



Berner Fachhochschule
Haute école spécialisée bernoise
Bern University of Applied Sciences

How deductions undermine the redistribution effect of taxes - Research with Swiss tax data

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FORS-SSP Methods and Research Meeting in Lausanne
26th March, 2019

- 1** Part 1: Economic Inequality in Switzerland. What can we learn from tax data

- 2** Part 2: Results from a study on redistribution through taxes and deductions with Swiss tax Data

Economic Inequality in Switzerland.

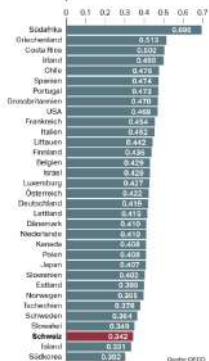
Einkommensverteilung vor Umverteilung
gemäss Gini*, 2015

16 bis 65-jährige, verfügbares Einkommen,
vor Steuern und Transfers

*Maass für Ungleichheit:

Ein Wert von 0
bedeutet, dass
alle Personen
genau gleich
viel Einkommen
haben

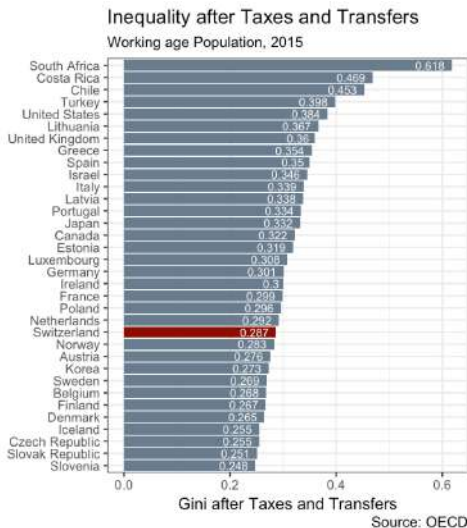
Ein Wert 1
hat eine Person
das ganze
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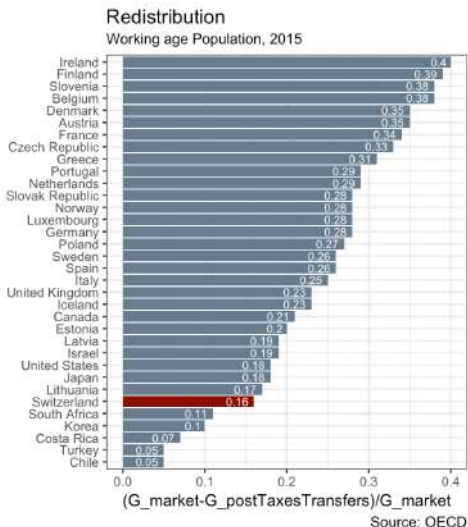
Quelle: OECD

(Source: Sonntagszeitung, 27.Januar 2019)

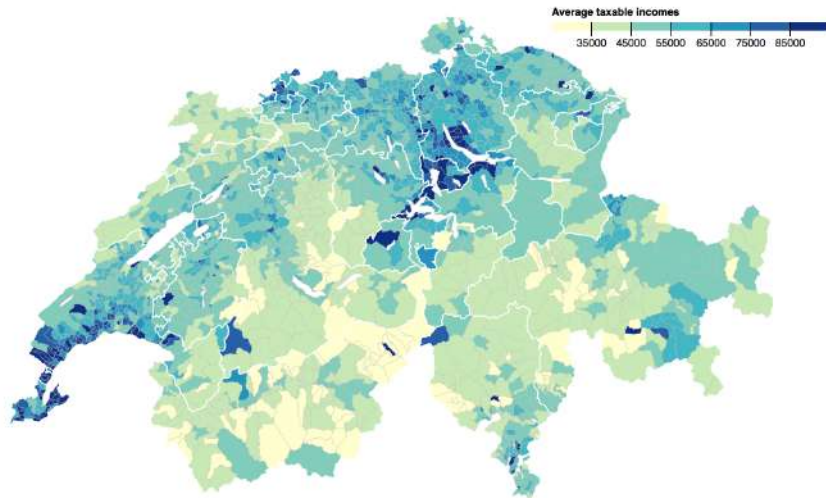
Economic Inequality in Switzerland. Low income Inequality.



Economic Inequality in Switzerland. Low income Inequality. Little Redistribution.



