

# Recent Developments in Economic Inequality







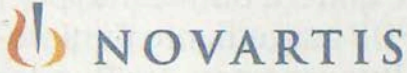



## Inequality in income and wealth in Switzerland

# Introduction

- Over the last year, income inequality has been a prominent theme in the public discussion in Switzerland
- Various political activities (“Abzocker” initiative, Minimum wage initiative, 1:12 initiative)
- Lots of media coverage

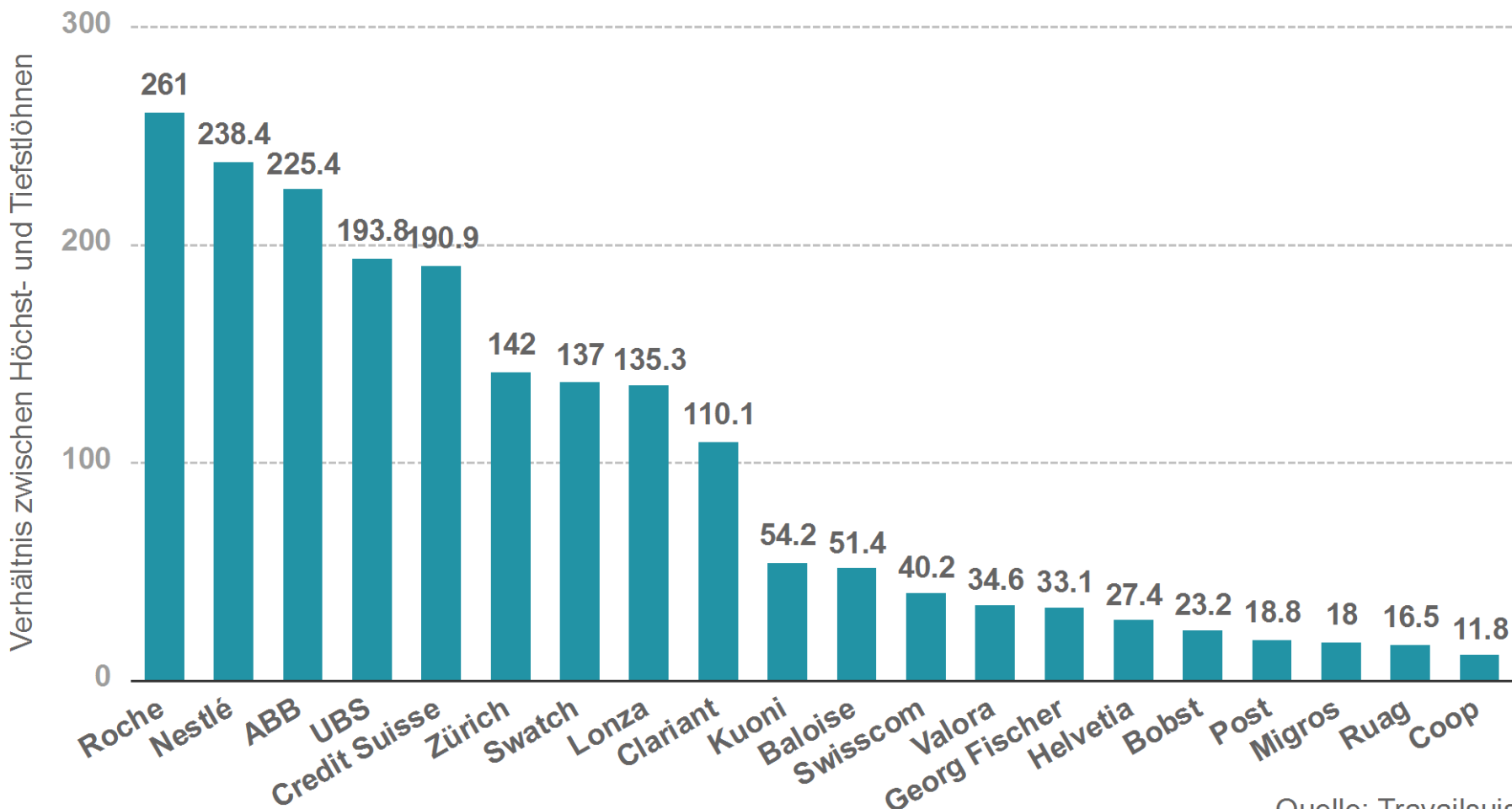
# Die Lohnschere in Schweizer Unternehmen

Verhältnis von Höchst- zu Tiefstsalären 2012

Rang	Konzern	Name	Lohnschere	Entschädigung in Mio. Fr.
1		 Severin Schwan	<b>1:261</b>	15,8
2		 Paul Bulcke	<b>1:238</b>	12,6
3		 Joe Hogan	<b>1:225</b>	10,16
4		 Joseph Jimenez	<b>1:219</b>	13,2
5	 LINDT & SPRÜNGLI	 Ernst Tanner	<b>1:195</b>	9,1

Der Bund,  
25.6.2013

# Lohnschere 2012



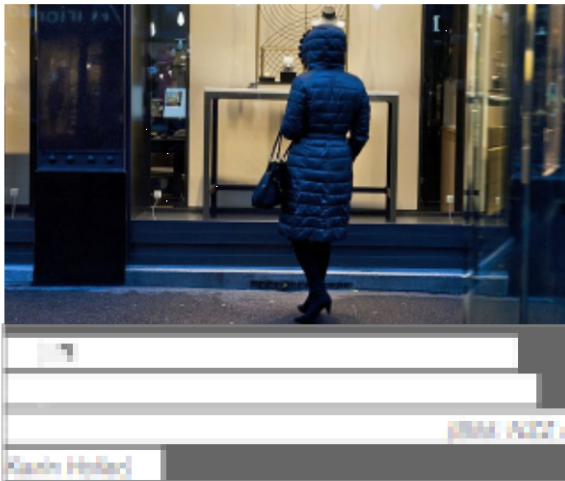
Quelle: Travailsuisse

Coop erfüllt als einziges Unternehmen die 1:12-Initiative: Eine Übersicht.

Der Bund, 24.6.2013

# Einkommensschere öffnet sich nicht

Wirtschaftsnachrichten Heute, 11:30



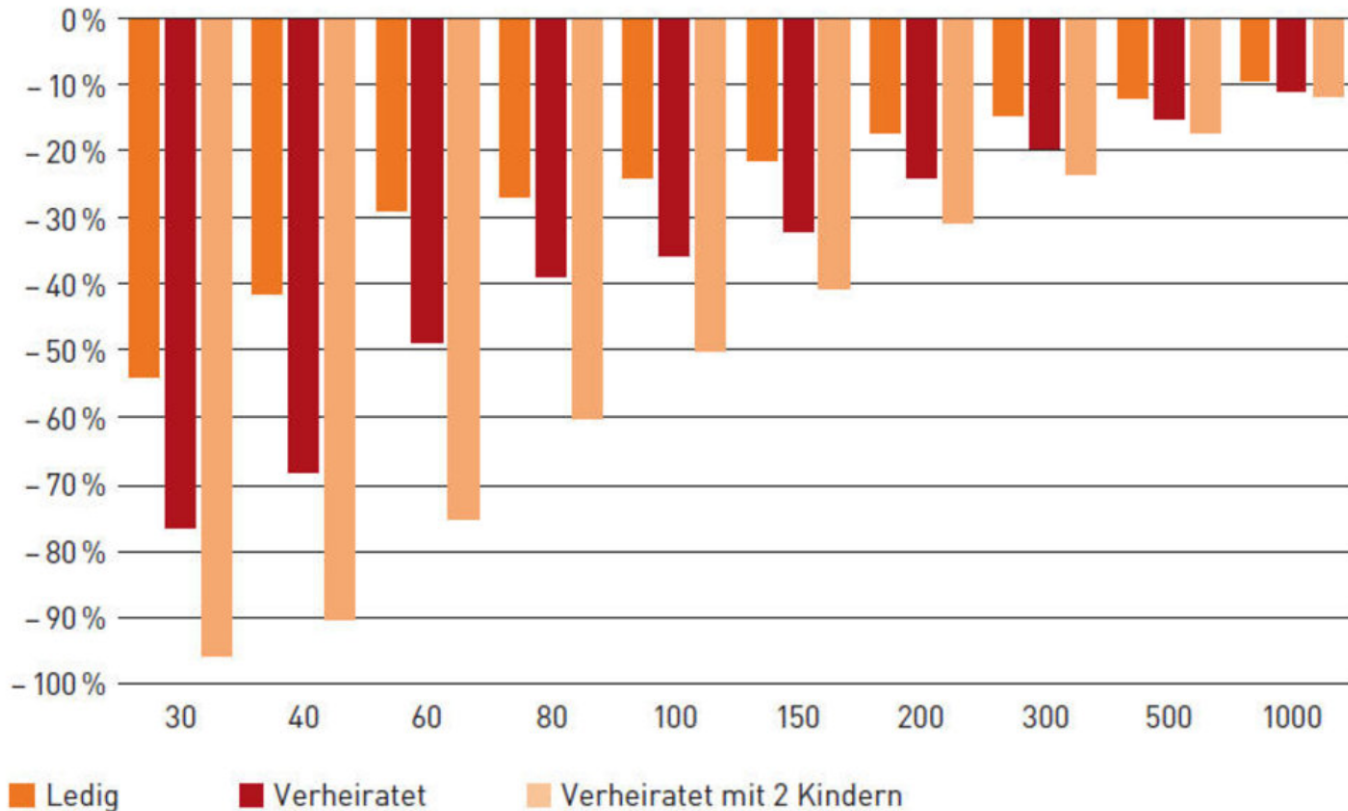
Schaut man sich die Zahlen über die Lebensbedingungen in Europa an, dann erscheint die Schweiz als Insel der Glückseligen. Hierzulande ist der Lebensstandard hoch, und die Einkommensschere geht seit Jahren nicht auseinander.

NZZ, 28.5.2013

# Wer hat, dem wird genommen

Aktualisiert am 02.04.2012 195 Kommentare

Reiche werden reicher, Arme immer ärmer? Stimmt nicht, sagt Economiesuisse – und präsentiert eine Studie mit brisanten Fakten.



