

# The distributional impact of budgetary choices in Ireland

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OECD Gender Budgeting  
Network

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# Outline

1. The ESRI and the SWITCH model
2. Distributional Impact Analysis at the ESRI
3. Incorporating gender and disability
4. Discussion

# The ESRI

- Established in 1960 as the Economic Research Institute
- Mission: To produce economic and social research that informs public policymaking and civil society
- Over 100 staff over 12 research areas (Labour; Taxation; Health; Energy; Education...)
- 1/4 of funding from Grant-in-Aid and the rest from research projects, competitive funding.

# The ESRI

The SWITCH microsimulation model was developed at the ESRI in the late 1980s

It models direct tax and welfare, many non-cash benefits and indirect taxes (via a sister model, ITSIM)

- Distributional impact of general government expenditure not captured
- Static model although a labour supply add-on has been developed for in-house use.

# The ESRI

- Access granted to government departments based on a funding agreement.
  - ESRI team provides training, delivers an annual research and model development work program and helps with ad-hoc modelling requests
- It has been used for in-house and governmental DIA for over thirty years
- Currently it is used by five government departments (DSP, DoF, DPER, DCEIDY, DoH) and the PBO

# The SWITCH model

- Based on the EUROMOD platform
- Linked to the 2019 SILC Research Microdata File which contains administrative information on ‘current’ income and welfare.
- ‘Current’ income is too out of date for policy making
  - Reweighted to be representative of the 2019 population
  - Updated to account for income and price growth

# The SWITCH model

- The SILC RMF is subject to Statistical Disclosure Controls (SDC) by the Irish Central Statistics Office
  - Typically results would need to be reviewed by a statistician before release
- The ESRI team added an automatic SDC filter to the SWITCH model.
  - CSO allows users to extract their results without review by a statistician.
  - Helps with secrecy and time sensitivity of budget negotiations

# Equality budgeting using microsimulation

- Microsimulation is invaluable for equality budgeting
  - effect of direct tax and welfare policy reform by income group, household type, gender, disability status...etc.
- But, estimating policy effects by gender is complicated as
  - family members pool some of their income
  - Joint taxation is hard to assign individually
  - Some welfare payments are household level
- We focus on tax-unit level income and
  - Assume it is split equally between partners or
  - Assigned to the physical recipient
  - Automated gender impact results produced by SWITCH based on full income sharing assumption



# Equality budgeting using microsimulation

Estimating policy effects along additional equality criteria is complicated by data availability and other considerations

- Disability status only available for those > 16 years old in EU-SILC
- Should family members of those affected by disability also be considered “affected”?
- Automated “impact by disability status” function will be launched with the next SWITCH release

# DIA at the ESRI

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## DIA at the ESRI

Post-budget analysis presented three days after budget announcement

Recently, many ad-hoc DIA's for the cost-of living packages, pandemic supports...

More structured work, in agreement with the steering group, on particular tax and welfare instruments

- e.g. Budget Perspectives conference tomorrow will discuss who benefits from childcare subsidies

# Budget 2023 – main measures analysed using SWITCH and ITSIM

## Income tax

Bands/credits increased for workers; 2<sup>nd</sup> USC band extended, rent tax credit

## Welfare

Personal rate of benefits increased €12 with proportional increases for qualified adults. QCI up €2; Working Families Payment increase; Fuel Allowance threshold and means assessment changed; earnings disregard for DA