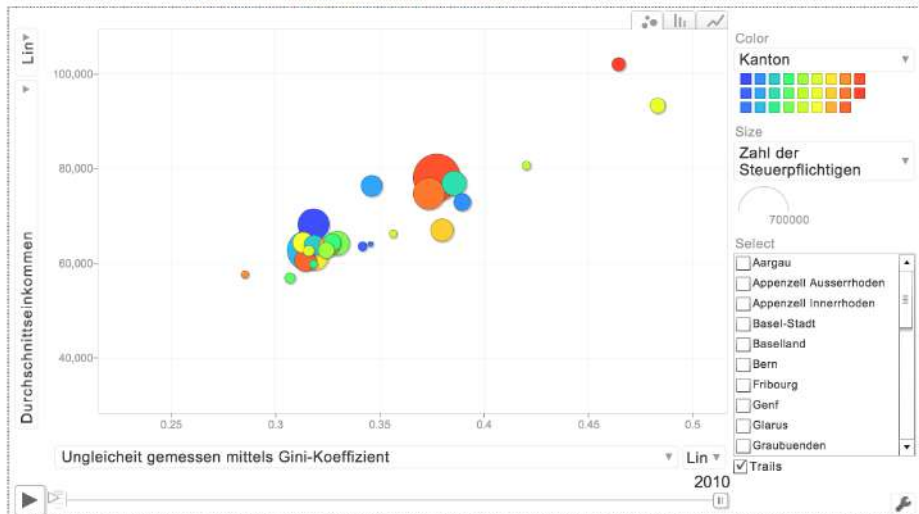
Regional Inequality within Switzerland



(Source: <https://www.knoten-maschen.ch/wohlstandsberge-und-taeler-der-schweiz/>)

Inequality between and within cantons

R version 3.0.0 (2013-04-03) • googleVis-0.4.2 • Google Terms of Use • Data Policy



(Source: <http://inequalities.ch/>)

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 - ▶ Cons:
 - ▶ information on non-taxed is not available before 1995/1996
 - ▶ tax units not households
 - ▶ little additional information on individuals and households
 - ▶ only taxable incomes (incomes after deductions, major part of direct taxes and all means-tested benefits are missing)

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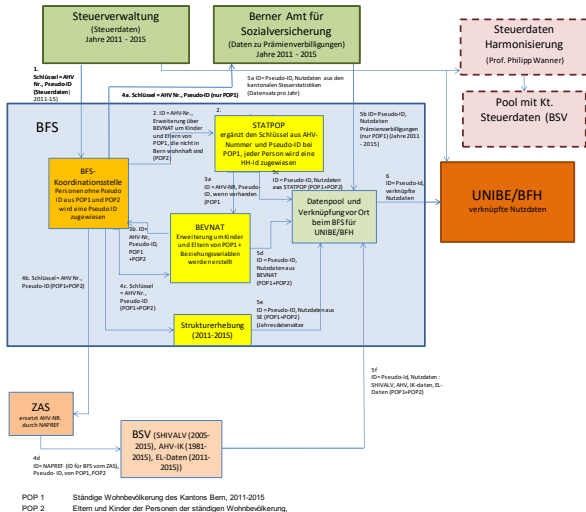
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- ▶ Starting point of an ongoing SNF-project on inequality, poverty and the impact of the welfare state in Switzerland (<http://inequalities.ch/>)
- ▶ Solution: Data-Linkage

Data-Linkage Modell



Part 2: Results from a study on redistribution through taxes and deductions with Swiss tax Data

Income redistribution through taxation – how deductions undermine the effect of taxes

Oliver Hübelin

Bern University of Applied Sciences

Rudolf Farys

University of Bern

Abstract

This paper shows the potential of administrative data to grant us a more complete picture of the redistributive effects of the visible (tax rates) and hidden (tax deductions) instruments of the fiscal welfare state. Based on administrative tax data from a large Swiss canton, we apply a gini-based redistributive effect decomposition to demonstrate how several taxes and



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- ▶ An important element of income inequality reduction are *progressive direct taxes*. On average 25% of the overall redistribution can be attributed to income taxes (Wang et al. 2014).
- ▶ Yet many countries also provide options for claiming deductions that alter the redistributive effect of taxes. This latter aspect however is often neglected since data usually only reports on taxes paid.
- ▶ By using administrative tax data we are able to evaluate *the visible (taxes) and hidden (deductions) instruments of the welfare state* with respect to their impact on income inequality.