## Abnahme der Steuerlast zwischen 1990 und 2010

Ärmere Bevölkerungsschichten haben stärker von Steuerreduktionen profitiert: Veränderung der Einkommenssteuerbelastung zwischen 1990 und 2010 (von links nach rechts stehen die Einkommensklassen, in 1000-Franken-Einheiten. Lesebeispiel zum ersten orangefarbenen Balken: 2010 zahlte eine ledige Person mit 30'000 Franken Einkommen rund 50 Prozent weniger als 1990).  
Bild: Economiesuisse, ESTV (2011)

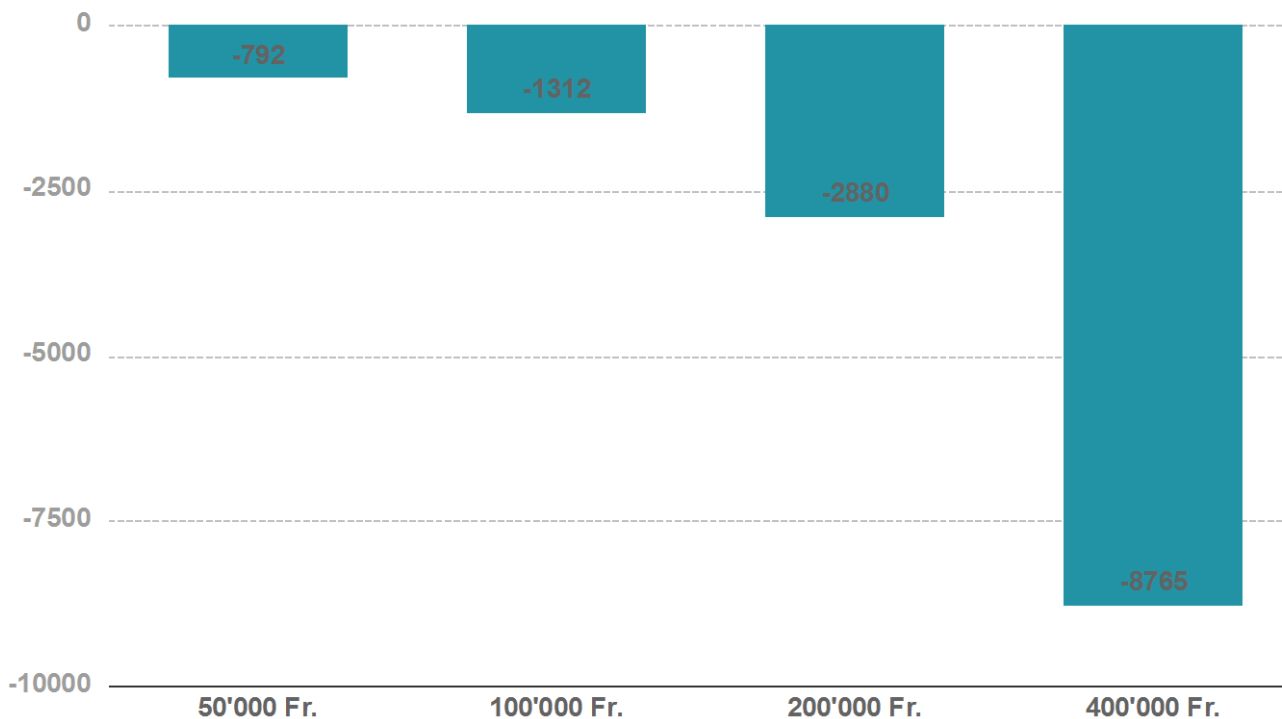
Tages-  
anzeiger,  
2.4.2013

# Trauen Sie keiner Verbandsstatistik

Eine Analyse von **Simon Schmid**. Aktualisiert vor 25 Minuten 5

**Reiche Schweizer hätten wenig, Arme hingegen stark von Steuerreformen profitiert, sagt Economiesuisse in einer Studie. Die Aussage ist problematisch, wie unsere Analyse zeigt.**

## Veränderung der Steuerbelastung von Verheirateten: Frankenbeträge

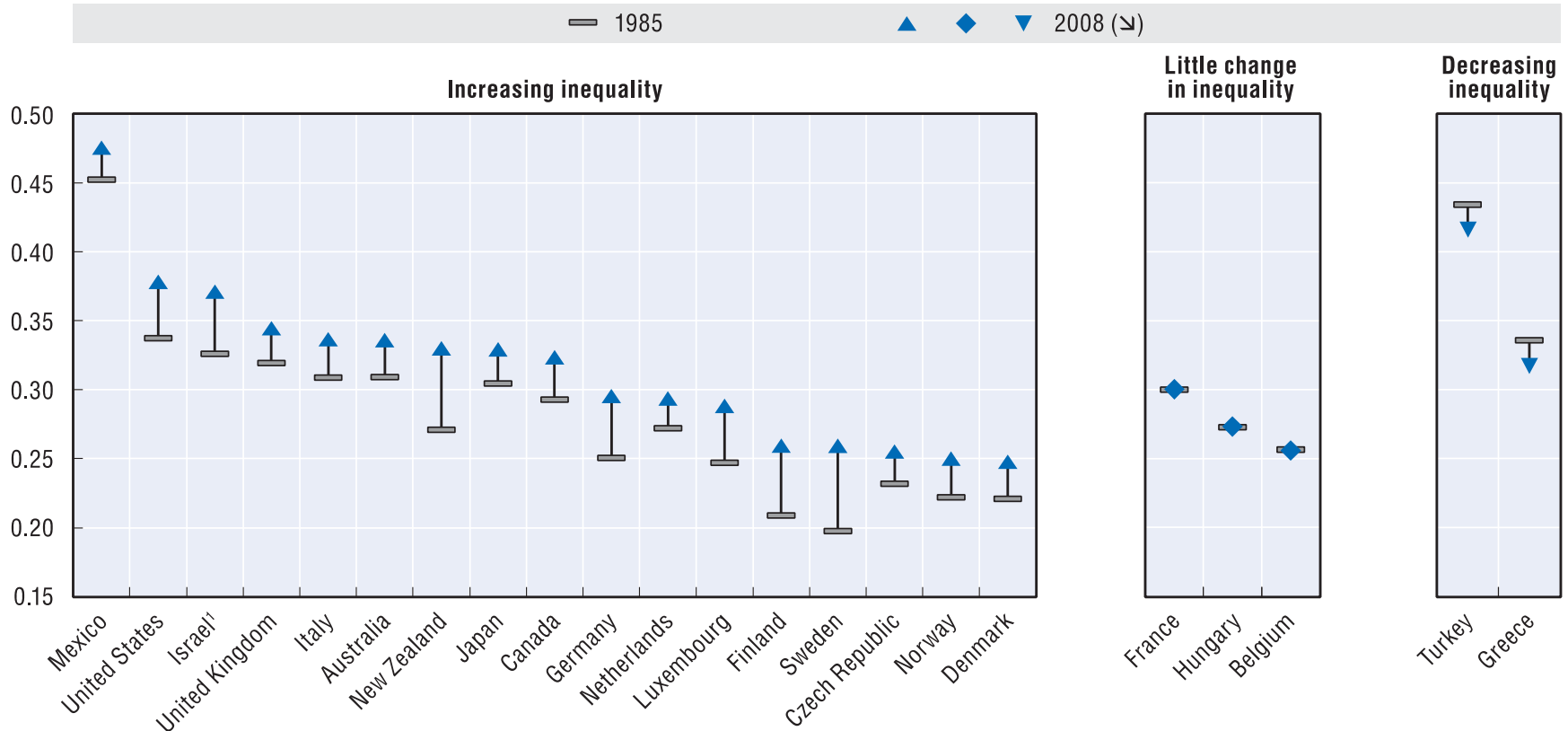


Der Bund,  
3.4.2013

Veränderung von 1997 bis 2008 nach Einkommensklassen, inflationsbereinigt. Quelle: ESTV (2008)

- Internationally, there seems to be consensus that income inequality increased in many countries

Figure 1. **Income inequality increased in most, but not all OECD countries**  
Gini coefficients of income inequality, mid-1980s and late 2000s



OECD (2011). *Divided We Stand. Why Inequality Keeps Rising*. OECD Publishing.



- In Switzerland, however, the situation is unclear, as there is only little systematic evidence that would allow for long-term comparisons.
- We therefore started a project to collect suitable data and analyze changes in the distribution in income and wealth in Switzerland over the last decades.
- We will now present a few first results from this project.

