

# How has gender income inequality in Ireland and the UK changed and why?

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- Gender wage gap well studied
  - Goldin, 2014; Blau & Kahn, 2017
  - Falling slowly in most countries
- Also, lots of investigation of the gender work gap
  - Olivetti & Petrongolo (2008); Keller (2019)
  - Some convergence in participation rates but differences in work hours still considerable



#### Introduction

- Combining the gender wage gap and the gender work gap (and other factors) gives the gender gap in income
- Adding the tax-benefit system gives the gender gap in disposable income
  - Income concept which is the target of policymakers
- Growing literature examines the composition of this gap in a cross-country setting
  - Figari et al (2011), Avram & Popova (2022), Doorley & Keane (2023)



- Missing from this literature is:
  - Time series dimension. How is the evolution of the wage/work gap and the tax-benefit system affecting gender income inequality?
  - Consideration of some of the 'other' factors
    - Self-employment status
  - A distributional perspective



#### Introduction

- In this paper, we estimate the gender income gap in the UK and Ireland
  - across the income distribution
  - in a historical perspective
  - isolating the effect of gender gaps in selfemployment from the usual factors



# Employment & self-employment rates

Employment Rates - Male

**Employment Rates - Female** 





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#### Part-time employment



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# Decomposing the gender income gap



We follow Doorley & Keane (2023), similar to Avram & Popova (2022):

$$C = Gap_M - Gap_D$$

 $Gap_M$  is the gender gap in market income and  $Gap_D$  is the gender gap in disposable income

At specified quantiles,  $\tau$ , of the disposable income distribution:

$$C(\tau) = Gap_M(\tau) - Gap_D(\tau)$$



We create counterfactual market and disposable income distributions for women:

- if they had a similar wage structure to men
- if they worked similar hours to men
- if they had similar self-employment status to men

This allows us to estimate the relative contribution of each of these to the gender gap in income



We isolate the contributions of tax and benefit policy by introducing a benefit function, b(.) and a tax function t(.)

$$D_{i}^{b} = b(w_{i} * h_{i}, s_{i}, y_{i}, X_{i})$$
  
$$D_{i}^{t} = t(w_{i} * h_{i}, s_{i}, y_{i}, X_{i})$$

We then decompose the effect of the tax-benefit system on the gender gap in income across the income distribution:

$$C(\tau) = \underbrace{(Gap_M(\tau) - Gap_{D^b}(\tau))}_{benefits} + \underbrace{(Gap_M(\tau) - Gap_{D^t}(\tau))}_{tax}$$



- We use EUROMOD for Ireland and UKMOD for the UK
- We only use systems where we have a match between the data and policy year
- We assume minimal income sharing between members of a couple
  - Upper bound estimate of the gender income gap but proxy for bargaining power



### Gender gap in market income



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#### Distribution of gender income gap over time





# The distribution of the gender income gap





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### Redistribution between men and women



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# Distributional impact of tax & welfare







■ Market ■ Tax ■ Benefit ● Gender income gap

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**Cross-country similarities** 

- Gender income gaps increase with equivalised household income
  - Employment/self-employment gaps drive the gender income gap at the bottom of the income distribution.
  - Wages and unobserved/other factors push it up at the top of the income distribution
- The tax-benefit system reduces the gender income gap by 1/3. Tax does most of the work although benefits play a role at the bottom of the income distribution.



# Cross-country differences

- The gender gap in employment/selfemployment is higher in IE than the UK
- The gender gap in pay is a larger component of the gender income gap in the UK than Ireland
- Benefits cushion the gender income gap more in the UK than Ireland