## One-off policies

Energy credit, extension of excise reduction and 9% VAT rate

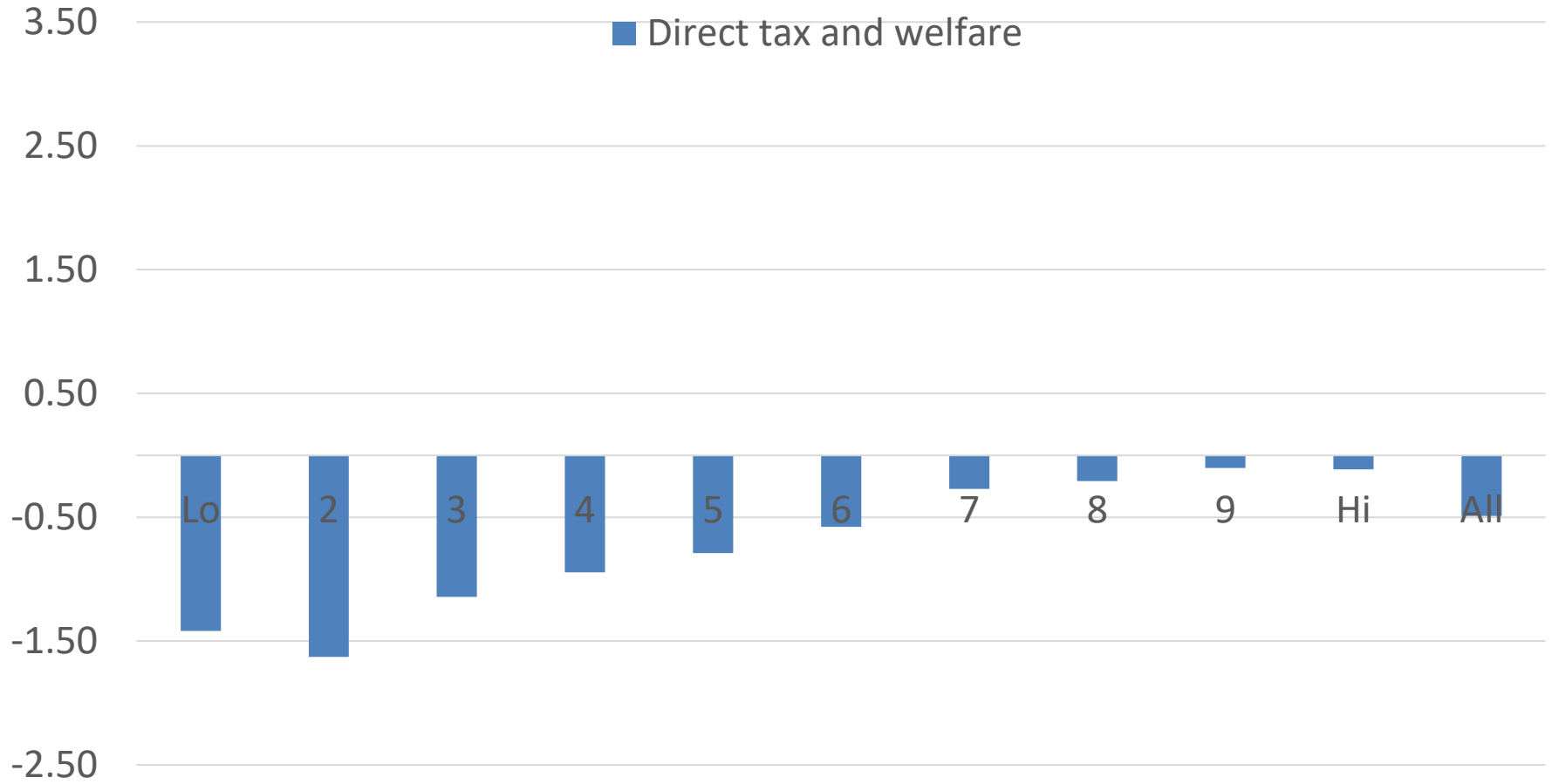
## Non-cash benefits

Universal Childcare Subsidy increase of 90c per hour; GP visit cards extended to those on or below median income. Free school books for primary level.

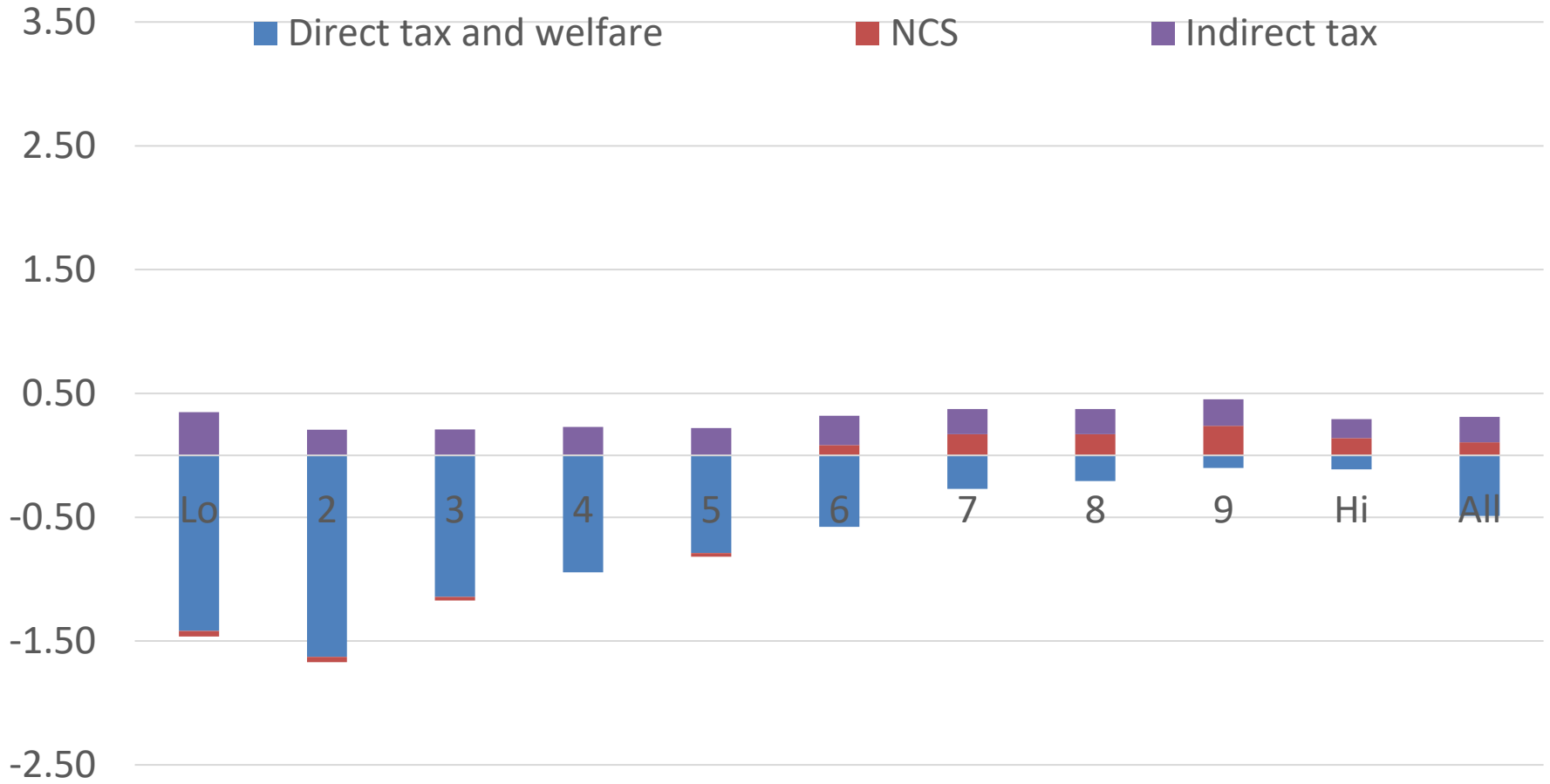
## Indirect tax

Tobacco excise + 50c; carbon tax + 7.50/tonne – offset by NORA levy; VAT cut on newspapers

