



Health payments - a blind spot of poverty simulations?

An extension of a Finnish tax-benefit model with health payment policies

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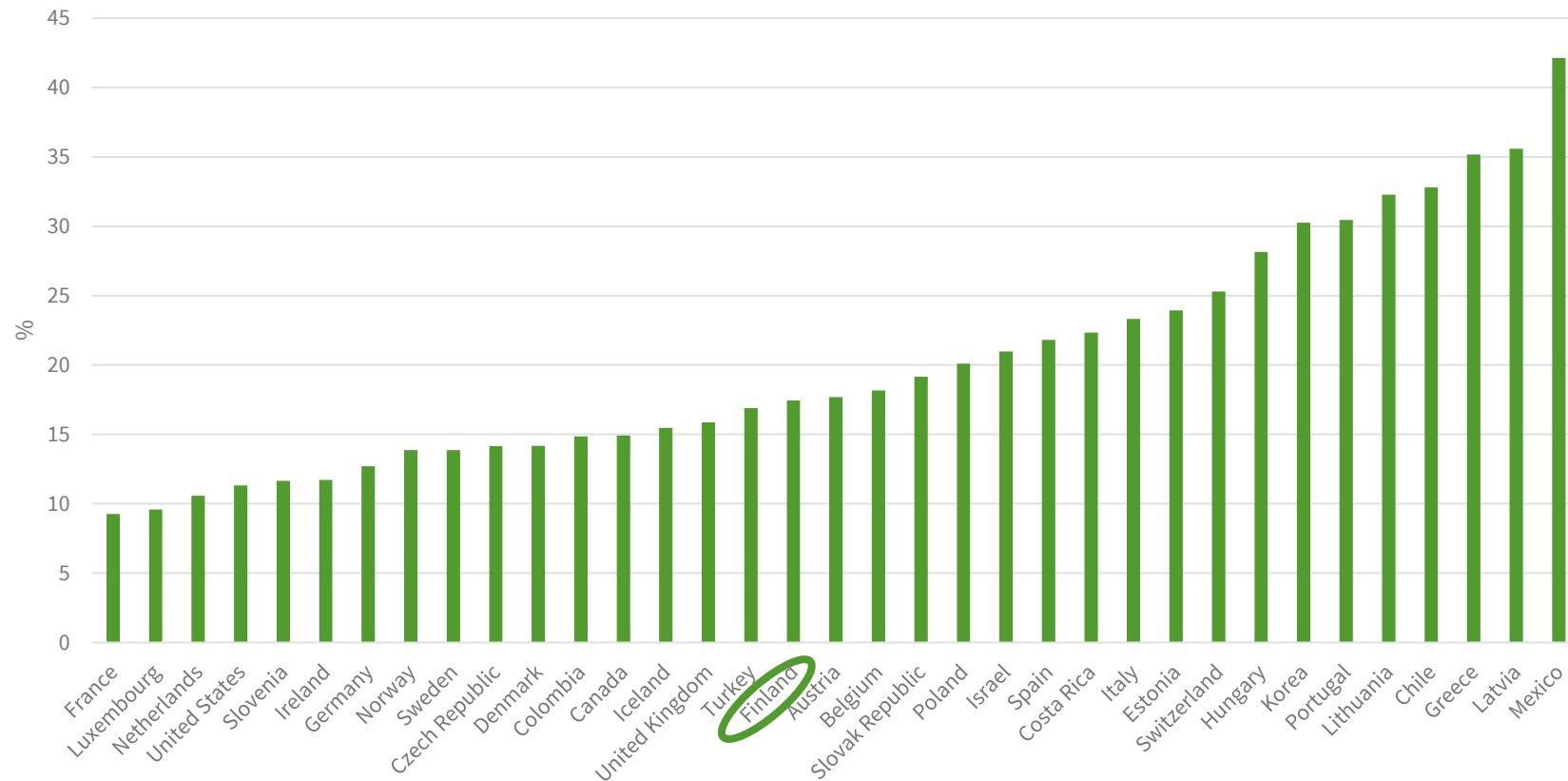
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Why do we analyze health payment policies?