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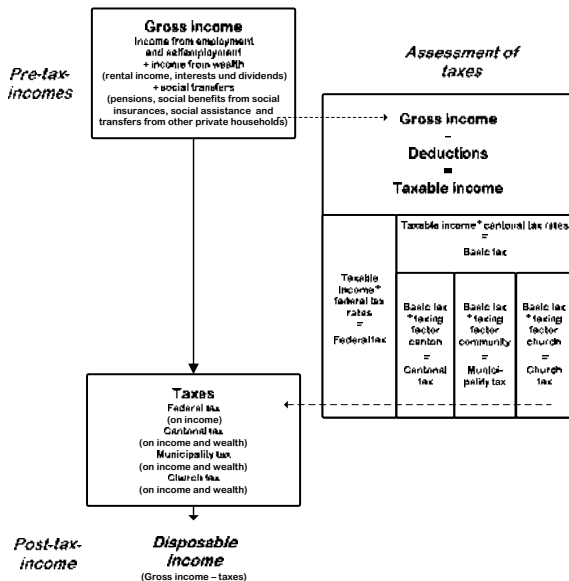
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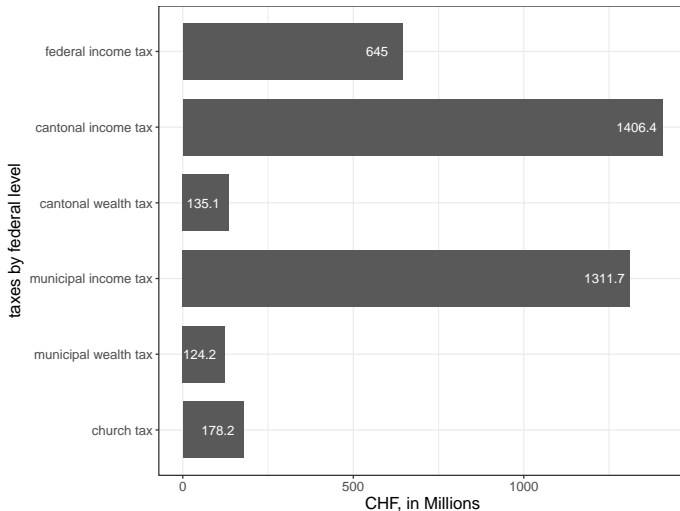
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- ▶ We have two time points: 2001 (283'580 tax units) and 2011 (327'047 tax units) and thus we are able to compare changes over time

The Assessment of taxes



Overview on taxes under scrutiny

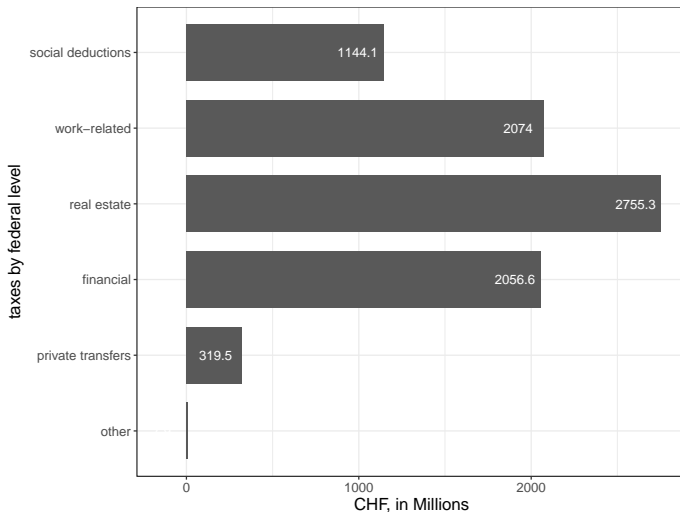


Overview on deductions under scrutiny

Table A.4: Assignment of deductions to main categories and Limits

	Limits
A Social deductions	
A1 Second earner deduction	600 CHF
A2 Special deductions for second earners when assisting in own business	600 CHF
A3 Costs of illness or disability	No limit
A4 Child deductions	6400-11000 CHF per child depending on age and year
A5 Deductions for supported persons	2400 CHF per person
A6 Invalidity deduction	3000 CHF
A7 Deductions for child care	3000 CHF
A8 Deductions for paid out life annuities	40%
B Work-related expenses	
B1 Miscellaneous work expenses individual/spouse	Multiple smaller limits for e.g. foreign meals, bus/train tickets, etc.
B2 Child care necessary for job	6000 CHF per child
C Real estate and interest costs	
C1 Property expenses	10-20% of rental income or effective costs of value-preserving expenses
C2 Debt interest	Limited to income from assets over 50000 CHF
D Deductions related to assets and insurance	
D1 Cost of asset management	No limit
D2 Buying into obligatory pension scheme (Pillar 2), individual/spouse	No limit
D3 Contribution to voluntary pension scheme (Pillar 3a)	-6000 – -34000 CHF depending on year and employment status
D4 Personal premiums to social security (OAS/ED)	No limit
D5 Insurance cost and interest of savings capital	2000 CHF (singles) /4000CHF(married)
E Alimonies and charity (transfers)	
E1 Alimonies to spouse	No limit
E2 Alimonies to children	No limit
E3 Party donations	1100 CHF
E4 Voluntary contributions	20% of net income
F Other deductions	No limit; Apprentice training in private household