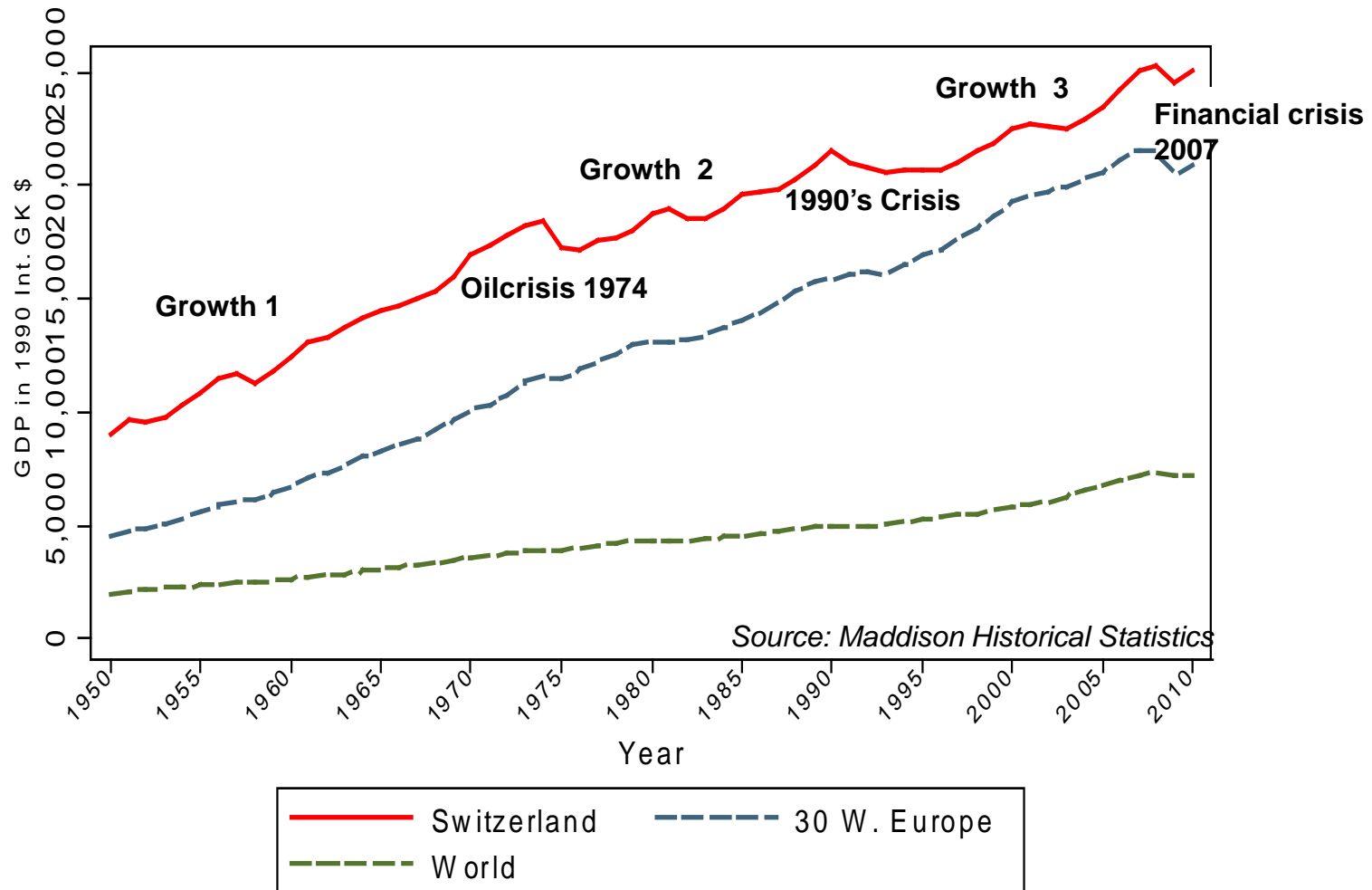
# Recent Developments in Economic Inequality

## Inequality and growth in Switzerland

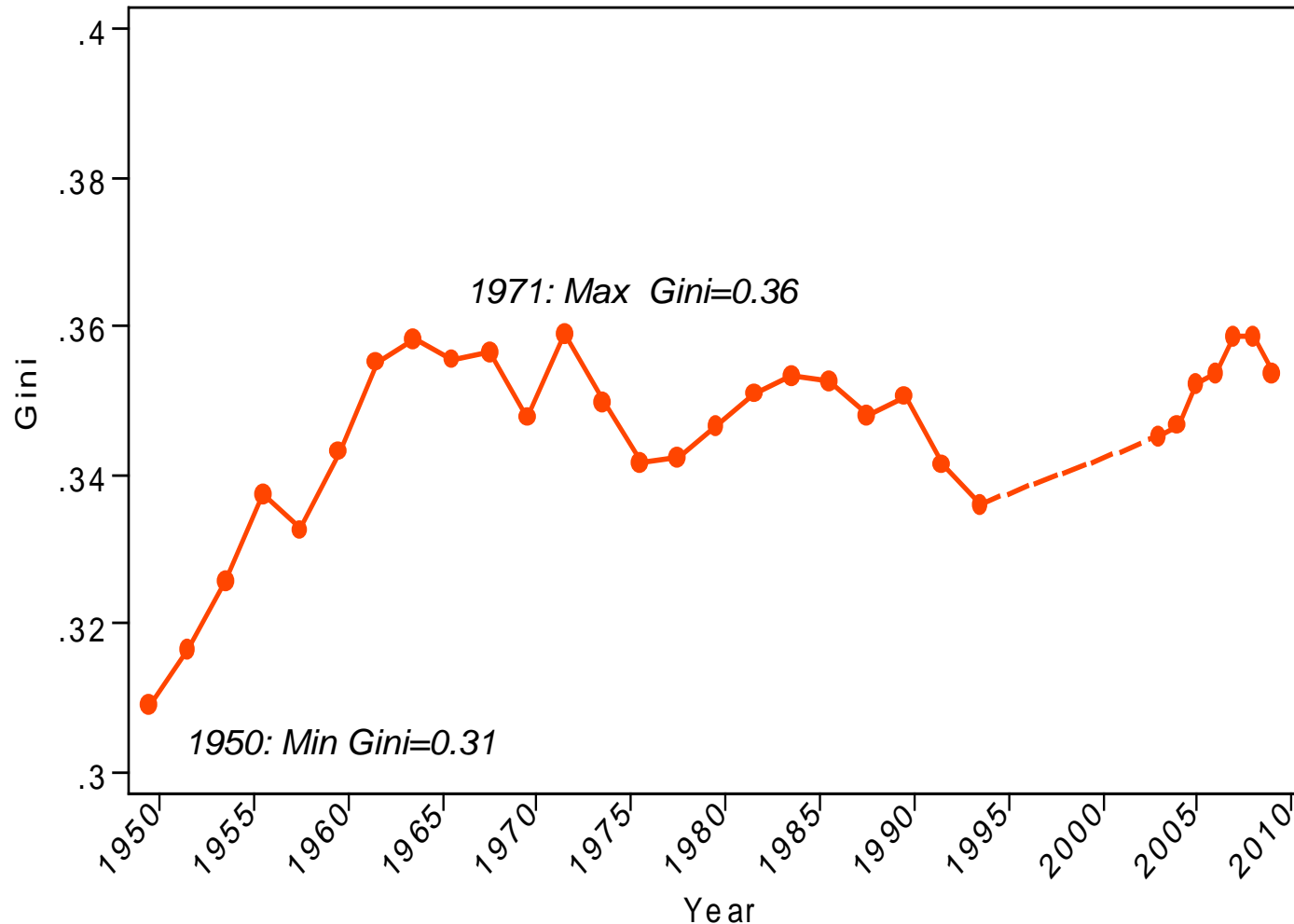
# Inequality and growth

- **Did inequality increase in the long-term?**
- **Is there a link between economic growth and inequality?**
- **Thesis 1:** Growth widens the gap (OECD 2011)
- **Thesis 2:** Economic upturn reduces inequality, whereas inequality rises with economic downturn/crisis (Parker 1998)
- **Thesis 3:** Growth does not have a systematic impact on inequality (Dollar and Kray 2002)

# Development of wealth - Post-War Era (1950 – 2010)

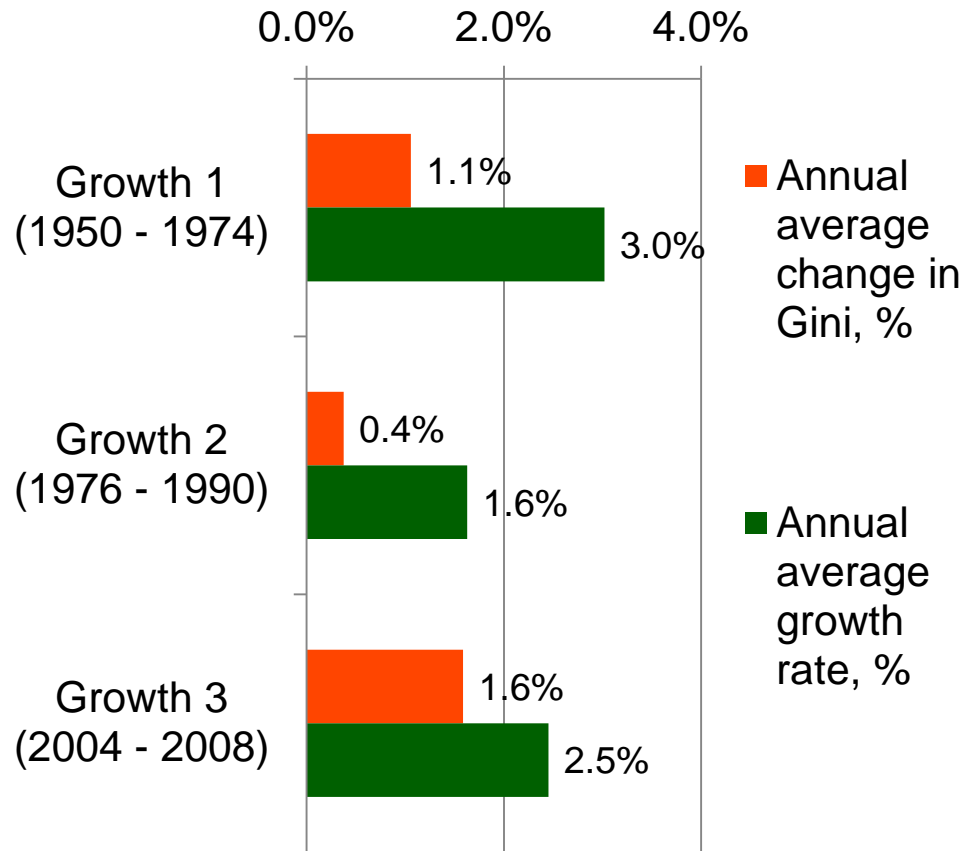
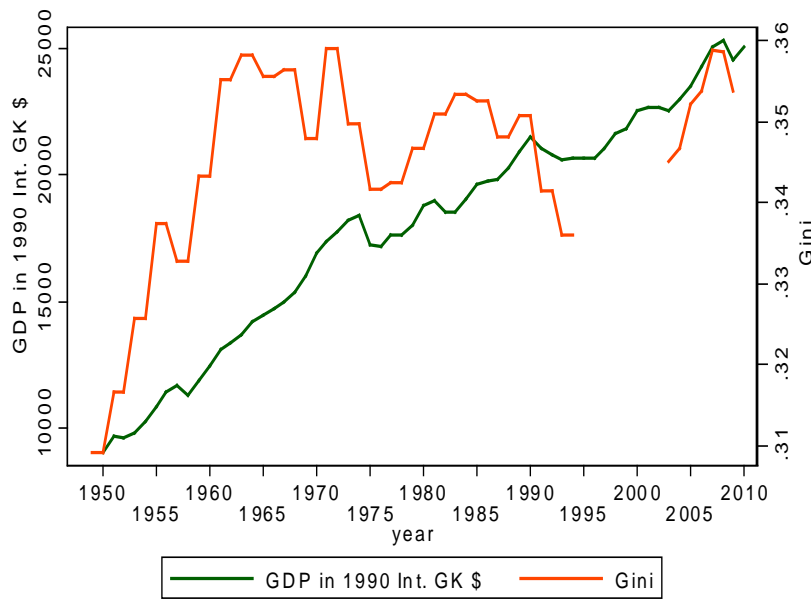