- So far, the health payment policies are typically neglected in policy simulations because
 - In some countries, payments play relatively minor role
 - The data on health care use or payments may be hard to retrieve
- But
 - In some countries, the payments are relatively high
 - In many countries, they have been increased as a austerity measures since 2008 and inequality effects remain unanalyzed
 - Tax-benefit and health payment policy reforms may have cumulative effects

* Health payments = service fees and medicine costs paid directly "at the counter"

The share of health care expenditure covered by out-of-pocket payments



Source: OECD 2019

A complex protection system underlines the need for microsimulation

- Municipal outpatient care
 - Payments for all kinds of visits (except nurse visit and children under 18)
 - Annual ceiling of 683€, children included in parent's ceiling
- Reimbursements for prescribed medicines
 - Annual ceiling of 576€
 - Copayment of 35/60/100% of the price, annual deductible 50€
- Private outpatient care
 - Costs partly reimbursed by state (average reimbursement rate 14%)
- Reimbursements for health-related travel costs
 - Annual ceiling of 300€
- Free-of-charge occupational health care
- Health payments of low-income families can be reimbursed with the last-resort social assistance benefit which covers also housing costs

Research question

- What are the effects of health payments policies on poverty in Finland during two government terms (2011-2019)?
 - On top of tax-benefit policies

How to measure poverty based on both income (tax-benefit) and consumption (health payments)?

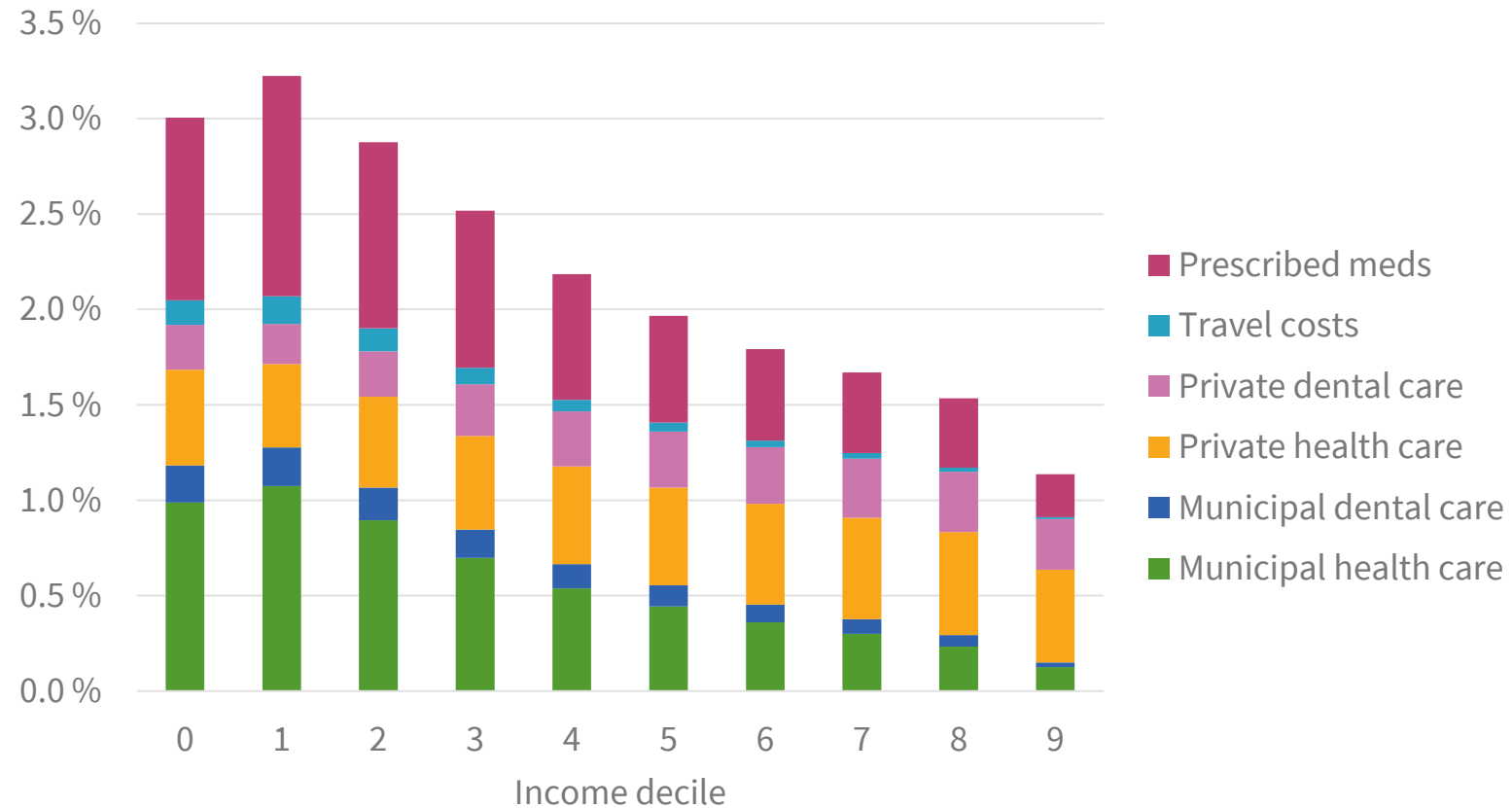
- Typical income-based measures
 - At-risk-of-poverty rates (AROP, 60% of median net eq. income)
 - At-risk-of-poverty gaps
- Measures for health spending (e.g. WHO 2021)
 - Impoverishing health spending (poverty threshold based on minimum consumption on basic needs (food, housing))
- Our approach: AROP rates with simulated incomes minus simulated payments (based on service utilization and medicine purchases in 2017)

