

Cost of living and its relevance for economic inequality – an admin-data approach studying the Swiss case

Dr. Oliver Hümbelin & Dr. Rudolf Farys
21st ESPAnet Annual Conference 2023
(Warsaw) 07 - 09 Sep 2023



Introduction: why study cost of living from a perspective of inequality?

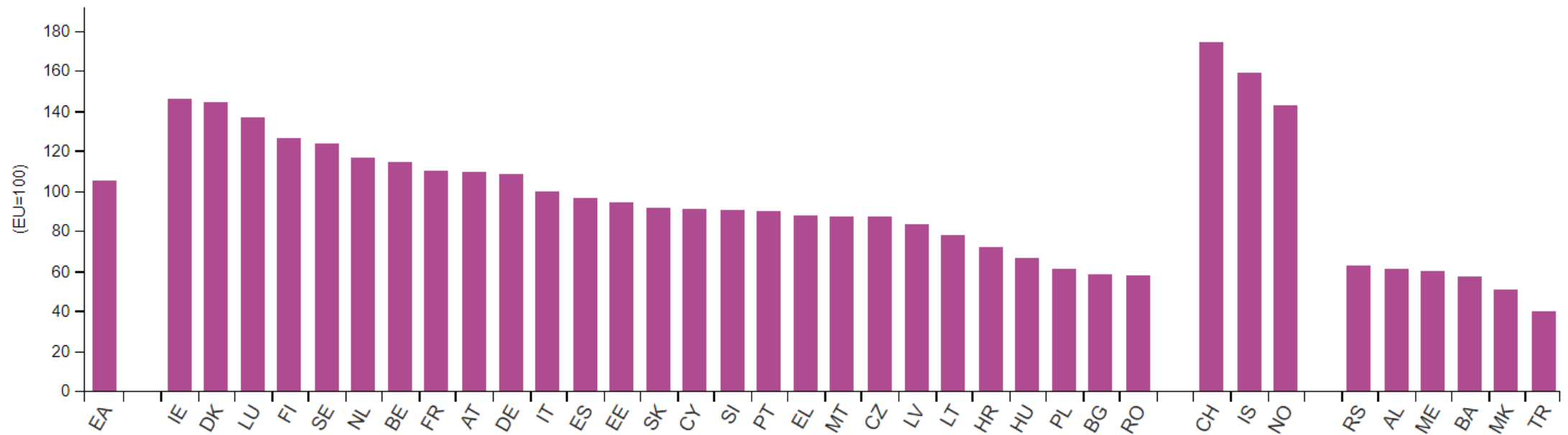
- Inequality studies usually focus on the distribution of income or wealth (Chancel et al., 2021).
- The cost of living is not taken into account, although ultimately it is not incomes but consumption possibilities that are the relevant benchmark of an economic welfare analysis (OECD, 2013; UNECE, 2011).
- Changes in prices (Argente & Lee, 2021; Handrich, 2022) and housing cost (Albouy et al. 2016) affect income classes differently.
- Furthermore, national estimates of economic inequality most often neglect subnational differences of cost of living, which potentially leads to biased results (Hillringhaus & Peichl, 2010)