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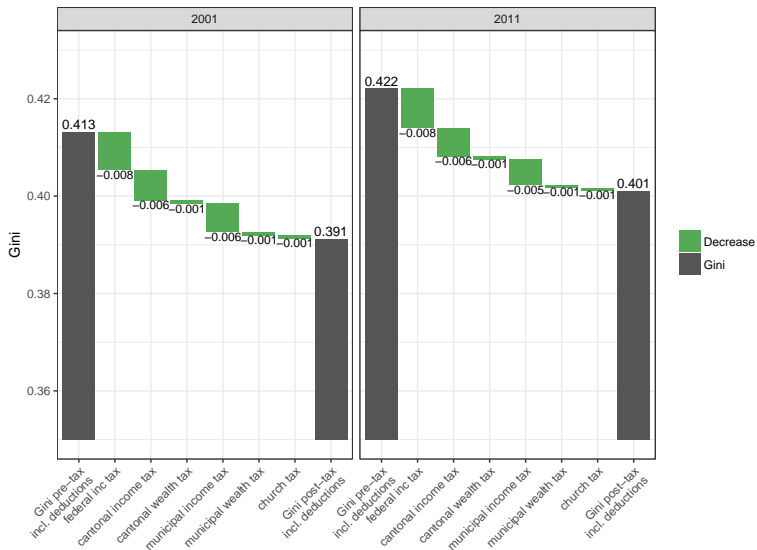
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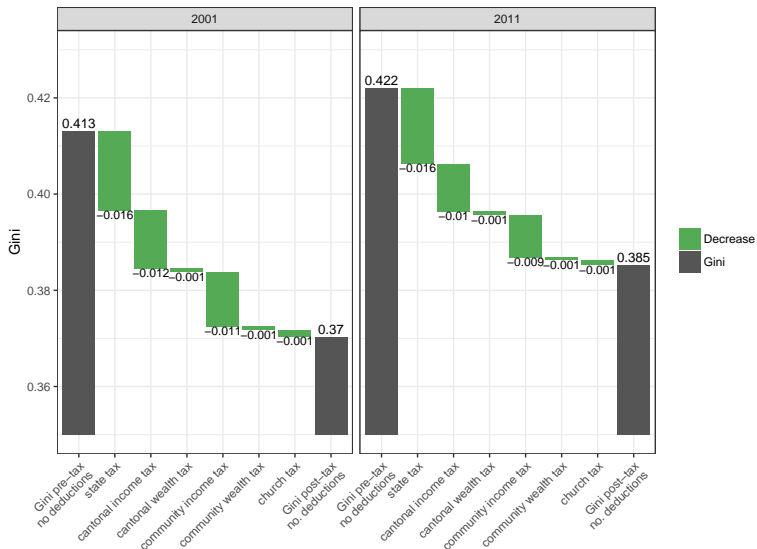
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- ▶ (1) Identify effect of taxes
- ▶ (2) To identify the effect of deductions a post tax income distribution without any deductions was created (G_z). The effect of every single deduction (u_i) was identified by comparing post tax income distributions applying deduction i (G_{u_i}) to G_z .

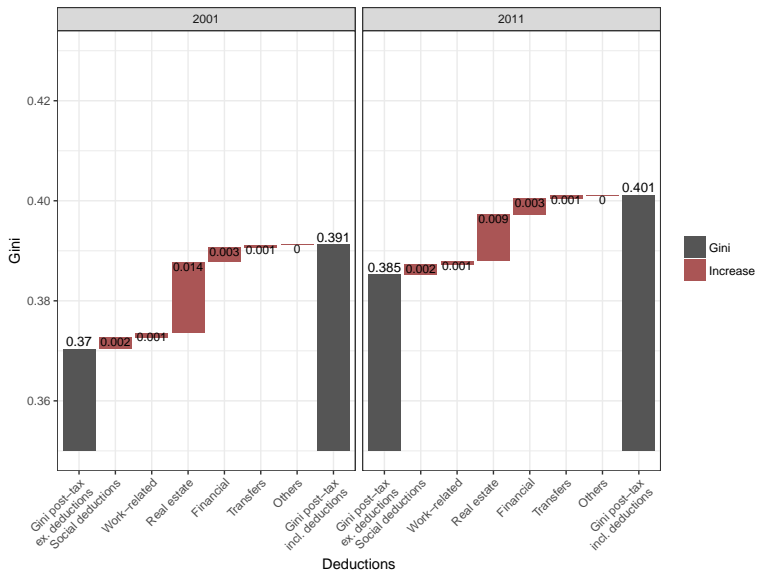
Results: Partial redistributive effect of taxes (incl. deductions)



Results: Partial redistributive effect of taxes (no deductions)



Results: Partial redistributive effect of deductions



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Thank you for your attention!

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