Data & methods

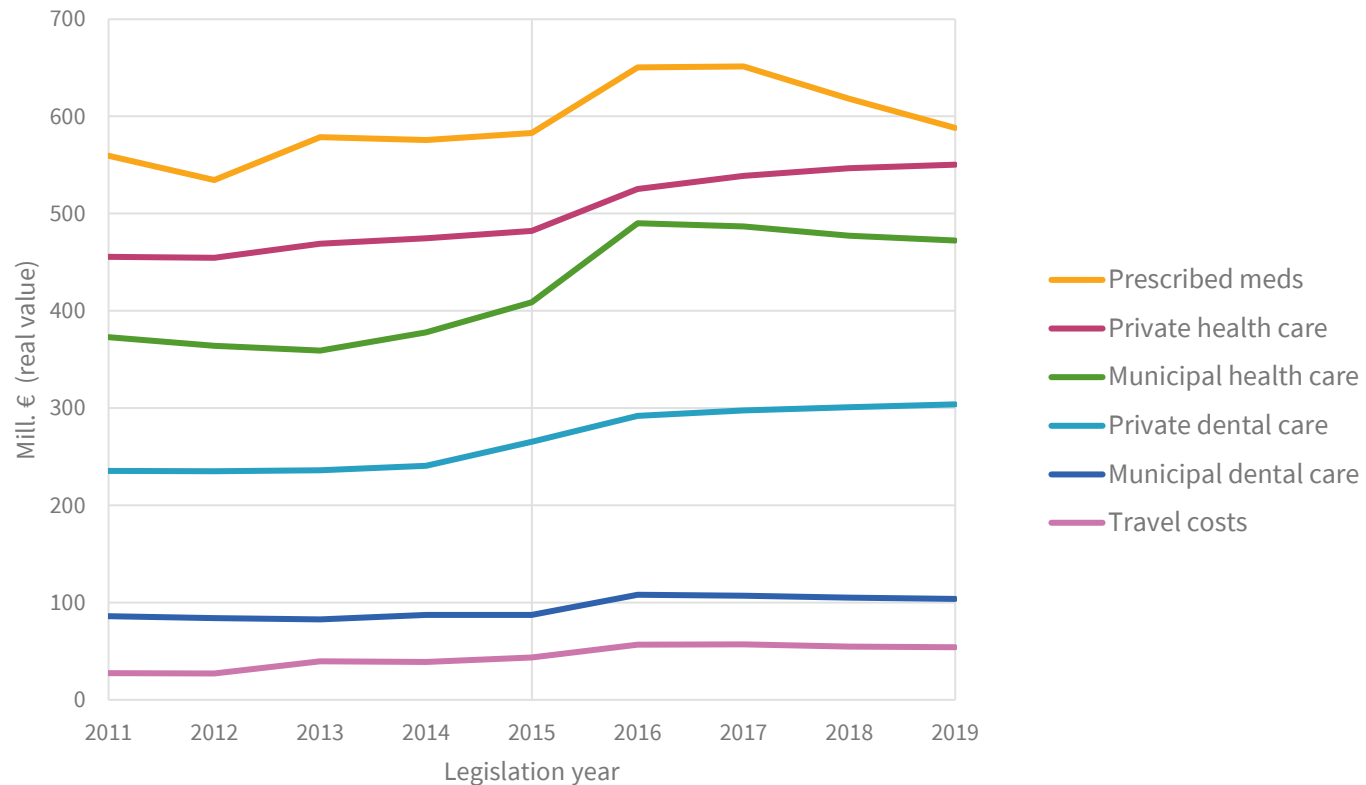
- 15% population sample from registers in 2017
 - 800 000 individuals
 - Incomes and taxes (individual-level)
- Real-world health data
 - Utilization of municipal health care (visit-level)
 - Reimbursement and costs of
 - prescription medicines (payment-level)
 - private care (payment-level)
 - travel costs (payment-level)
- Non-behavioral microsimulation 2011-2019
 - Adjusting the monetary parameters to the price level of 2017