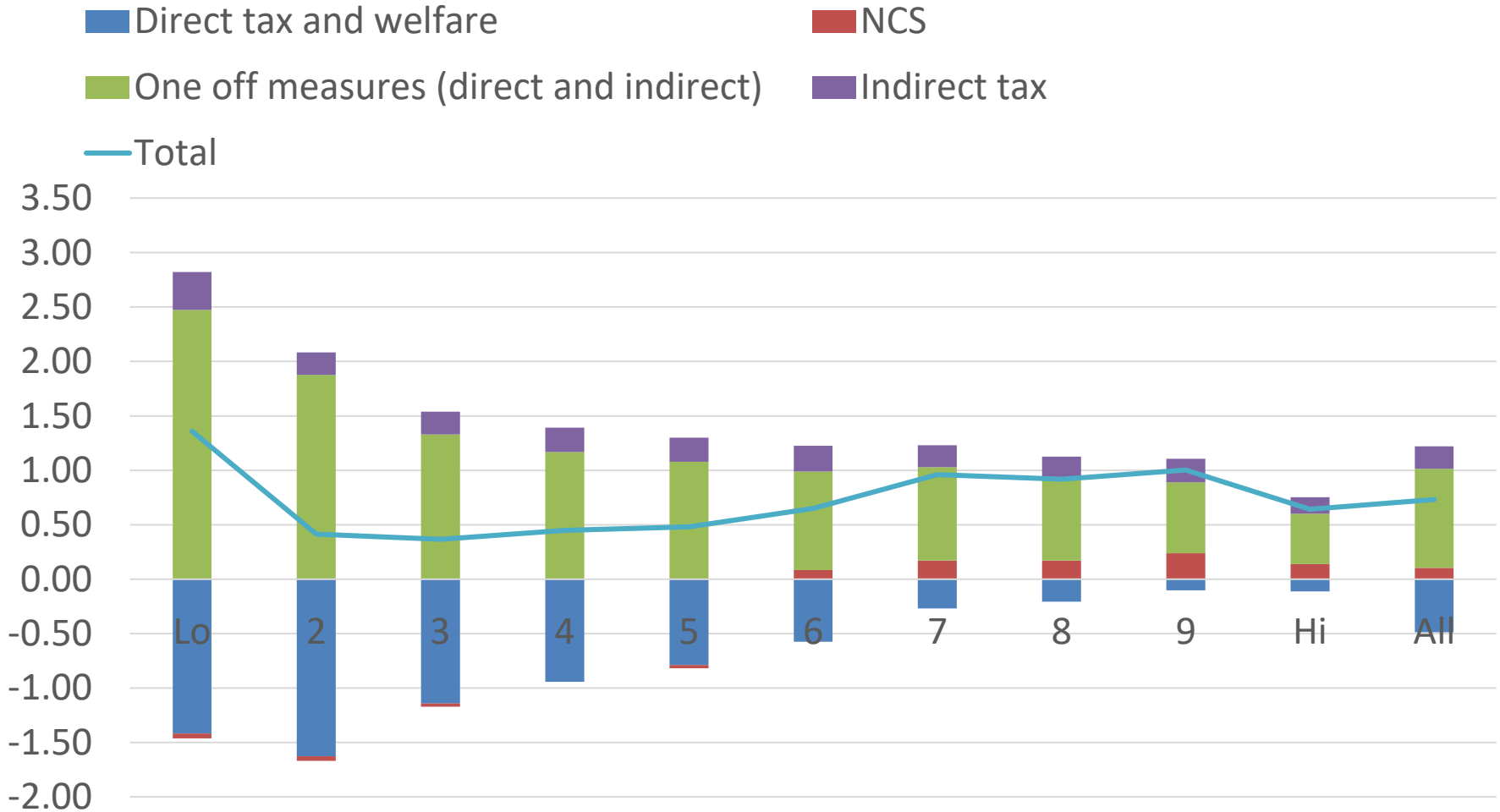
# Permanent tax & welfare changes in 2023 won't keep up with forecast inflation



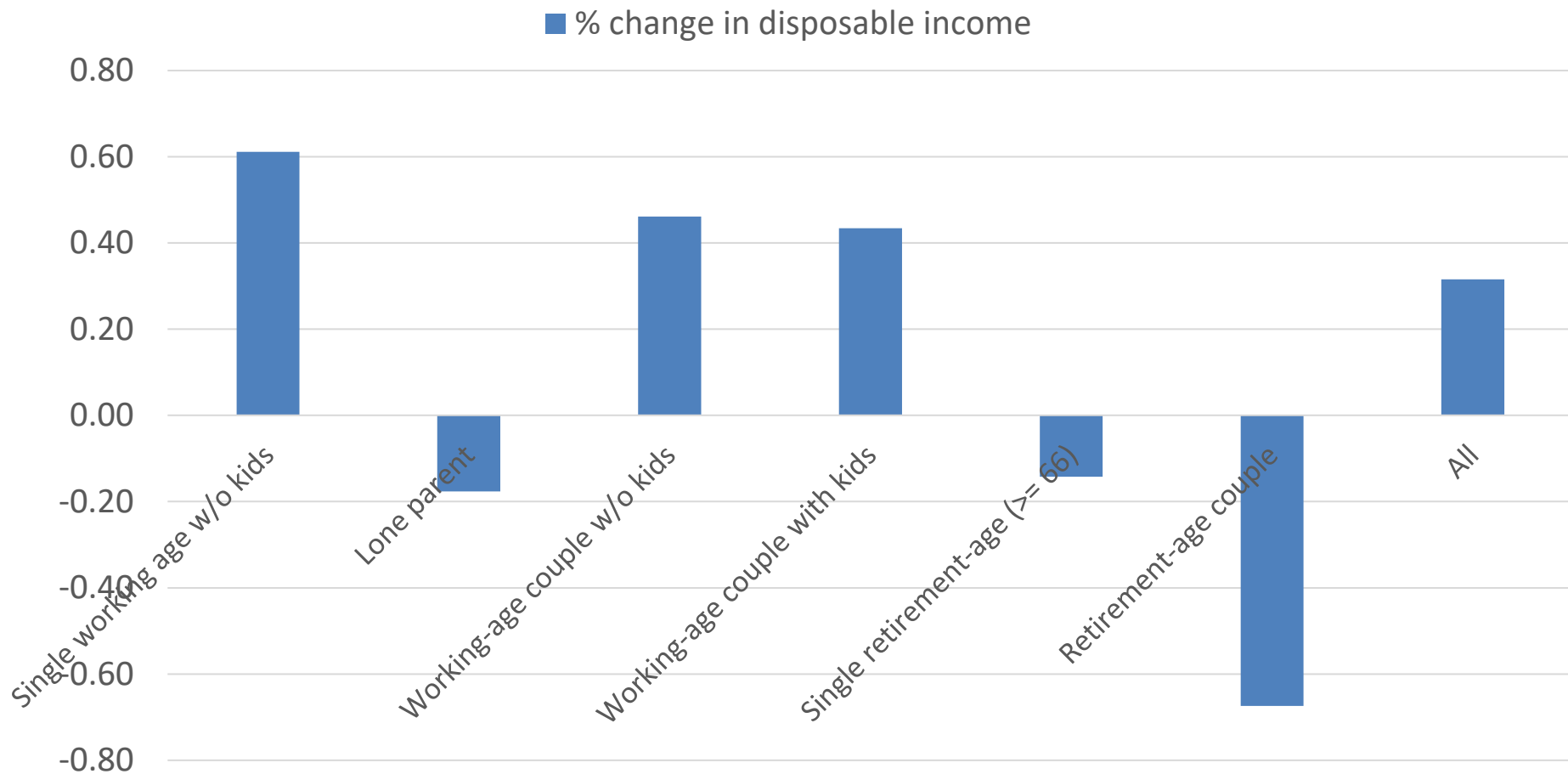
# Indirect tax changes and childcare subsidy reform reduce income losses