# Inequality of taxable income (1950 – 2009, Gini)

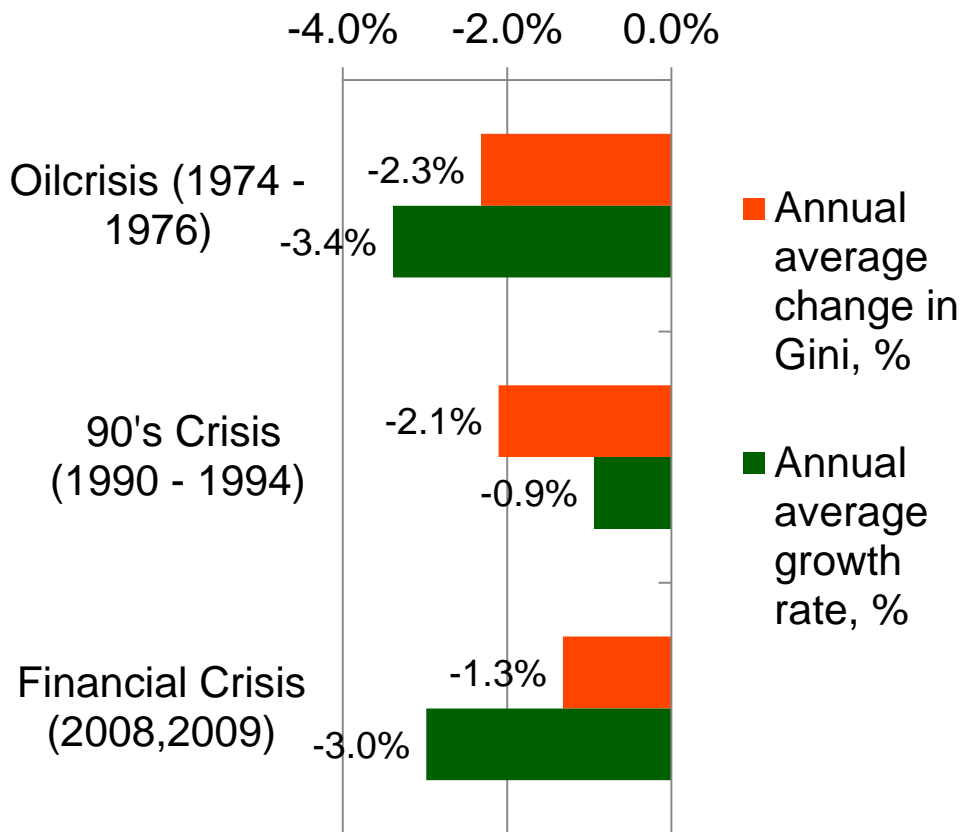


# Periods of growth and Inequality

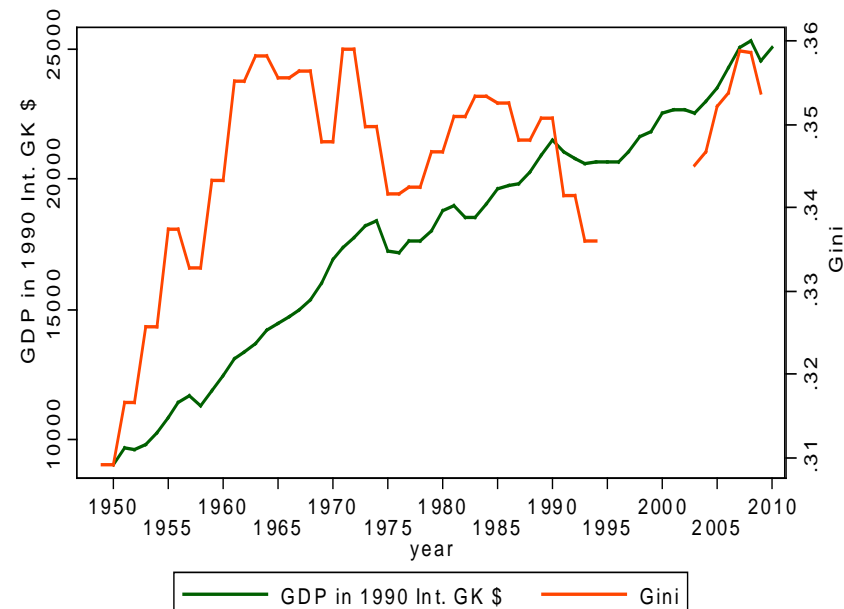
- Inequality tends to grow in time of prosperity



# Periods of crises and inequality



- Reduction of inequality with crisis



# The end of the story?

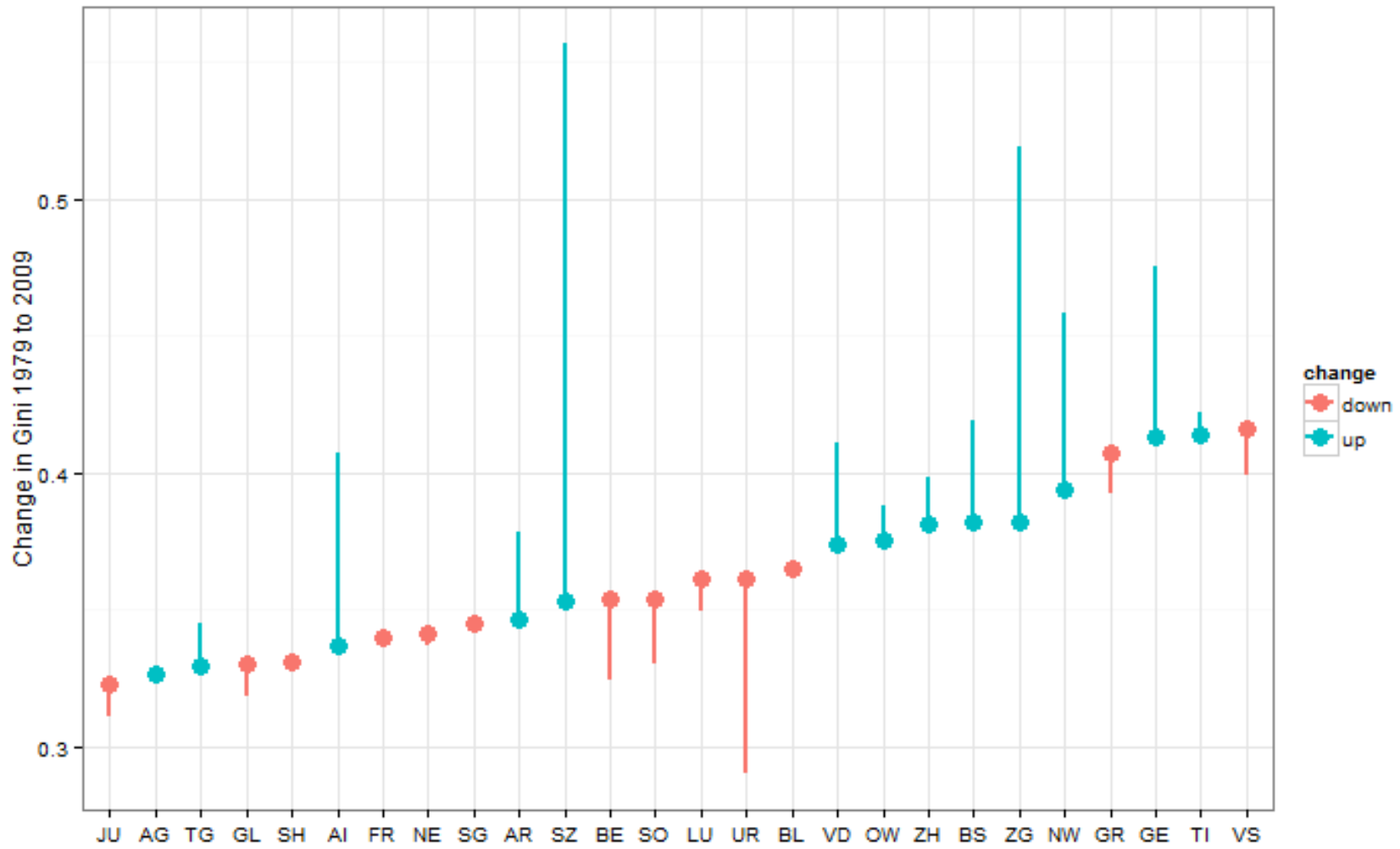
- Looking from 1950 to 2009 our data suggests, that inequality in income has slightly increased
  - Substantial growth in the period from 1950 to 1970
  - Period of up and downs from 1970 to 2000
  - Relatively fast increase in inequality in recent years (2005 to 2009)
- Is there really a link between growth and inequality?
  - In times of growth inequality tends to rise
  - With crisis inequality falls
- Not the end of the story, it is the beginning
  - It is difficult to learn from macro time series of a single country → omitted variable bias
  - There are several macro-shifts in the same time period, which could affect inequality as well.
  - Is quality of data good enough?



