataset
- Sectoral Income Inequality Dataset

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Poverty in the European Union on the rise (definition EU = PL60)

- Poverty rose in most countries (= 19 out 23)
- On average: 2.3%-points
- Disappointing: combating poverty is an explicit EU objective (= part Lisbon Agenda & Europe 2020 strategy)

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Agenda: Evidence for policy

I. Setting the scene: why income inequality and poverty matters?

II. Effectiveness of poverty alleviation by T/B-systems: best-practices across countries (OMC). And the winner is ...?

III. Familiar claim income transfer policy:
Social expenditure goes along with lower poverty levels and higher antipoverty effects across countries. True or false?
However: Target social spending at immigrant kids!

IV. Tax Allowances: Targeting or Universalism?

V. Concluding remarks – policy recommendations

Part I: Why inequality and poverty rise?

Many possible factors, including:

• Technological progress and a resulting rise in the skill premium for labor

• Globalization: highly educated workers profit, low skilled labor not (as much)

• Good education may not be reachable for lower income groups

• Demographic factors: ageing (more pensioners who have relatively low incomes)

• Several institutional factors, which vary from country to country, are important. E.g. for China the urban-rural gap is important.

• Developments at the sectoral level

• Government redistribution - became T/B-systems less redistributive?
Why inequality and poverty matter?

- A perfectly equal society is not desirable (no incentives). However, high inequality may undermine social stability.

- It deprives people of educational opportunities, human and physical capital accumulation.

- OECD (2014): Rising inequality is estimated to have knocked down growth since 1990 by 9 points in the UK and by 6-7 points in the US, Italy and Sweden.

- IMF (2015): if the income share of the top 20 percent increases by 1 percentage point, GDP growth is 0.08 percentage points lower. A 1 percentage point increase in the share of the bottom 20 percent is associated with 0.38 percentage point higher growth.
... while superrich (income & wealth)

**Superrich**
- Donald Trump
- Jack Ma (Ma Yun)
- John de Mol
- Bill Gates

**Similarities**
- Top incomes
- Male (gender)
- Family (inheritance)
- Mediocratic
- Political power?
- Influence tax policy?
The tax/benefit-system and fiscal redistribution

Income components

Labor income + capital income + private transfers =

Market income

+ Social benefits and transfers

= Gross income

-/- Income taxes and social security contributions

= Disposable income

Snapshot of OECD-wide spending and revenue composition
Tax race to the bottom: CIT rates over time across the globe

Figure 2: Corporate income tax rates, 1980–2013

Poverty: international perspective

Monetary poverty in an international setting: no agreed-upon definition

- World Bank: $1 dollar a day ($1.90)
- USA: Absolute – Orshansky (basket)
- EU: Relative → poverty line (PL) 60 percent of median income (AROP)

Thresholds single person (PPS) 2015

- CBS: lage inkomensgrens → €12.250
- SCP: budgetgrens → €12.264
- EU: 60% median income → €12.629
**AROP: below 60% of median income**

Poverty rate EU28:
- PL 40 = 6
- PL 50 = 11
- PL 60 = 17
- PL EU60 = 23

Poverty line:
- PL EU = 60
- PL USA = 30
- PL China = ??

Poverty rate USA 2013 (LIS):
- PL 40 = 11
- PL 50 = 17
- PL 60 = 24

China PL60 = 27

At-risk-of-poverty rate after social transfers 2015 (PL 60)

Source: Eurostat: ECHP/EU-SILC
Part II - Antipoverty effectiveness of T/B-system

Standard budget incidence approach:

• Market income versus disposable income

• Antipoverty effect social transfers and taxes = people lifted out of poverty =
  (a) pre-tax-transfer poverty -/
  (b) post-tax-transfer poverty

• Public policy indicator on targeting = targeting effect = antipoverty
  effectiveness: poverty reduction per percentage point social spending GDP
  = [(a) – (b)] / social spending % GDP