# ...as do one-off policies for 2023



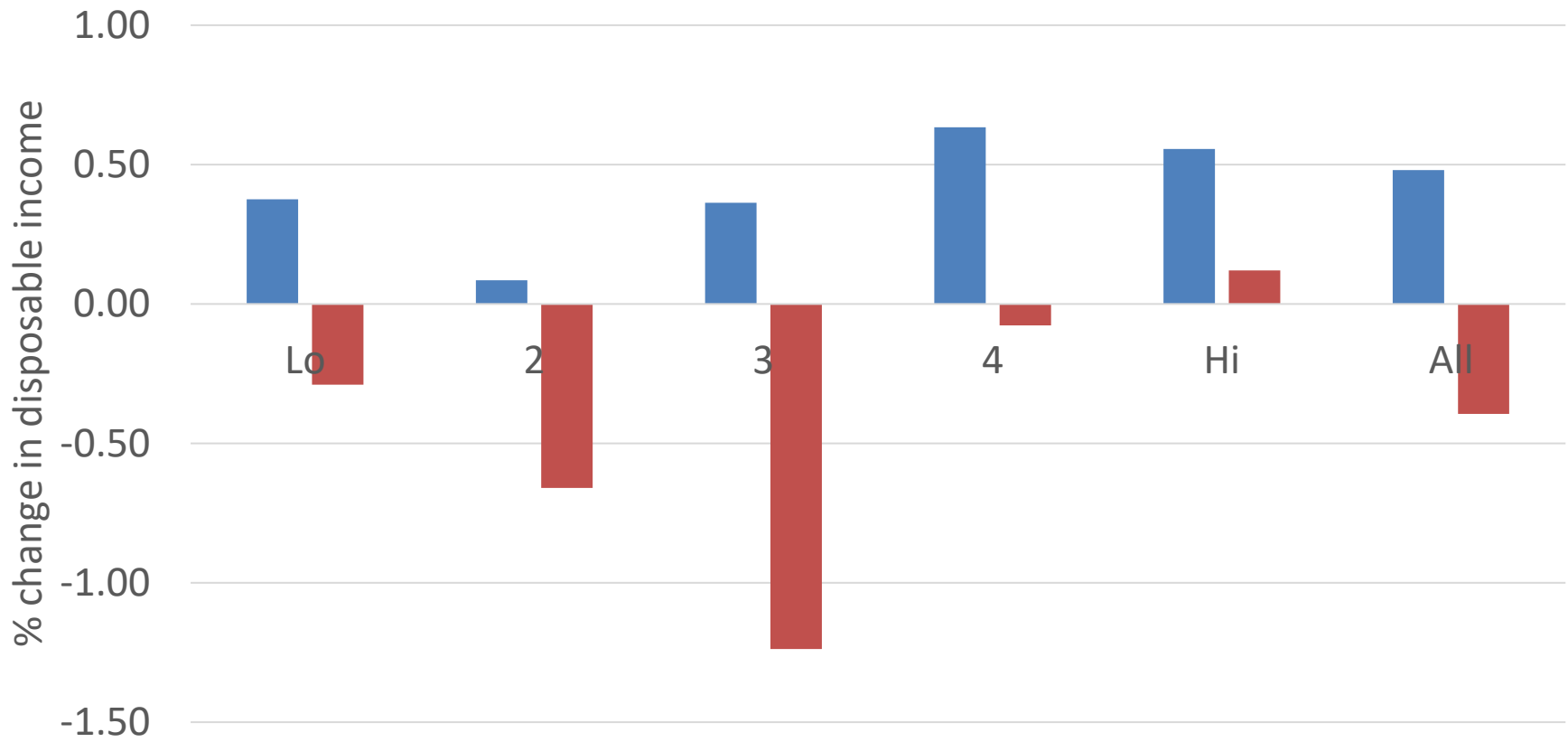
# Lone parents and pensioners slightly worse off in 2023, compared to price adjusted 2022 policies