Research Questions

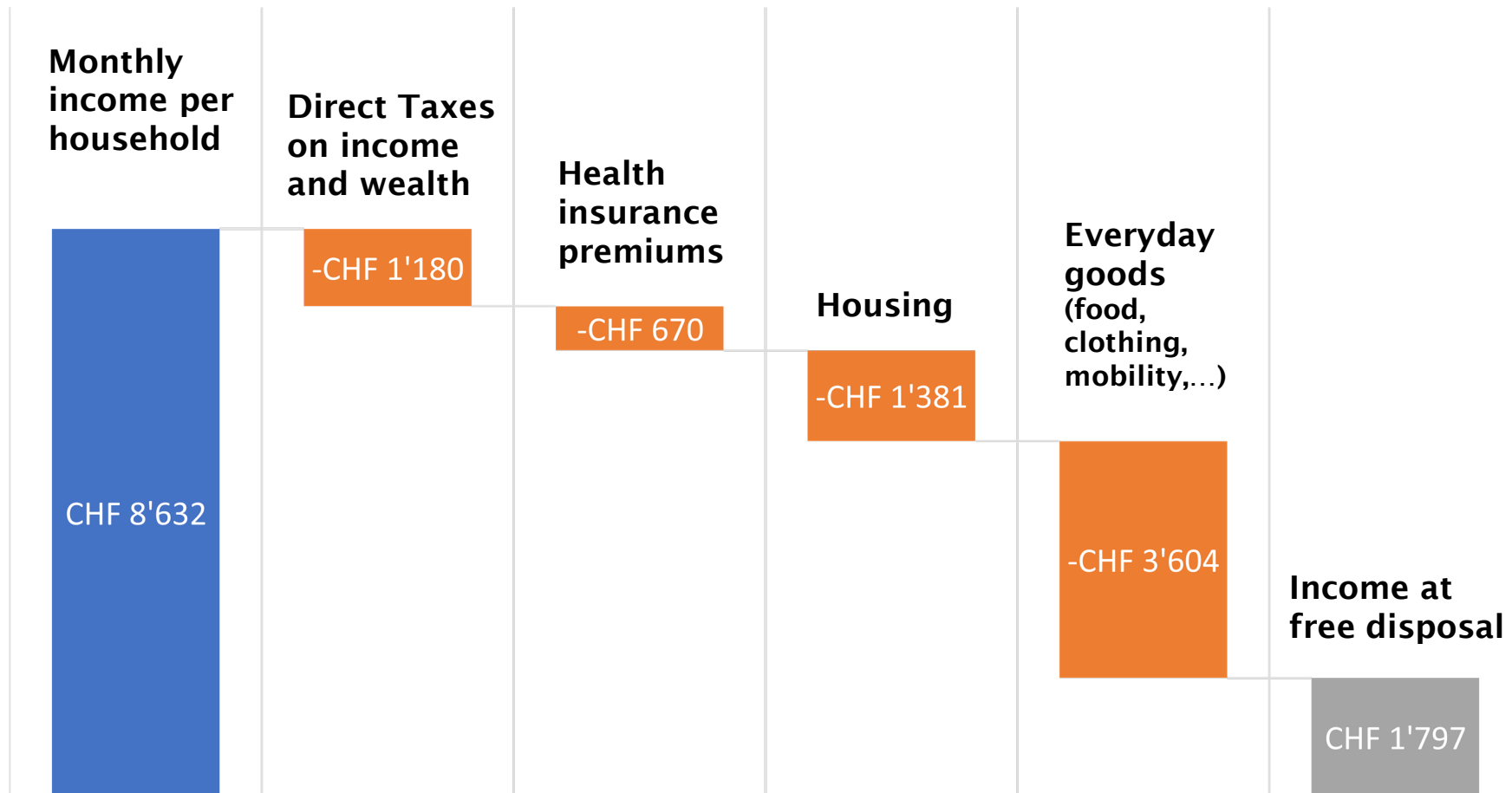
- How relevant are cost of living from a perspective of economic inequality?
- How important are regional differences in Switzerland for the assessment of economic inequality? (see working paper)

Cost of Living in Switzerland

Price level index for final household expenditure (HFCE), 2022



What makes Switzerland so expensive?