# Inequality and Growth

Recent development in Switzerland – a glance at the regional level

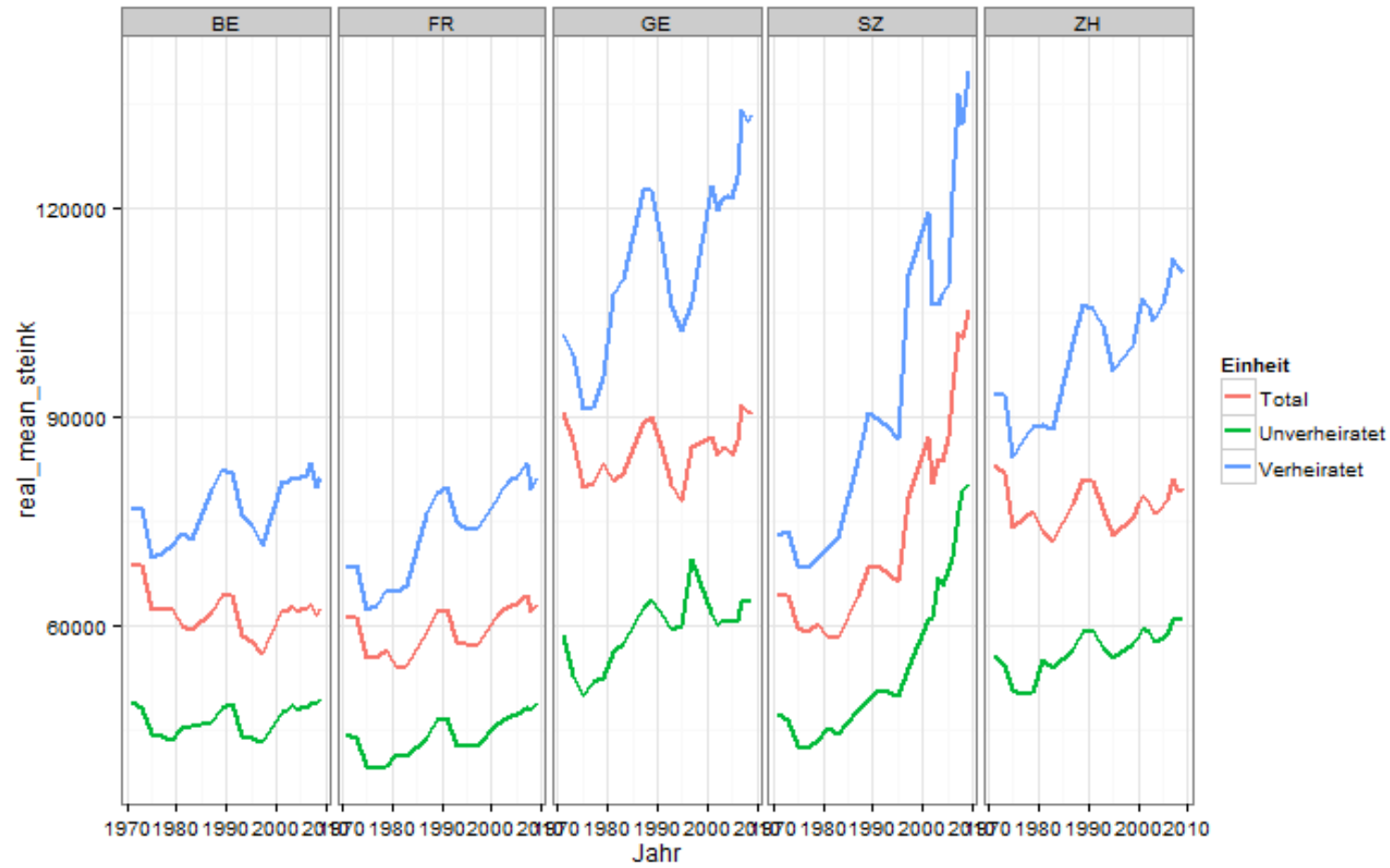
# Change in Gini (taxable income) 1979 to 2009



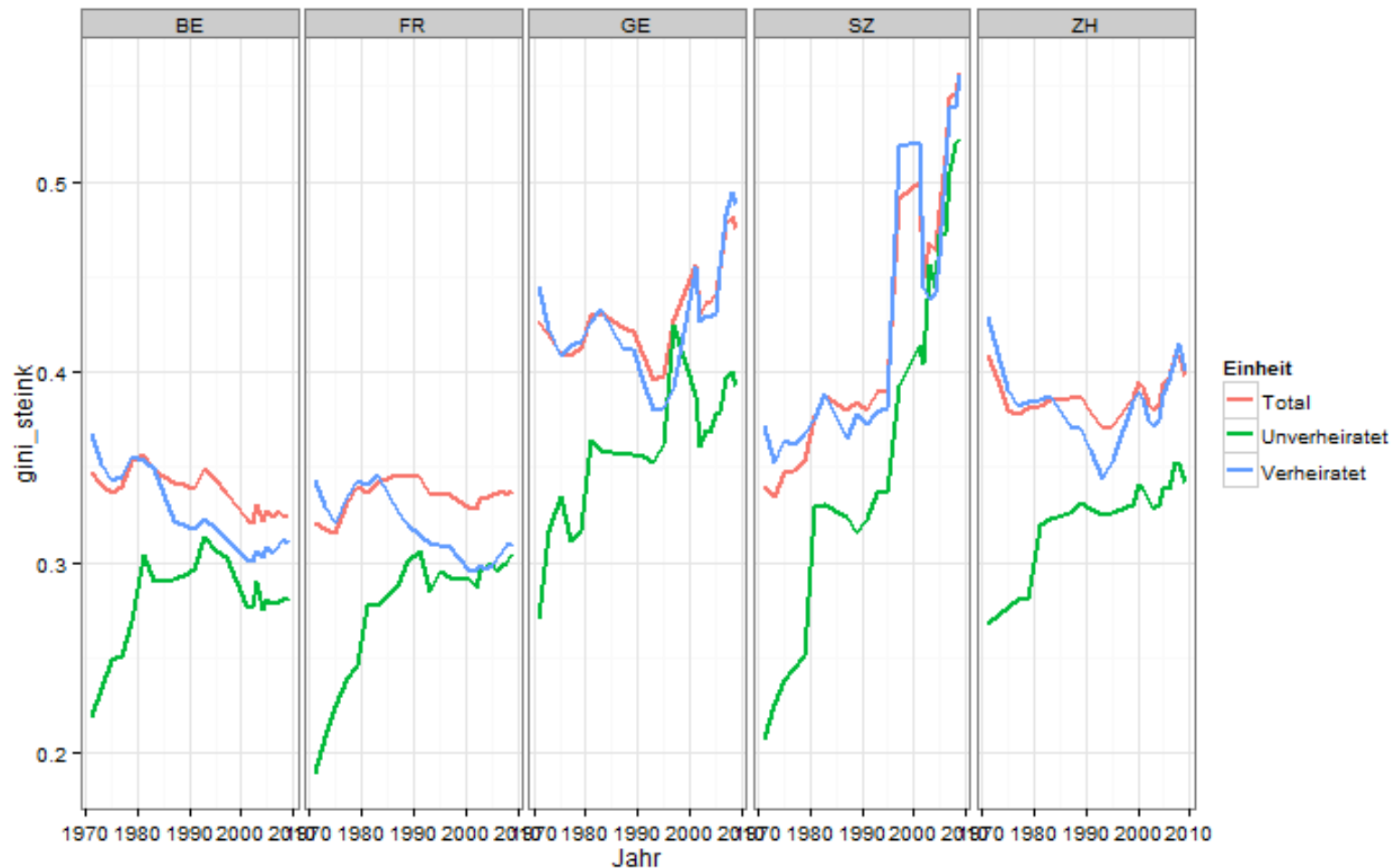
## Change in Gini (taxable income) 1979 to 2009

- There are different kinds of cantons:
  - SZ, AI (increase in inequality from a low niveau)
  - ZG, NW, GE (increase in inequality from a high niveau)
  - AG, SH, FR, SG, NE, LU (stable inequality, low niveau)
  - ZH, TI (stable inequality, high niveau)
  - BE, UR, SO (falling inequality)
- In the following analyses, we select a subsample of cantons to represent the different types: SZ, GE, ZH, FR, BE

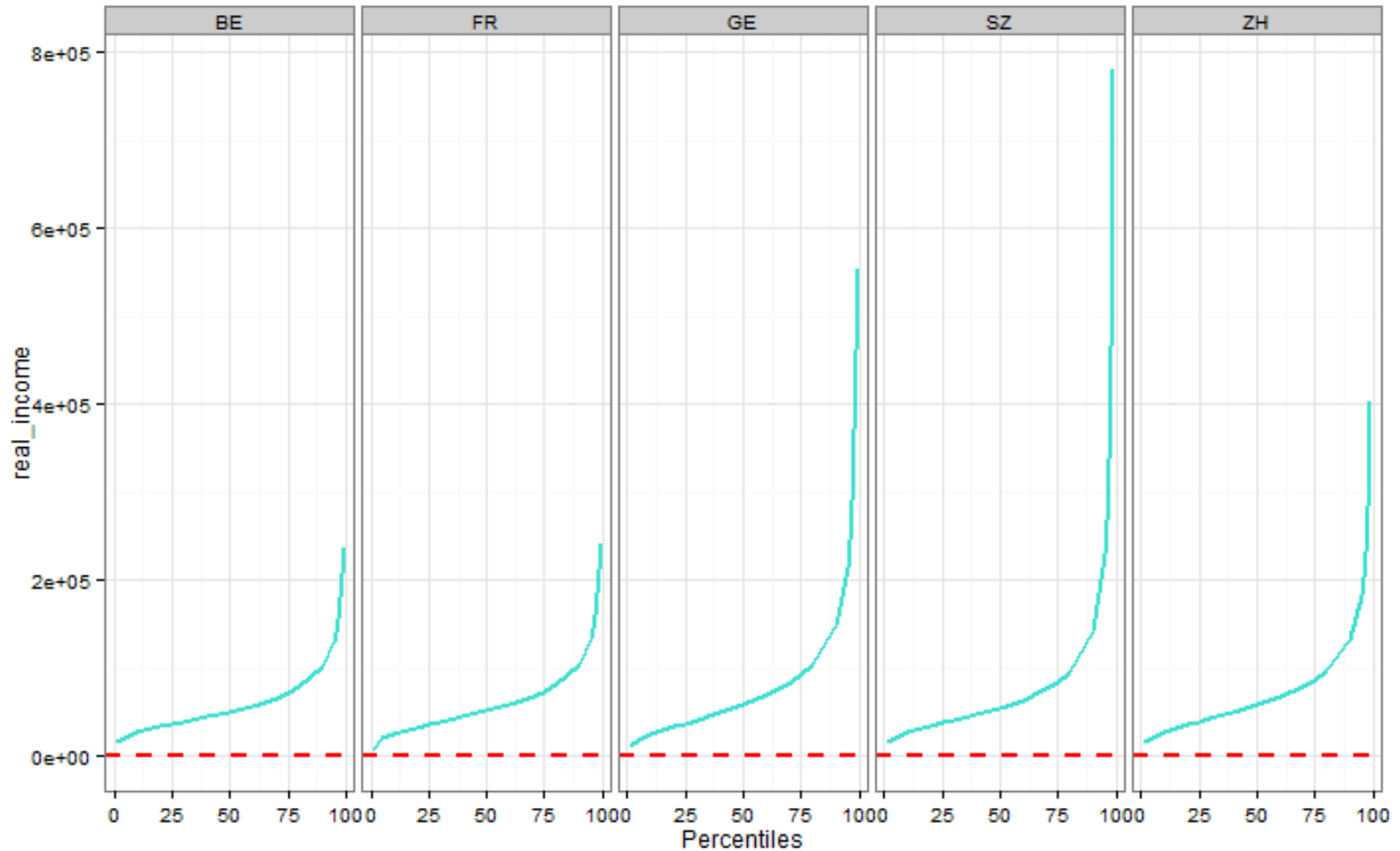
# Change of mean taxable income by cantons (constant 2009 CHF)