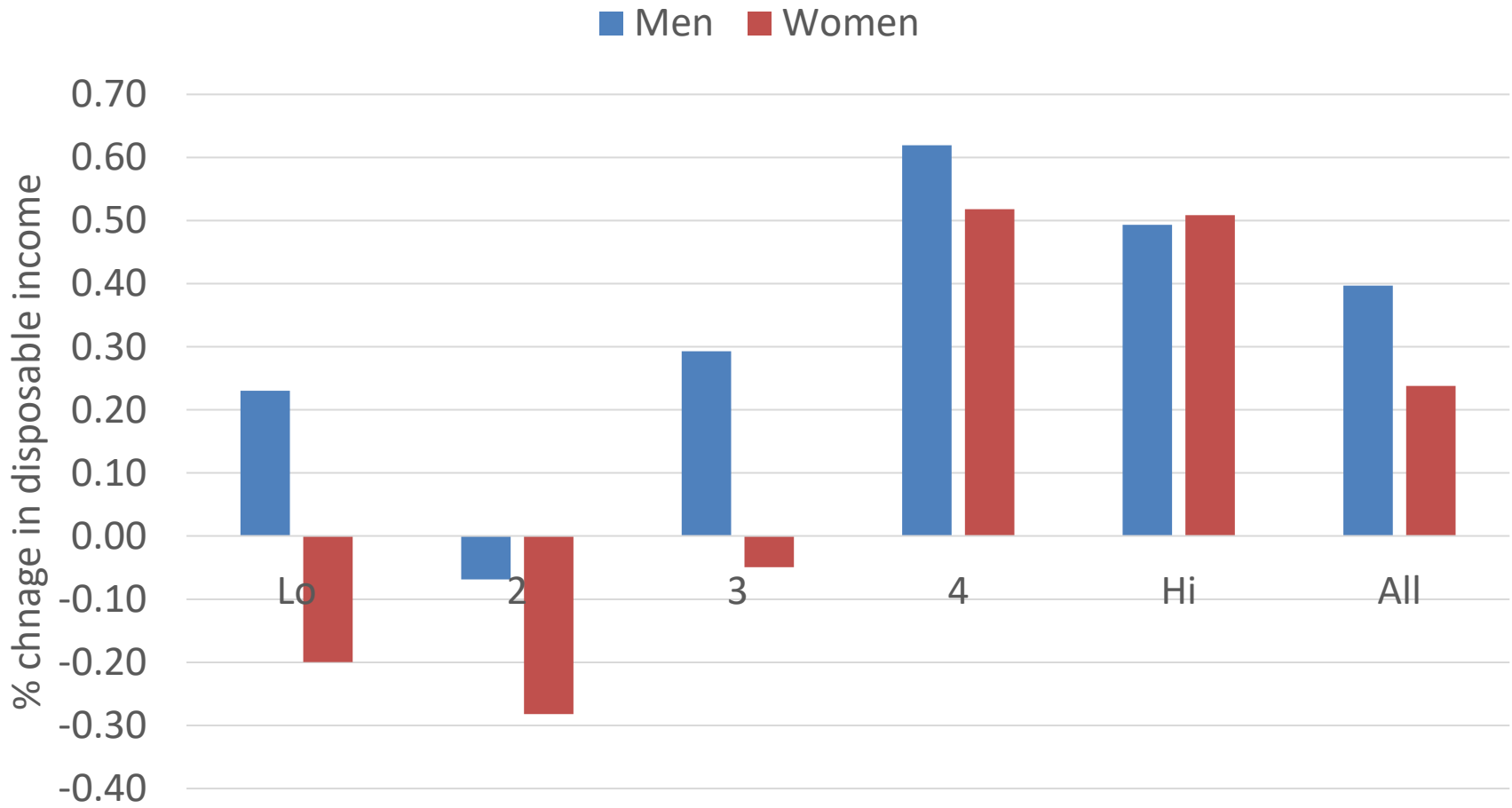


# Non-earning households are also slightly worse off in 2023, compared to price-adjusted policies

■ Earning ■ Non-earning

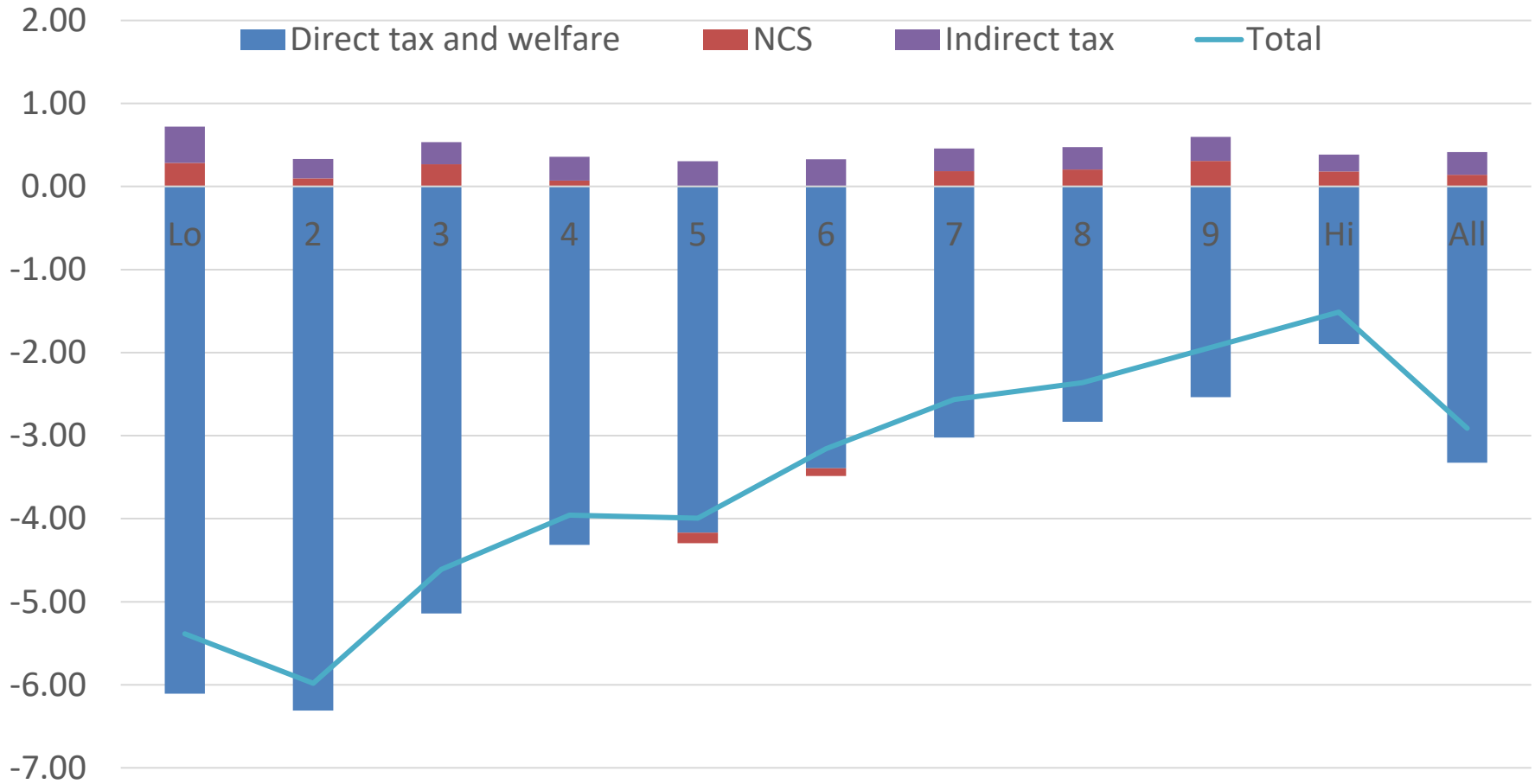


# Policy changes for 2023 benefit men slightly more than women, compared to price adjusted policies



**How might this picture change if one-off policies are not repeated?**

# Without the one-off measures, Budget 23 changes result in large regressive income losses compared to price-indexed 2020 policies