Source: Household Budget Survey Switzerland, averages across all households

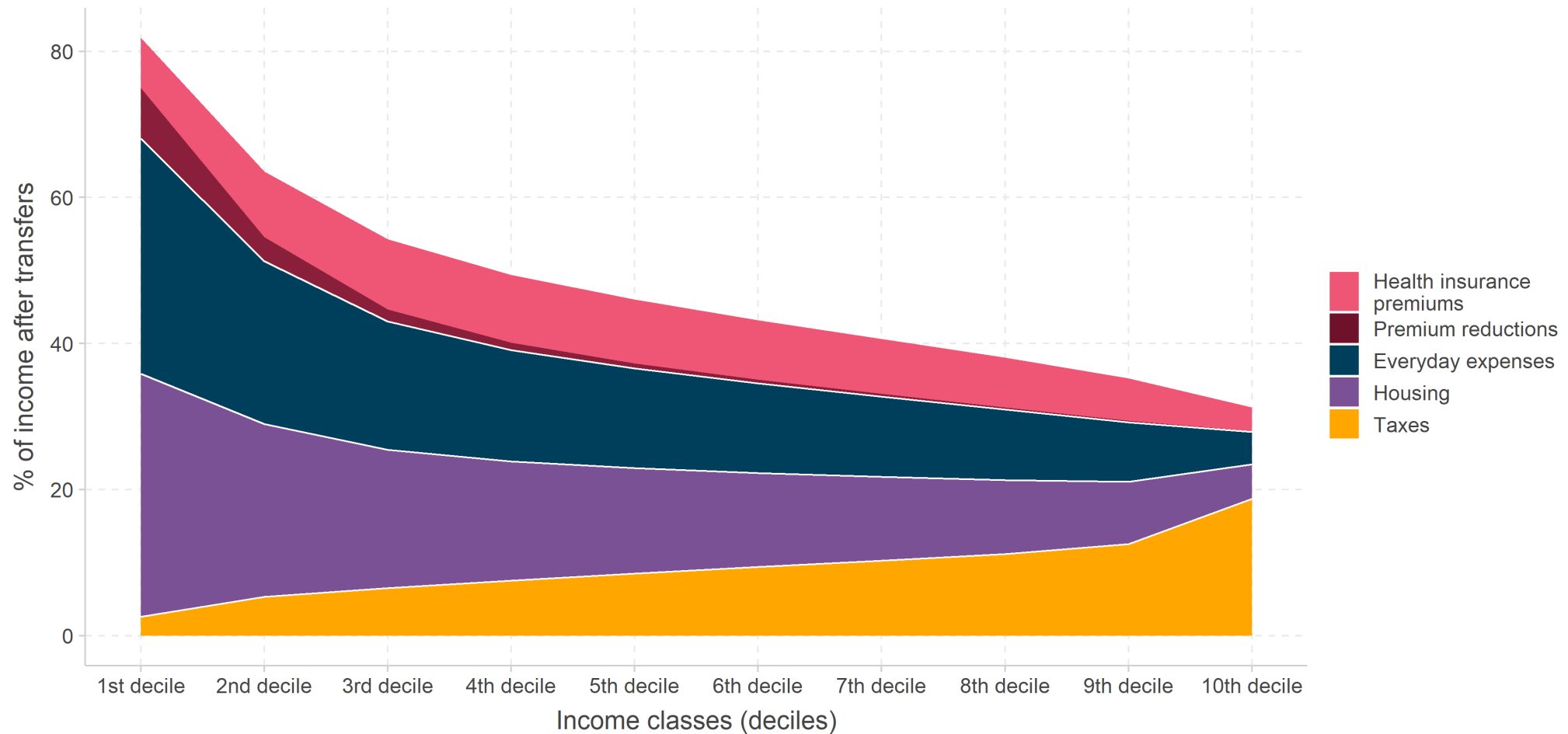
Methods: Our data and strategy of analysis