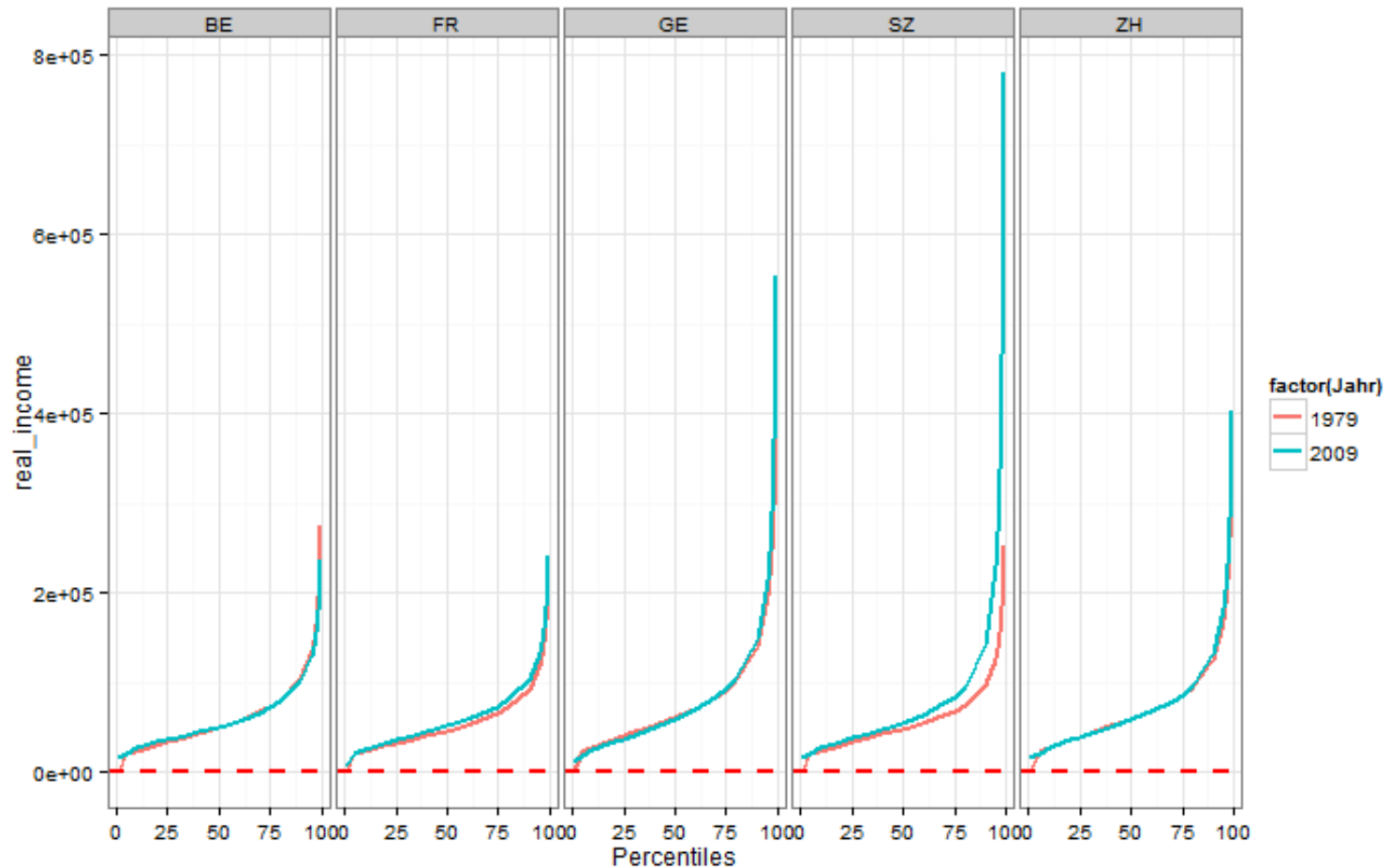
# Change of gini (taxable income) by cantons



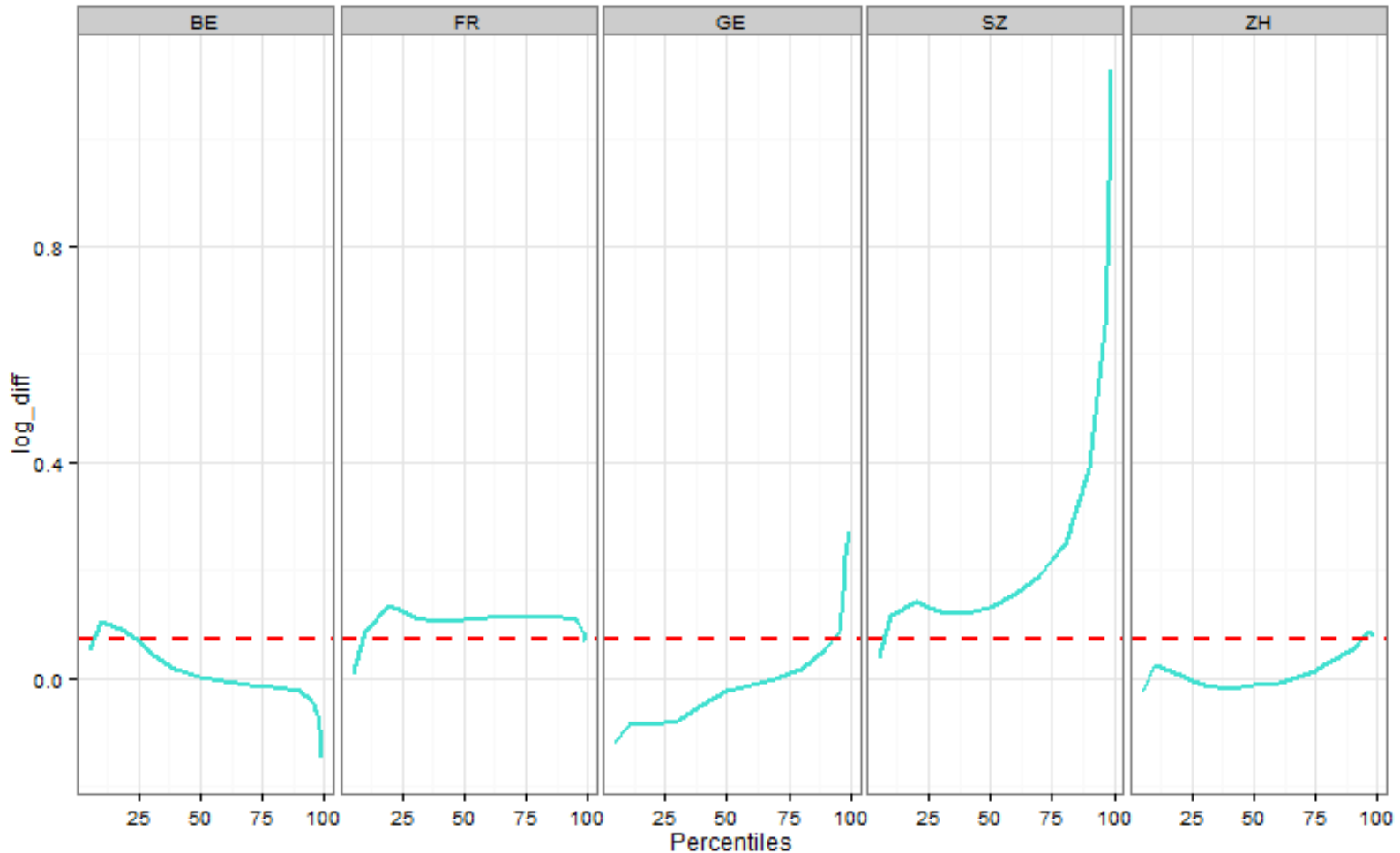
# Distributions of “taxable income” 2009 by cantons