Results

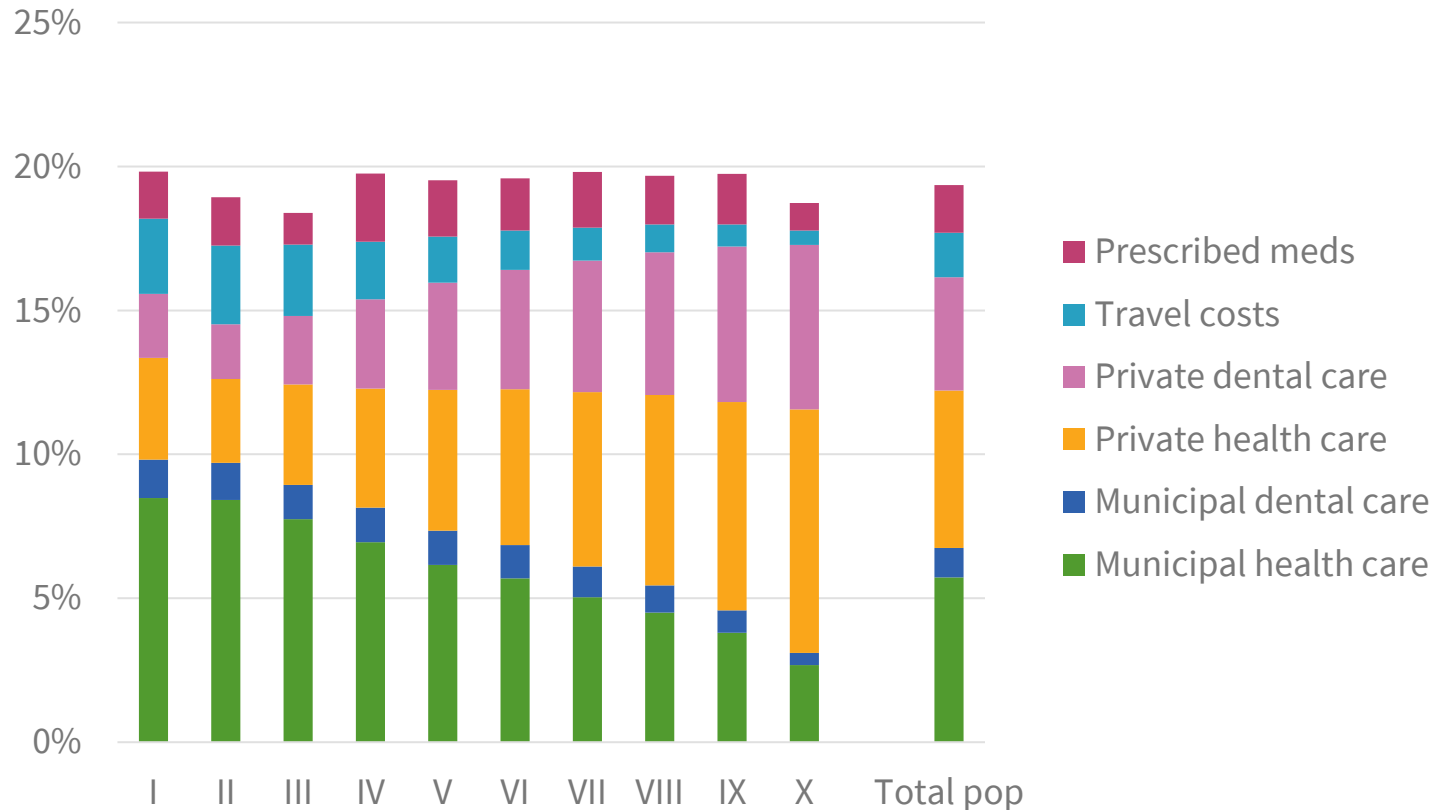
Health payments in relation to total income