- For the empirical assessment we use a combination of administrative data and imputations from official sources.
- Administrative data (linked tax data for about 3.8 Million inhabitants, ~40% of Swiss population)
 - Comprehensive data to estimate income inequality (Hümbelin&Farys, 2016)
 - Direct taxes and health insurances premium reductions
 - Housing cost (register survey data-based imputation using a statistical model).
- Imputed values from external sources
 - Health care insurances: national statistics with differentiation according to age and region
 - Everyday goods
 - Basic need according to the poverty line which is used to assess eligibility of social assistance (It's 960 CHF for 1 Person household)
 - Average for 1 Person < 65 according to the household budget survey (2'057 CHF)
- For final analysis we use two scenarios: (a) minimum (poverty line) and (b) average cost of living

Methods: Our approach to assess the importance of cost of living from an inequality perspective

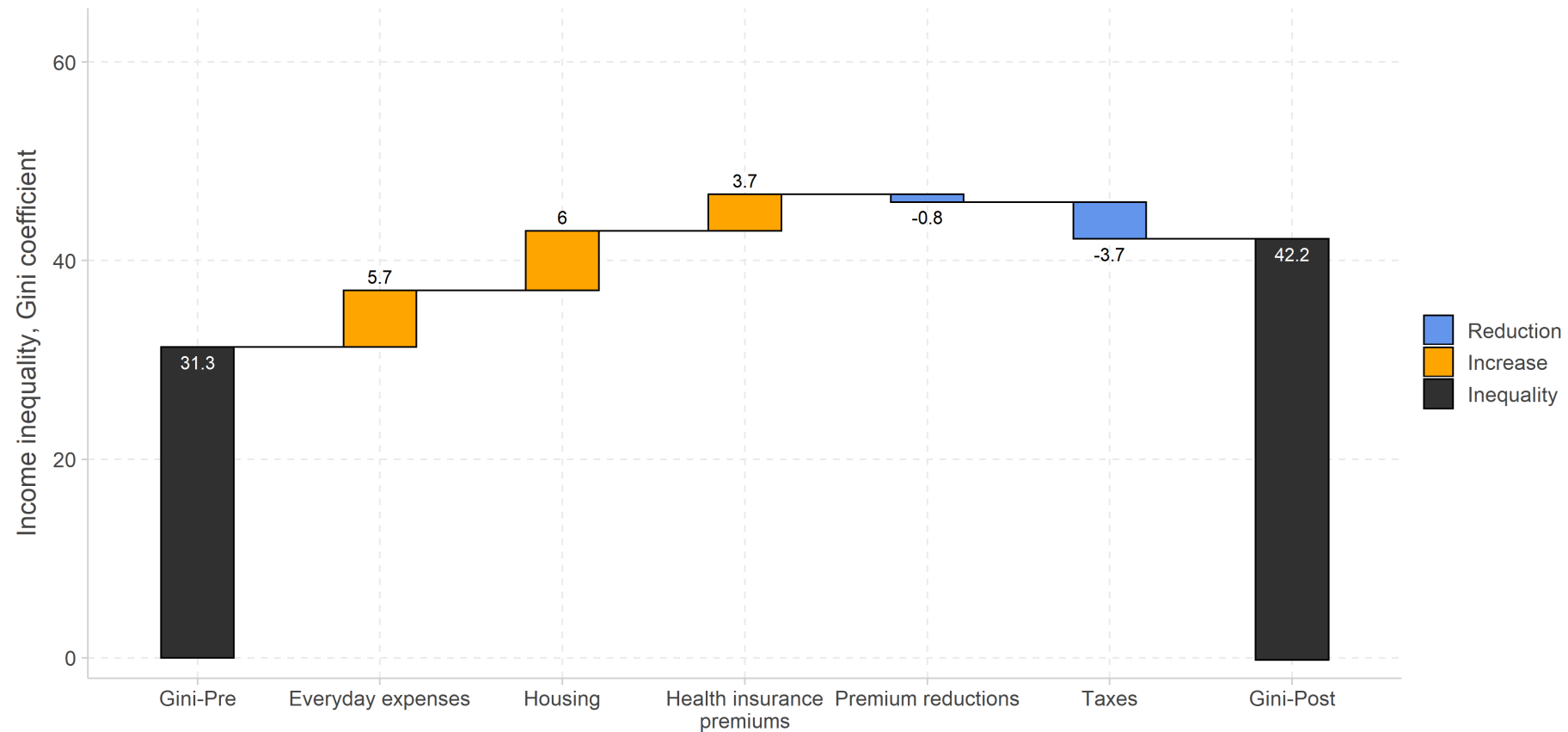
- We use techniques suggested by Reynolds & Smolensky (1977), that are widely used in distributional studies (Caminada et al., 2019a; Causa & Hermansen, 2020).
- It is a Gini-based assessment of change in inequality with G_x being inequality of income before cost of living.
- Importance of cost of living = $G_x - G_{x-cost\ of\ living}$
- Costs of living are mandatory payments one cannot avoid:
 - taxes,
 - health care premiums,
 - housing cost
 - everyday goods