# Distributions of “taxable income” 1979 and 2009 by cantons

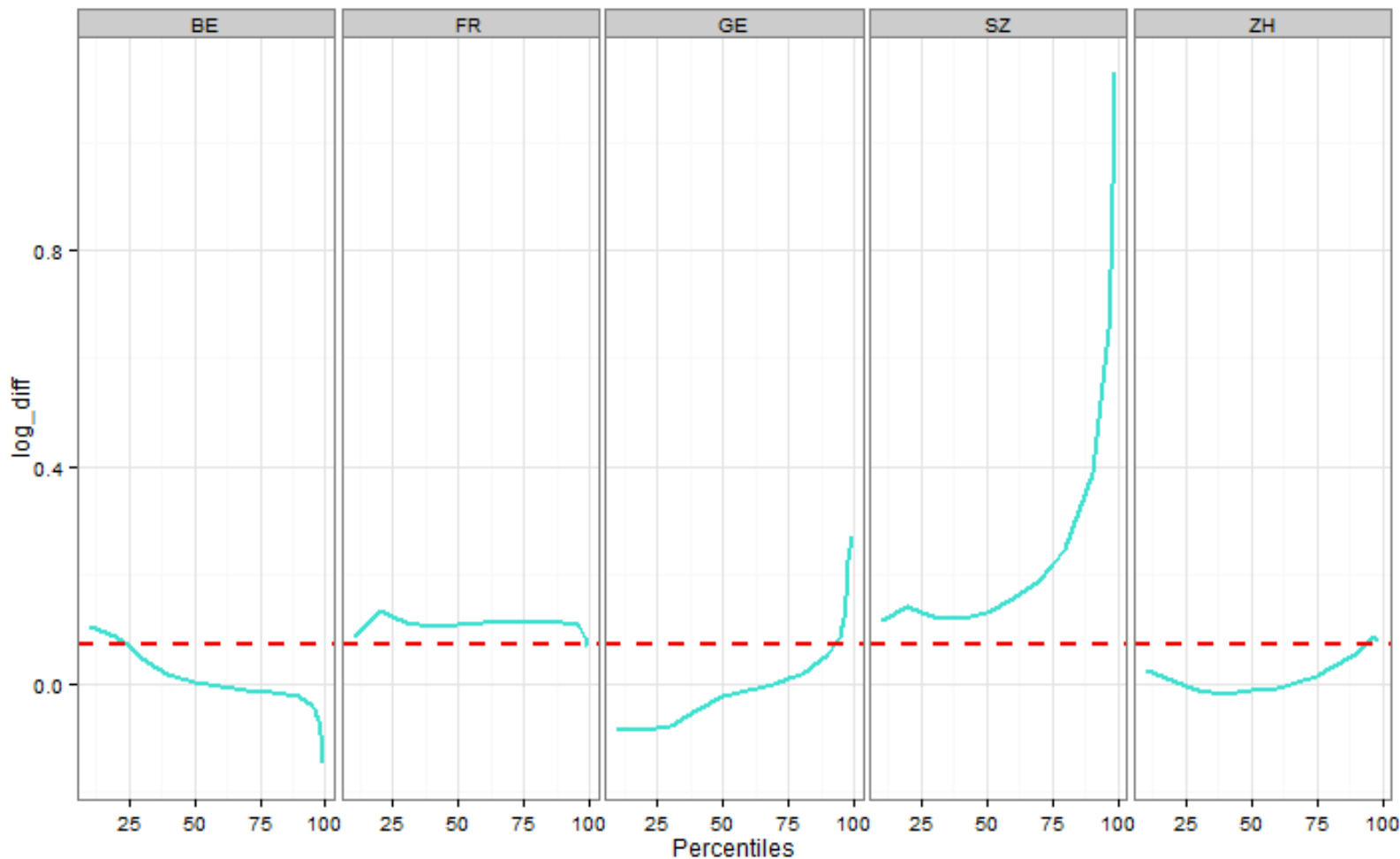


# Changes in “taxable income” distributions of Swiss cantons 1979 to 2009 (p5-p99)

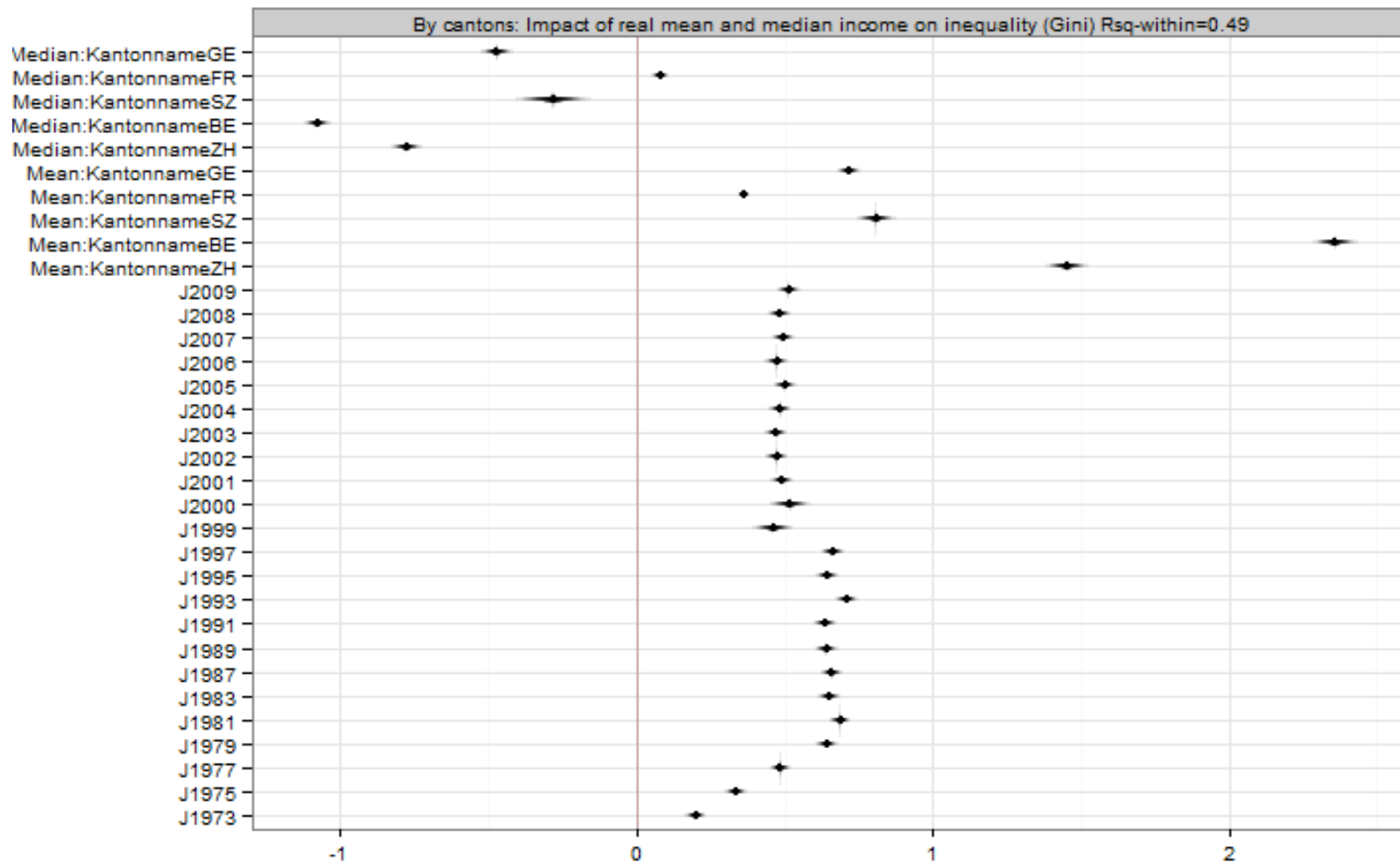




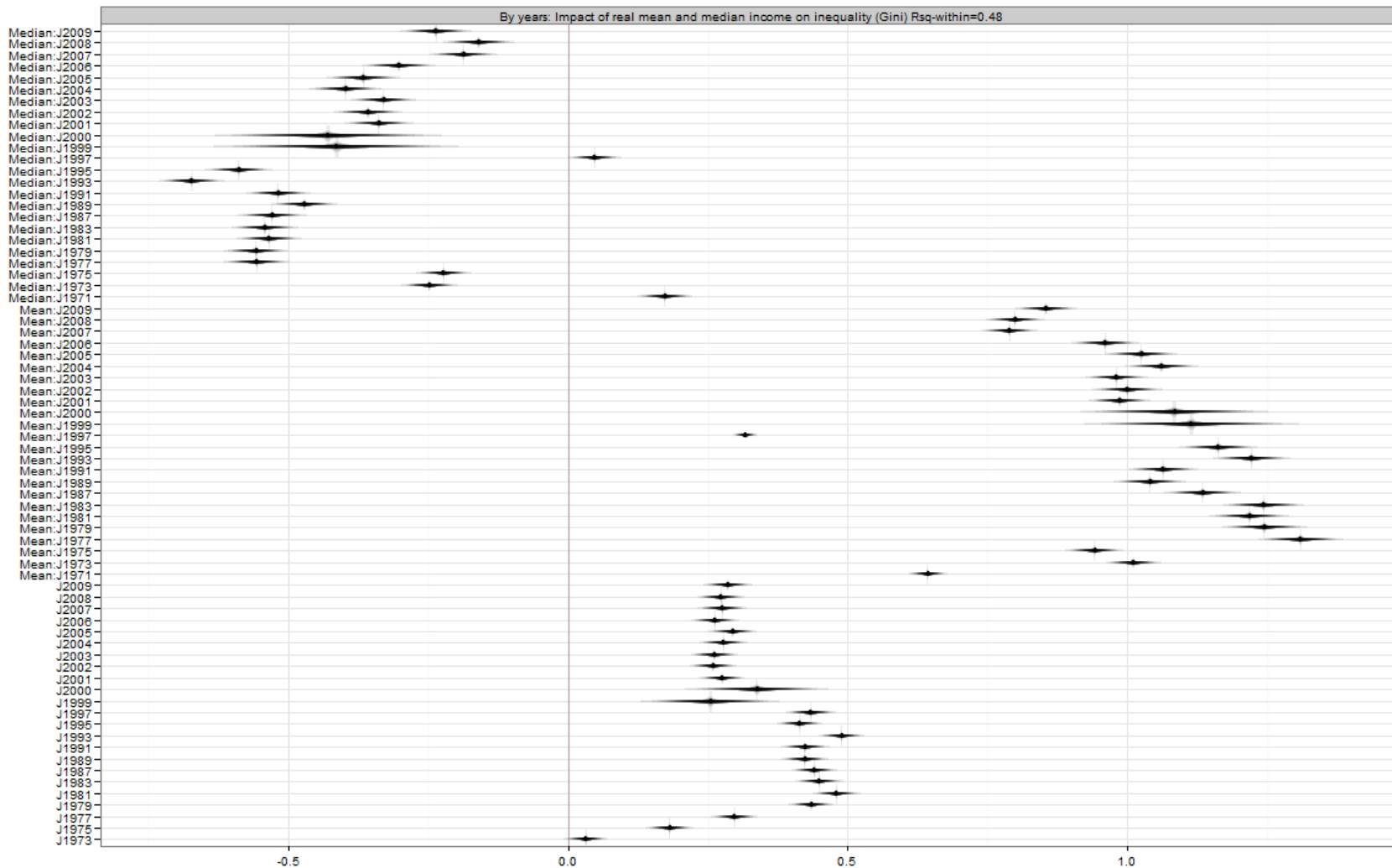
# Changes in “taxable income” distributions of Swiss cantons 1979 to 2009 (p10-p99)