# More in-depth analyses by gender/disability

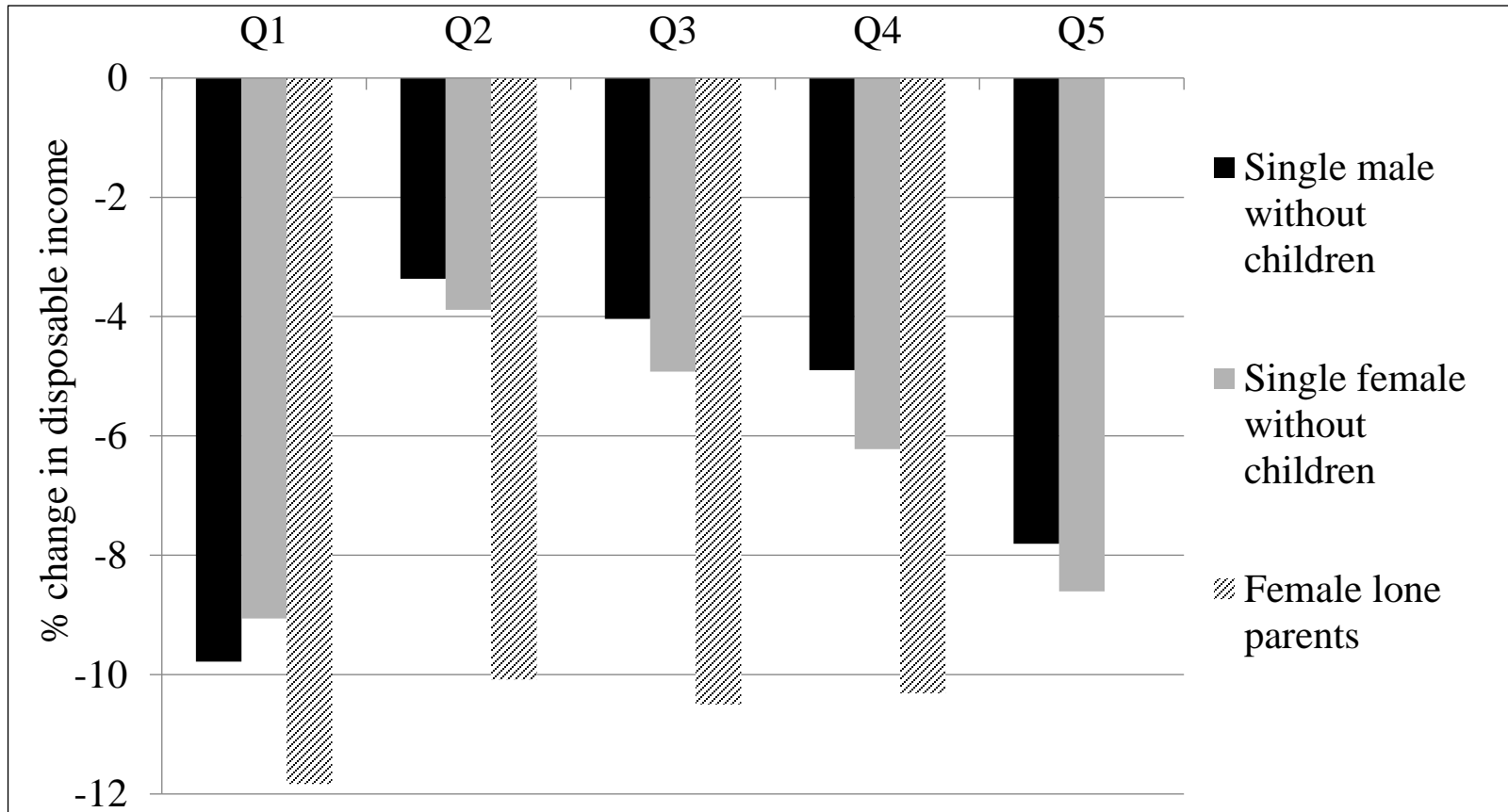
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# Measuring gender impacts of changes to tax-benefit policy 2008-2018