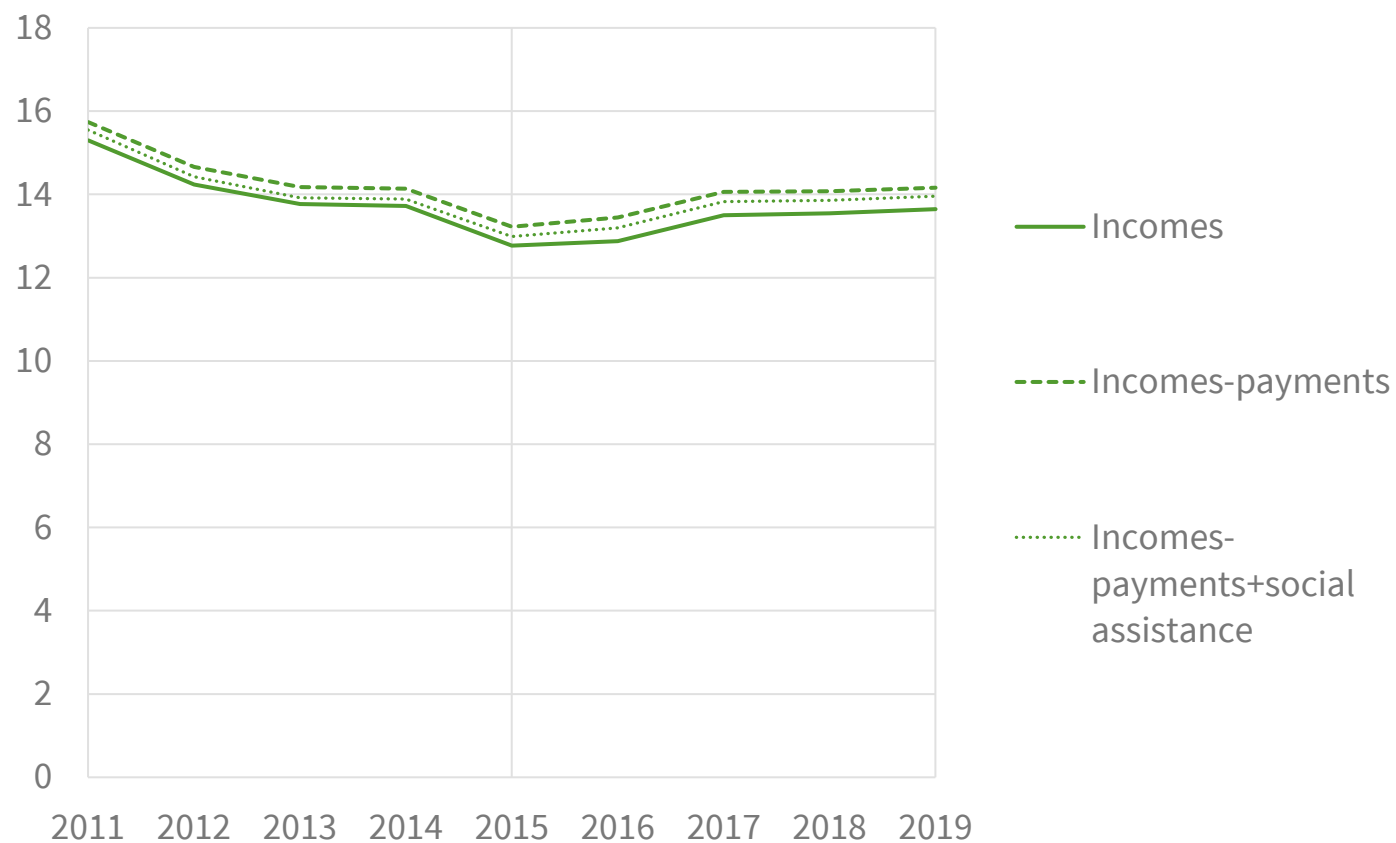
Simulated sums of different health payments have all increased due to policies