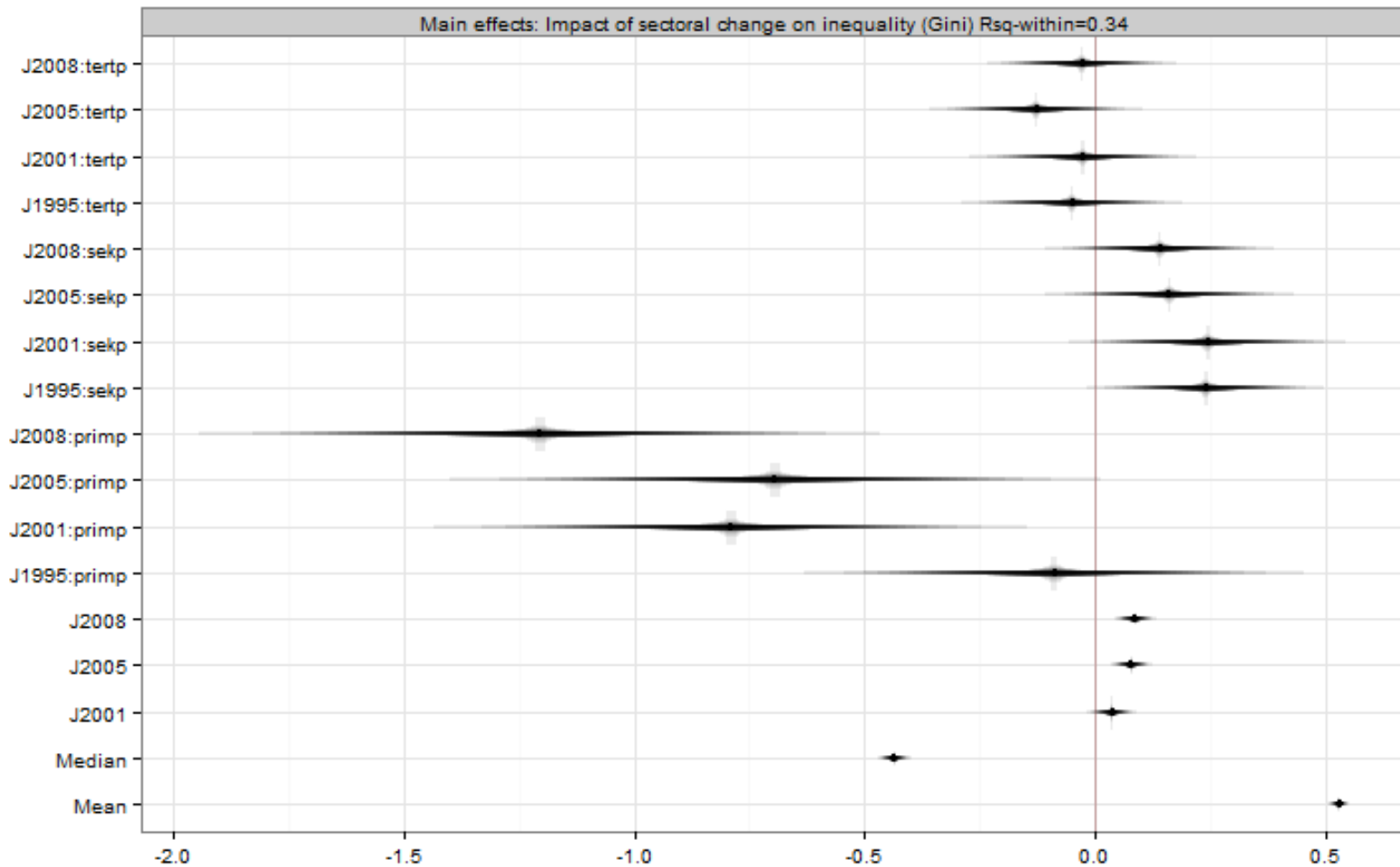
# Impact of real mean and median income by canton



# Time-varying impact of real mean and median income



# Relevance of economic sector



## Results - Mean and Median Income by years

- year-Dummies indicate important variables are missing
- positive correlation with mean income and
- negative correlation with median income, so
- average income gains favor high incomes
- correlation weaker in 1997, and 2007-2009 (years of crisis)
- in those years, both ends of the income distribution develop more equally
- so (simplified) **poor people profited less** in a boom **but lost the same** in the crisis

## Results - Mean and Median Income by cantons

- similar picture as in the “distributional-change-graph”.
- for instance:
  - Fribourg has a very homogenous development
  - Schwyz favored high incomes but didn't make the poor worse off
  - Geneva did make the poor worse off
  - Bern and Zurich would be more unequal if they grew
- possible explanations:
  - difficult
  - impact of mean and median is not linear
- Further research: impact of policy changes

## Results - Sectoral change

- 2001, 2005, 2008: primary sector earnings closer to median
- tertiary sector: no effects
- secondary sector: notable effect
- all three results are rather surprising: a swiss phenomenon?
- We will dig deeper (individual data) to check what is going on
- possible explanations:
  - “the modern rich swiss farmer”
  - little heterogeneity within service sector
  - significant wage-gaps between industries

## Shortcomings

- taxable income' does not show the whole picture, e.g.
- Pauschalbesteuerte (no flat-rate taxed people included)
- biased by institutions (changing deductions)
- We will adress these problems by collecting individual tax data



**u<sup>b</sup>**

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Bern University of Applied Sciences

# Forthcoming...

## Project Webpage

<http://inequalities.ch/>

**u<sup>b</sup>**

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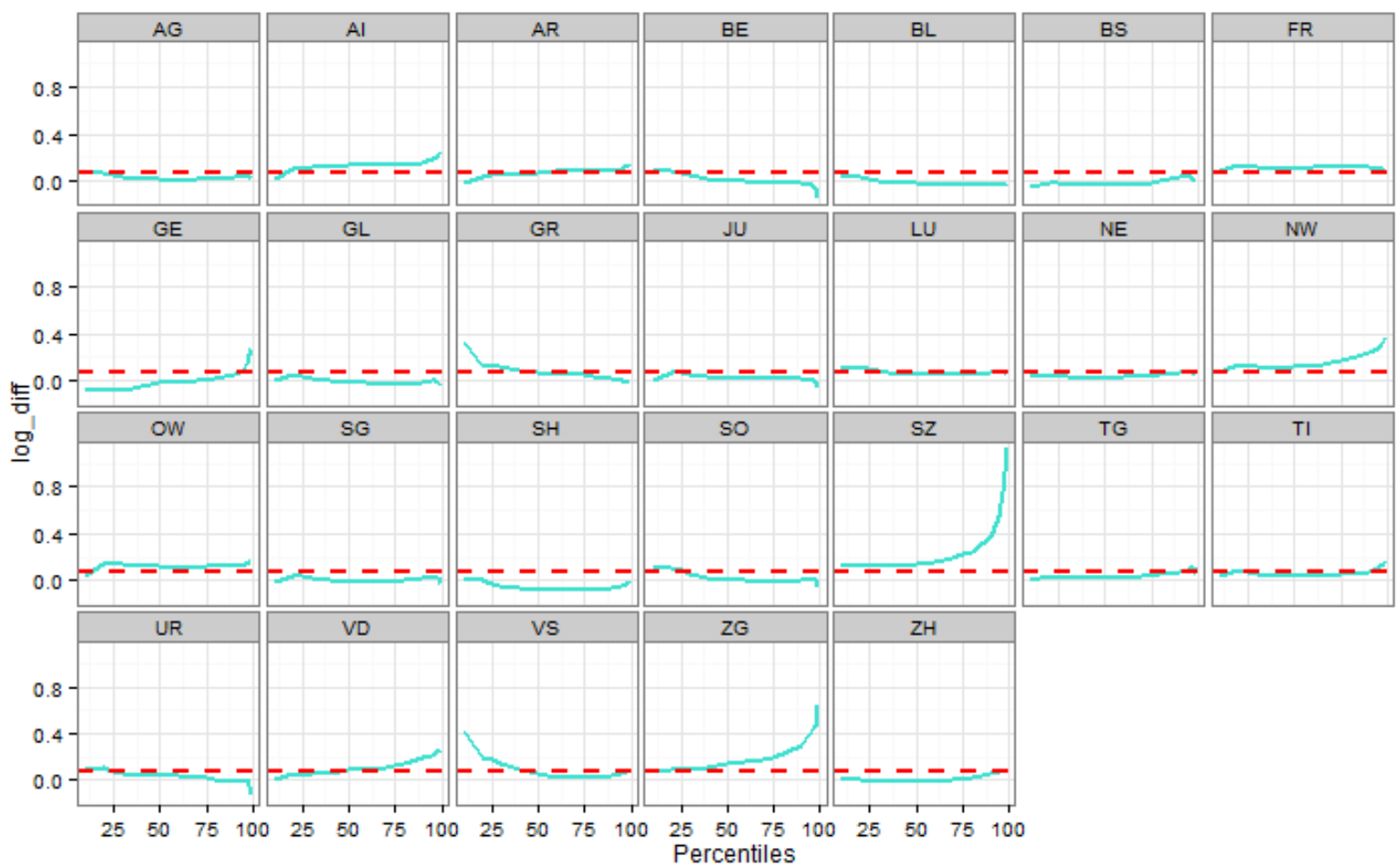
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# Anhang

# Appendix - Impact of other contextual variables

	Estimate	Std. Error	t-value	Pr(>  t )
poly(Mean, 2)1	252.6999	1.5522	162.80	0.0000
poly(Mean, 2)2	-98.7303	0.9667	-102.13	0.0000
poly(Median, 2)1	-165.0453	1.9873	-83.05	0.0000
poly(Median, 2)2	18.3620	1.3506	13.60	0.0000
J2001	0.0199	0.0135	1.48	0.1399
J2002	0.0281	0.0141	2.00	0.0455
J2003	0.0122	0.0145	0.84	0.4003
J2004	0.0751	0.0146	5.15	0.0000
J2005	0.0847	0.0153	5.54	0.0000
J2006	0.0674	0.0164	4.12	0.0000
J2007	0.0995	0.0178	5.59	0.0000
J2008	0.0794	0.0195	4.07	0.0000
J2009	0.0970	0.0202	4.81	0.0000
ausl	0.2144	0.1091	1.97	0.0494
maenner	0.0996	0.1647	0.60	0.5453
Bild	-0.0638	0.0060	-10.58	0.0000
Uni	-0.0019	0.0058	-0.33	0.7437

# Appendix - Impact of other contextual variables



# Sectoral Change