## Main policy changes 2008-2018

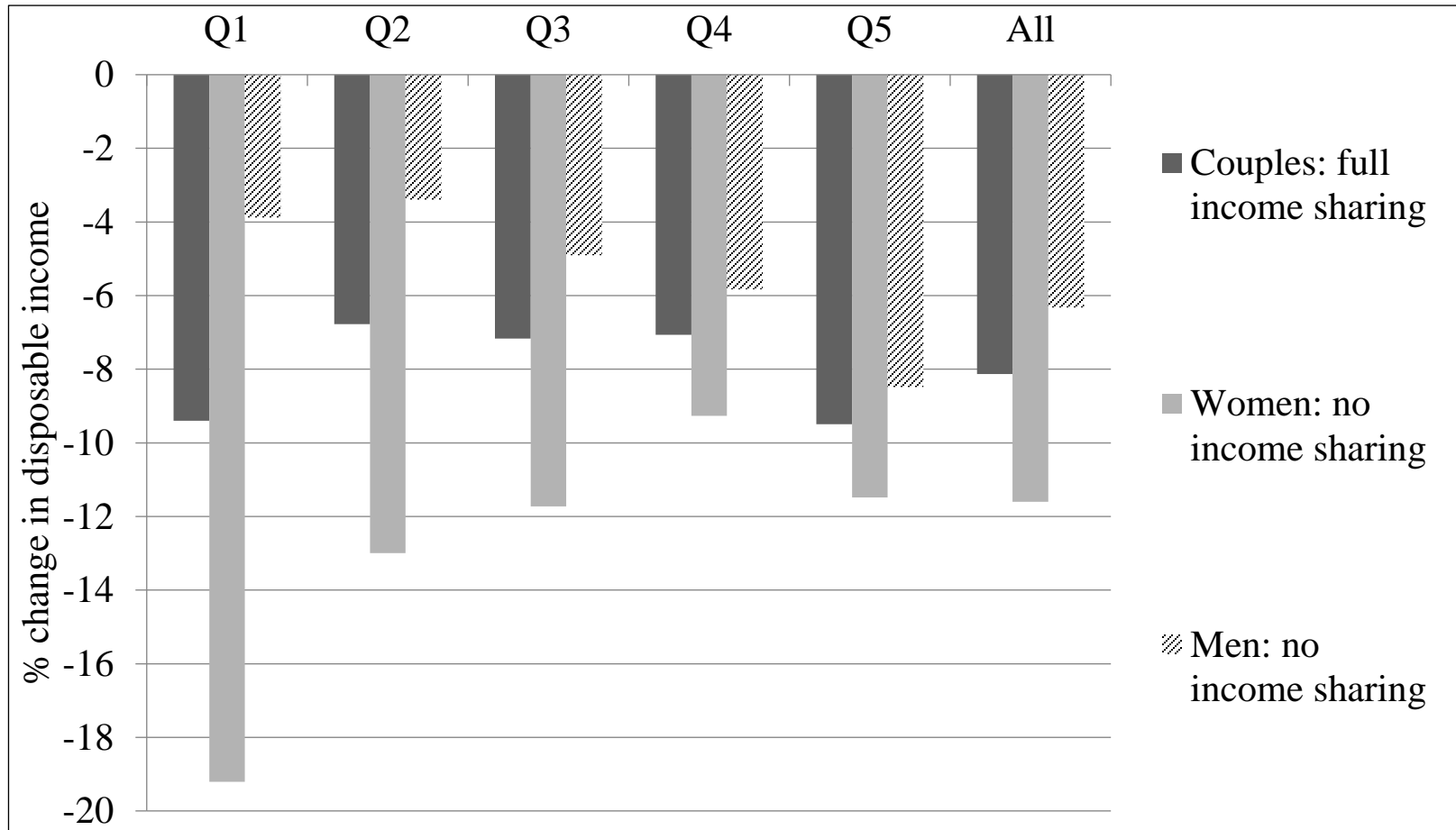
- Income tax
  - standard rate band =
  - higher rate of tax ↓
  - threshold for higher rate of tax ↓
  - tax credits ↓
- Social insurance contributions ↑
- Welfare payments ↓ in austerity period and ↑ in recovery period but failed to keep pace with inflation

# Measuring gender impacts of changes to tax-benefit policy 2008-18: singles



Doorley, Karina & Berholz, Maxime & Callan, Tim & Keane, Claire & Walsh, John R., 2018. "The gender impact of Irish budgetary policy 2008-2018," Research Series, Economic and Social Research Institute (ESRI), number BKMNEXT367.

# Measuring gender impacts of changes to tax-benefit policy 2008-18: couples



Doorley, Karina & Bercholz, Maxime & Callan, Tim & Keane, Claire & Walsh, John R., 2018. "The gender impact of Irish budgetary policy 2008-2018," Research Series, Economic and Social Research Institute (ESRI), number BKMNEXT367.



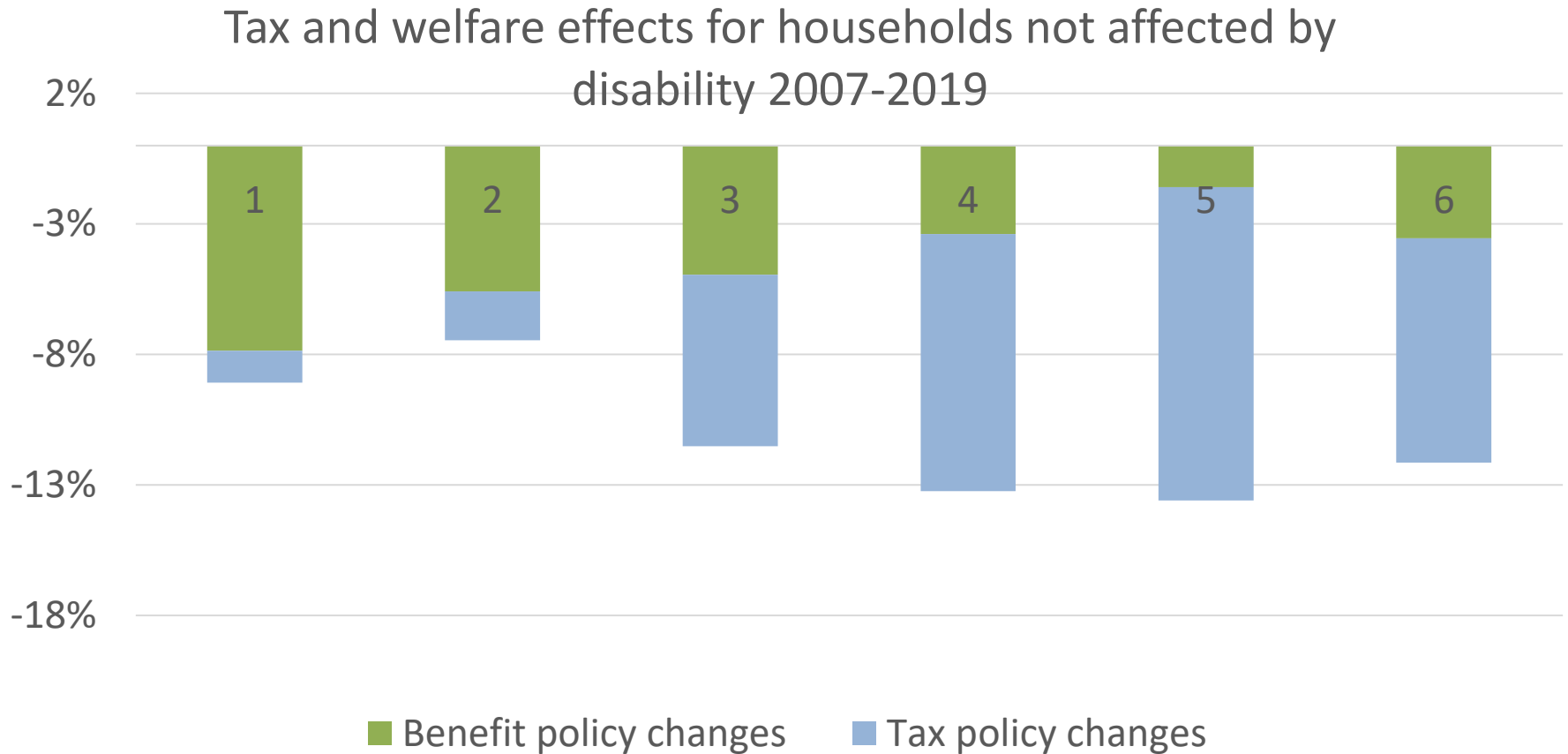
# Measuring gender impacts of changes to tax-benefit policy