Leiden LIS Budget Incidence Fiscal Redistribution Dataset
– data & methods on Gini’s and relative income poverty rates

• Poverty rates
  - AROP market income = Pov (mi)
  - AROP Disposable income = Pov (dhi)

• Redistribution = % of people lifted out of poverty
  - Overall redistribution = Pov (mi) – Pov (dhi)
  - Decomposition: social benefits vs income taxes
  - Further decomposition by social programs (13)

• Target groups: total population, working-age population, children & elderly
• Countries: 49
• Time-series: 1967-2016

We provide data and codebooks
Disposable income poverty (PL60) across countries among different age groups (most recent data year)

Source: Caminada & Wang (2019)

Disposable and market income poverty rates (PL60) across LIS countries (most recent data year)

Source: Caminada & Wang (2019)
### Poverty alleviation in LIS countries (PL60)

Lift out of poverty = Poverty market income -/- Poverty disposable income

= Fiscal redistribution social benefits and income taxes = Lift out of poverty by T/B-system

<table>
<thead>
<tr>
<th></th>
<th>China 2013</th>
<th>India 2011</th>
<th>USA 2016</th>
<th>Netherlands 2013</th>
<th>Mean 49 countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty mi</td>
<td>36%</td>
<td>31%</td>
<td>34%</td>
<td>32%</td>
<td>33%</td>
</tr>
<tr>
<td>Poverty dpi</td>
<td>27%</td>
<td>27%</td>
<td>24%</td>
<td>12%</td>
<td>18%</td>
</tr>
<tr>
<td>Reduction</td>
<td>9%-p</td>
<td>4%-p</td>
<td>10%-p</td>
<td>20%-p</td>
<td>15%-p</td>
</tr>
<tr>
<td>Partial effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social benefits</td>
<td>-</td>
<td>4</td>
<td>13</td>
<td>26</td>
<td>17</td>
</tr>
<tr>
<td>Income taxes</td>
<td>-</td>
<td>-</td>
<td>-3</td>
<td>-6</td>
<td>-2</td>
</tr>
</tbody>
</table>

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### Poverty alleviation in LIS countries

Lift out of poverty by T/B-system

<table>
<thead>
<tr>
<th></th>
<th>China 2013</th>
<th>India 2011</th>
<th>USA 2016</th>
<th>Netherlands 2013</th>
<th>Mean 49 countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>9%</td>
<td>4%</td>
<td>10%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>WA population</td>
<td>7%</td>
<td>4%</td>
<td>4%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Children</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
<td>1%</td>
<td>9%</td>
</tr>
<tr>
<td>Elderly</td>
<td>31%</td>
<td>8%</td>
<td>39%</td>
<td>84%</td>
<td>48%</td>
</tr>
</tbody>
</table>

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Great Recession: At risk of poverty shifted from elderly to the young (change AROP 2007-2013)

The Netherlands: poverty of market income and disposable income and fiscal redistribution since 1990

<table>
<thead>
<tr>
<th></th>
<th>Total population</th>
<th>Working-age</th>
<th>Children</th>
<th>Elderly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty mi</td>
<td>30</td>
<td>32</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Poverty dpi</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Lifted out of poverty</td>
<td>18</td>
<td>19</td>
<td>1</td>
<td>13</td>
</tr>
</tbody>
</table>

Policy focus:
- Working age
- Kids
- Elderly

Source: Caminada (not be quoted)
Trend The Netherlands and Belgium: Increasing net social expenditures as % GDP, however ....

Source: Caminada, Goudswaard, Van Vliet & Bakker (2018)

Public policy indicator on targeting
Poverty alleviation via T/B-systems and social spending across 20 LIS/OECD-countries (most recent data year)

Source: Caminada (unpublished work)
Public policy indicator on targeting
Poverty alleviation via T/B-systems and social spending across 21 LIS/OECD-countries (most recent data year)

Targeting of net social expenditure on poverty reduction in the EU15 over time  Pensions are excluded from social transfers
Lesson 1: OMC – best-practices

- Each point GDP net social spending alleviates poverty in EU15 on average by 1.2 point.