Results: Burden of cost of living by income class - minimum cost of living

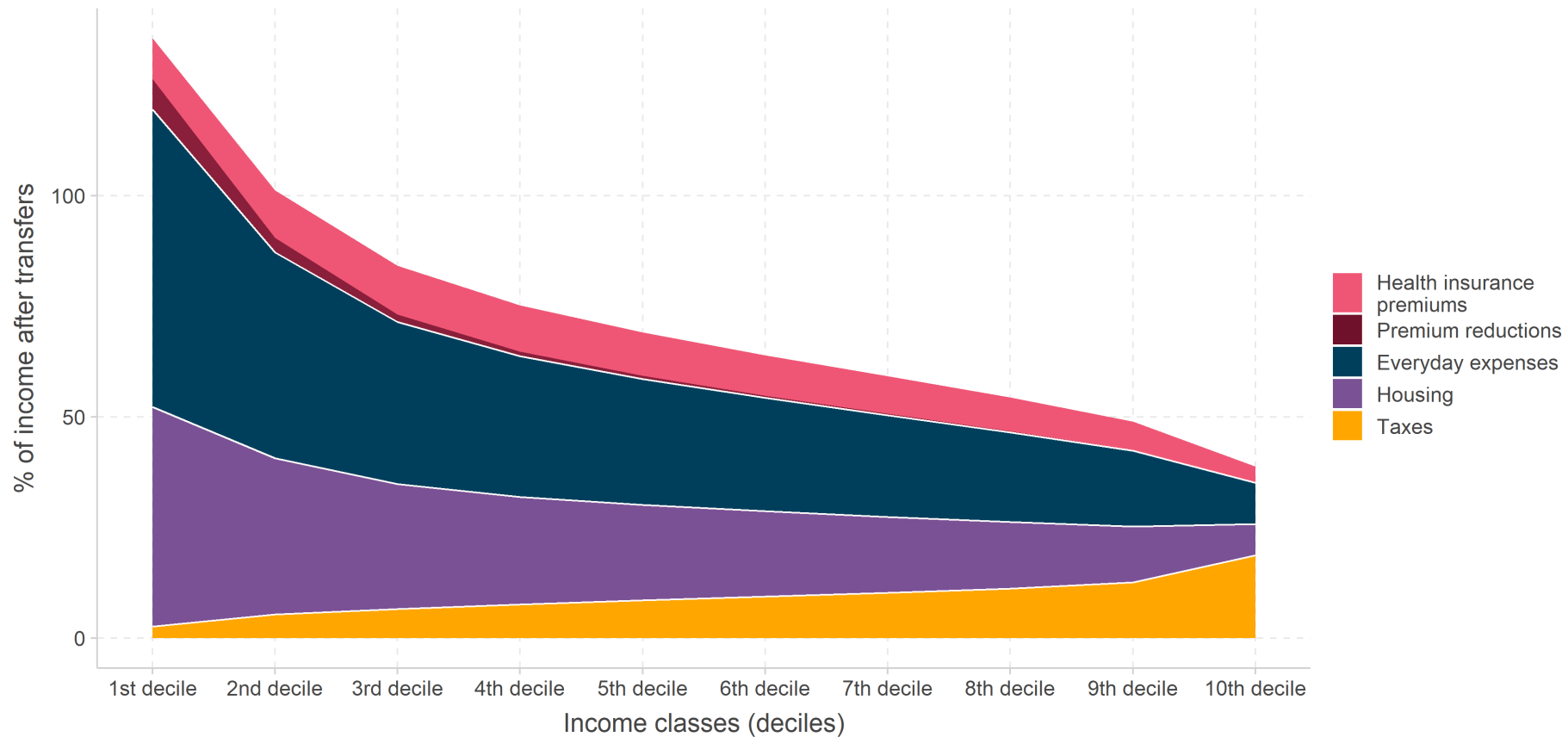


Scenario - Minimal

Results: Income Inequality before and after cost of living - minimum cost of living



Results: Nearly 20% with the lowest income can not afford basic goods as the average citizen



Scenario - Average

Conclusion: Cost of living are a relevant component of an inequality analysis and should get more attention

- Mandatory payments do increase inequality of disposable incomes drastically. If neglected, an assessment of inequality in economic wellbeing seems incomplete.
- What role should the welfare state play in reducing inequality?
 - Cost of living stemming from financing common goods like taxes (infrastructure) and the financing of the health care system are (partly) designed progressively.
 - Housing cost and cost for everyday goods cannot be avoided either. Yet they are the two largest contributors to inequality in our analysis. Need for new policies?
- How much is needed? What are the basics? These are questions that are not easily defined.

Thank you for your attention!

Contact

oliver.huembelin@bfh.ch

rudolf.farys@unibe.ch

Bibliography

Albouy, D., Ehrlich, G., & Liu, Y. (2016). *Housing Demand, Cost-of-Living Inequality, and the Affordability Crisis* (Working Paper 22816; Working Paper Series). National Bureau of Economic Research. <https://doi.org/10.3386/w22816>