- Between 2008-2018, differential impacts of budgetary policy by gender
  - (Female) lone parents lost out by more than other singles due to child benefit reductions
  - Differential impact of tax-benefit policy reforms is concentrated in the lower half of the income distribution.
- Most of the gender difference in income losses occurred during the austerity period. Recovery budgets were more “gender neutral”.
- Budgets in the intervening years have not compensated for the higher systematic losses by women during the recession.

# Equality budgeting - disability

- Relatively low attachment of people with disabilities in Ireland to the labour force
  - Social welfare system critical to their standard of living
- Equality budgeting introduced in 2017 in Ireland, with gender as a primary axis of equality.
- Scope extended in 2018 to additional dimensions including poverty, socioeconomic inequality and disability.

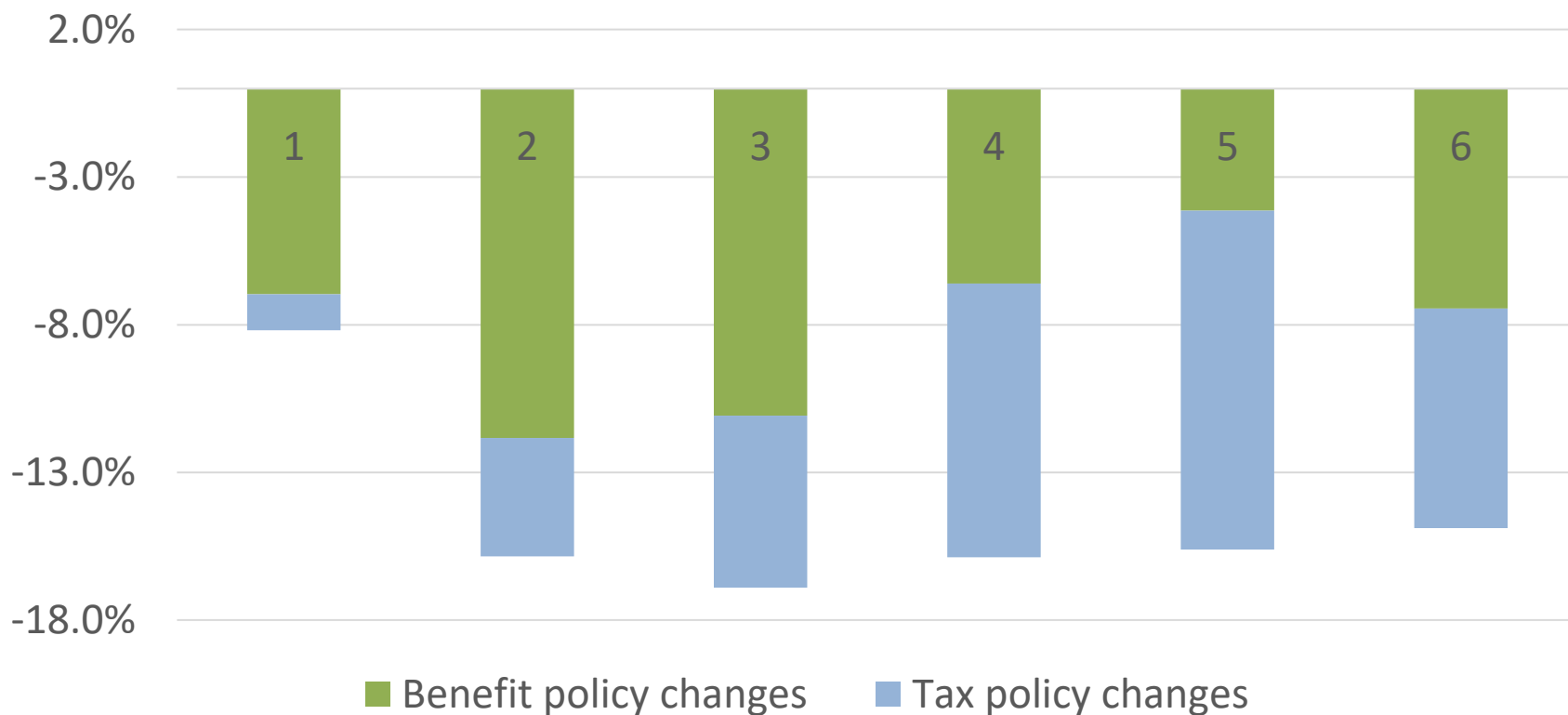
# Disposable income of households not affected by disability fell due to tax and welfare policy



Doorley, Karina & Regan, Mark, 2022. "BP1: The impact of Irish budgetary policy by disability status," Papers BP2023/1, Economic and Social Research Institute (ESRI)

# Households affected by disability were more negatively affected by welfare policy

Tax and welfare effects for households affected by disability 2007-2019



# Discussion

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# Discussion

- Strong history of DIA at the ESRI and, more generally, in Ireland
- Challenges of robust DIA are amplified for equality budgeting – need for high quality data on dimensions of equality

# Appendix

# Difficulties in defining disability

- Medical model: classifies individuals with disabilities as having an impairment which precludes them from mainstream social activities
- Social model: societal barriers as a limiting factor rather than the medical diagnosis
- Definition for equality budgeting exercise carried out by Doorley & Regan (2022), based on available data
  1. Based on labour force status- “Disabled or/and unfit to work”
  2. In receipt of disability-related social welfare payments
    - Disability Allowance, Invalidity Pension or Illness Benefit
- Better measurement of working-age disability