<table>
<thead>
<tr>
<th>Best practice</th>
<th>Low score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>Italy</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Netherlands</td>
</tr>
</tbody>
</table>

- OMC: Mutual learning and policy exchanges ...

- Over time → Dutch system: less targeting → universalism

Part III - Effectiveness of income transfer policies in alleviating poverty

- Vast literature claims “strong negative relationship at country level between the level of social spending and the incidence of poverty “ – “arguably one of the most robust findings in comparative poverty research”


- However, .... (Caminada et al)
## Exception: poverty among kids immigrants

### Poverty (PL50) among Immigrant Children across Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>% Immigrants Households</th>
<th>All</th>
<th>Majority</th>
<th>Minority</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>27</td>
<td>15</td>
<td>13</td>
<td>20</td>
<td>1,5</td>
</tr>
<tr>
<td>Austria</td>
<td>17</td>
<td>9</td>
<td>7</td>
<td>14</td>
<td>1,9</td>
</tr>
<tr>
<td>Belgium</td>
<td>13</td>
<td>10</td>
<td>7</td>
<td>20</td>
<td>2,7</td>
</tr>
<tr>
<td>Canada</td>
<td>21</td>
<td>15</td>
<td>14</td>
<td>22</td>
<td>1,6</td>
</tr>
<tr>
<td>Denmark</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>17</td>
<td>3,9</td>
</tr>
<tr>
<td>Finland</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1,3</td>
</tr>
<tr>
<td>France</td>
<td>8</td>
<td>8</td>
<td>6</td>
<td>19</td>
<td>3,0</td>
</tr>
<tr>
<td>Germany</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>15</td>
<td>1,8</td>
</tr>
<tr>
<td>Ireland</td>
<td>13</td>
<td>14</td>
<td>13</td>
<td>17</td>
<td>1,3</td>
</tr>
<tr>
<td>Italy</td>
<td>2</td>
<td>17</td>
<td>17</td>
<td>15</td>
<td>0,9</td>
</tr>
<tr>
<td><strong>Netherlands</strong></td>
<td>6,7</td>
<td>8,5</td>
<td>6,7</td>
<td>27,3</td>
<td>4,1</td>
</tr>
<tr>
<td>Sweden</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>14</td>
<td>3,8</td>
</tr>
<tr>
<td>UK</td>
<td>13</td>
<td>16</td>
<td>15</td>
<td>23</td>
<td>1,6</td>
</tr>
<tr>
<td>USA</td>
<td>13</td>
<td>22</td>
<td>20</td>
<td>40</td>
<td>2,0</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>19</td>
<td>1,9</td>
</tr>
</tbody>
</table>

*Source: Smeeding et al (2009)*

### Targeting social expenditure of family programs on (immigrants) children

**Poverty rate (PL = 50) vs. Gross total social expenditures on Family Programs, % GDP**

- Minority: \( y = -6x + 32,8 \) \( R^2 = 0,380 \)
- Majority: \( y = -4x + 19,3 \) \( R^2 = 0,43273 \)

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Lesson 2: Social spending and poverty

- Familiar claim (*higher social expenditures goes along with lower poverty levels*) must at least toned down.

- Universal social benefits are less effective compared to targeting at vulnerable / high at-risk-of-poverty groups.

- Targeting especially via social expenditures of family programs at (immigrants) children.