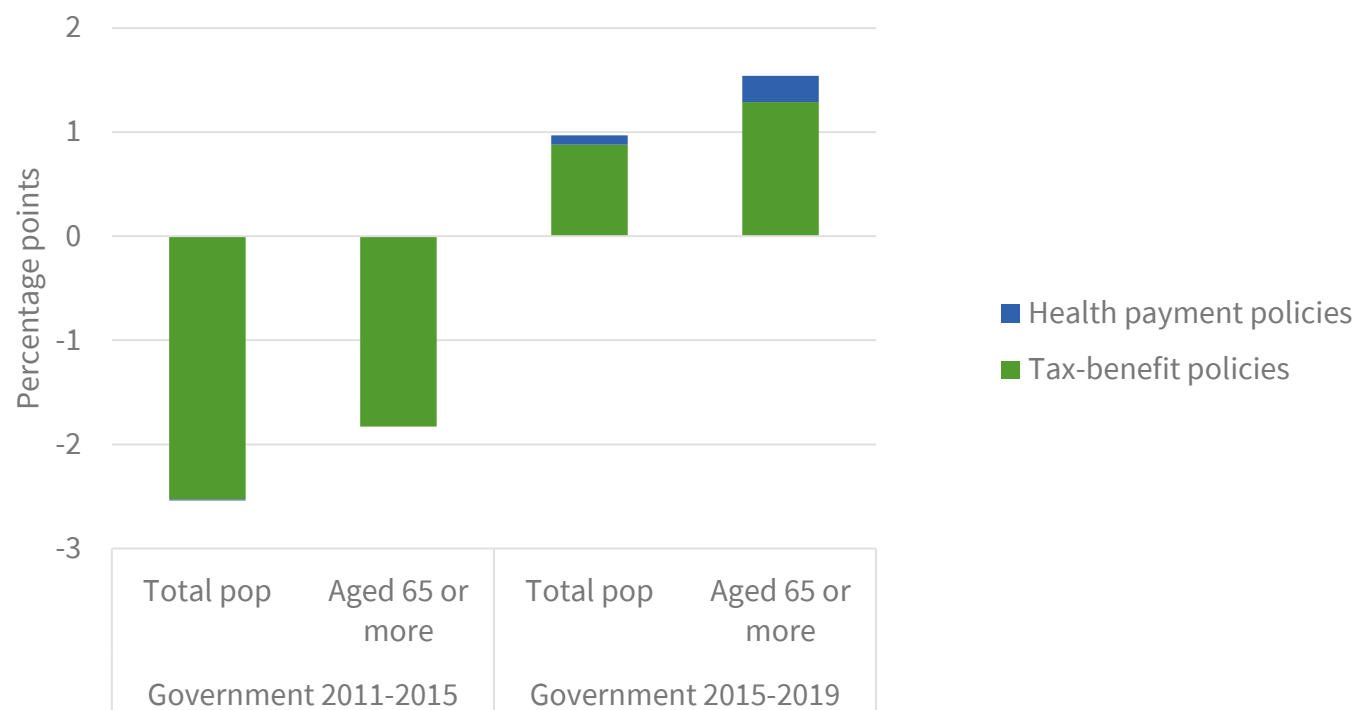
The simulated relative increase of OOPs is surprisingly even across income deciles



The simulated AROP rates



Policy effect on AROP rate by government term





Discussion

- In this case, poverty effects were dominated by tax-benefit changes but it may not always be the case
- Behavioral effects of the health payment policies remain unanalyzed because of lack of causal evidence
- Extended model has been and will be used in policy planning together with the Finnish ministry of social affairs and health
 - Primary interest is the budgetary effects, distributional effects is the secondary interest
- Model comes with high data requirements
 - May be hard to find or access real-world health data in some countries
 - Perhaps possible to replace real-world data with survey or synthetic data



Thank you!

Sources:

- Aaltonen K, Tervola J, Heino P (2021). Analyzing the effects of healthcare payment policies in conjunction with tax-benefit policies: A microsimulation study with real-world healthcare data. INVEST working paper 34/2021.
<https://doi.org/10.31235/osf.io/m7h3u>