Argente, D., & Lee, M. (2021). Cost of Living Inequality During the Great Recession. *Journal of the European Economic Association*, 19(2), 913–952. <https://doi.org/10.1093/jeea/jvaa018>

Caminada, K., Goudswaard, K., Wang, C., & Wang, J. (2019). Has the redistributive effect of social transfers and taxes changed over time across countries? *International Social Security Review*, 72(1), 3–31.

<https://doi.org/10.1111/issr.12193>

Causa, O., & Hermansen, M. (2020). Income Redistribution through Taxes and Transfers across OECD Countries. In J. Gabriel Rodríguez & J. A. Bishop (Hrsg.), *Inequality, Redistribution and Mobility* (Bd. 28, S. 29–74). Emerald Publishing Limited. <https://doi.org/10.1108/S1049-258520200000028002>

Handrich, L. (2022). *Belastung einkommensschwacher Haushalte durch die steigende Inflation*. DIW Econ GmbH.

https://www.diakonie.de/fileadmin/user_upload/Diakonie/PDFs/Pressmitteilung_PDF/Diakonie_DIWEcon.pdf

Hillringhaus, T., & Peichl, A. (2010). *Die Messung von Armut unter Berücksichtigung regional divergierender Lebenshaltungskosten und öffentlicher Leistungen*. 147.

Hümbelin, O., & Farys, R. (2016). The Suitability of Tax Data to Study Trends in Inequality—A theoretical and empirical review with tax data from Switzerland. *Research in Social Stratification and Mobility*.

<http://dx.doi.org/10.1016/j.rssm.2016.04.004>

OECD. (2013). *OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth*.

OECD Publishing. <http://dx.doi.org/10.1787/9789264194830-en>

UNECE. (2011). *Canberra Group. Handbook on Household Income Statistics*. United Nations.