Part IV: Targeting at Dutch low income families

Tax credits + allowances: **55** billion euro
Tax revenue + SSC: **92** billion euro

**Instrumental tax policy** → stop just pumping money around and simplify the tax code and allowances → less complex financial relationship households – treasury

PIT rates almost double as high as they reasonably could be → shortening tax balance
### Cleaning: too much anomalies, 2016

<table>
<thead>
<tr>
<th>Category</th>
<th>Value (Billion)</th>
<th>Per household</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Tax expenditures (78)</td>
<td>18.9</td>
<td>2,444</td>
</tr>
<tr>
<td>- Indirect taxes (40)</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>- Direct taxes (38)</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>B: Tax credits (11)</td>
<td>42.3</td>
<td>5,483</td>
</tr>
<tr>
<td>C: Allowances (4)</td>
<td>12.4</td>
<td>1,600</td>
</tr>
<tr>
<td>D: Other</td>
<td>24.4</td>
<td>3,160</td>
</tr>
<tr>
<td>- Housing (mortgage interest)</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td>- Pensions (box 1 - box 3)</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>- Lower rate PIT seniors</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>E: Other (15)</td>
<td>17.2</td>
<td></td>
</tr>
<tr>
<td>Correction for doubles</td>
<td>-3.2</td>
<td></td>
</tr>
<tr>
<td><strong>Total: 110 anomalies</strong></td>
<td>112.0</td>
<td>14,502</td>
</tr>
</tbody>
</table>

---

### Samenstelling marginale belastingdruk 2015

![Graph showing marginal tax burden distribution](image)

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*Bron: CPB (2015), Kansrijk arbeidsmarktbeleid*
Heterogeneity tax ratios = results fiscal discrimination

\[ \text{Tax ratio} = \frac{\text{Gross income} - \text{disposable income}}{\text{Gross income}} \times 100 \]

Policy: To what extent will society take differences in income and other factors into account by determining tax ratios?

<table>
<thead>
<tr>
<th>Category</th>
<th>Budget (billion euro)</th>
<th># Households (x 1,000)</th>
<th>Share of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing rent</td>
<td>€ 2.774</td>
<td>1,107</td>
<td>15%</td>
</tr>
<tr>
<td>Kids</td>
<td>€ 1.047</td>
<td>824</td>
<td>11%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>€ 4.855</td>
<td>3,628</td>
<td>48%</td>
</tr>
<tr>
<td>Total</td>
<td>€ 8.676</td>
<td>6,316</td>
<td></td>
</tr>
<tr>
<td>(# households with allowances)</td>
<td></td>
<td>(4,589)</td>
<td>(61%)</td>
</tr>
<tr>
<td>Tax Committee (Family Allowance)</td>
<td></td>
<td>3,651</td>
<td>49%</td>
</tr>
<tr>
<td>Idem, compulsory pay-out via health insurances</td>
<td></td>
<td>1,405</td>
<td>19%</td>
</tr>
</tbody>
</table>

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Source: Caminada, Goudswaard & Knoef (2018)
Clear distinction: (individual) taxation and (family) income support

**Taxation to encourage labour force participation**

**Individual**
- Rates structure
  - Two lower rates
  - General tax credit
- For working population
  - Earned income tax credit
  - Income-related combination tax credit
  - Childcare benefit

**Income support**

**Household**

**Instruments**
- Healthcare benefit
- Rent benefit
- Child benefit
- Child-related budget

Concluding remarks - policy

Objective: Poverty reduction (kids). How?

✔ Requirement: rethinking anti-poverty policy - out of the box (system).

✔ Target instruments to vulnerable groups → kids of immigrants, working poor (self-employed); *not* elderly.

✔ Current social benefits, T/B-system and Allowances are less well suited to target (too many beneficiaries) → Target Family Allowance.

✔ Status quo T/B-system: social cost **225,000** jobs
Related work – downloads via www.economie.leidenuniv.nl


Related papers – downloads via www.economie.leidenuniv.nl


Databases & codebooks

1. Leiden LIS Budget Incidence Fiscal Redistribution Dataset on Income Inequality (2017)
3. Social Assistance and Minimum Income Levels and Replacement Rates Dataset
4. Unemployment Replacement Rates Dataset
5. Sectoral Income Inequality Dataset

Website: Leiden Law School / Economics / Data