ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ

Use of quantitative empirical analyses in policy design of a national minimum wage in Cyprus

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Background and motivation

- Government's intention to introduce a national minimum wage (NMW) in Cyprus as soon as full-employment conditions are reinstated (unemployment rate falling at or below 5%)
  - Unemployment rate in 2019 is expected at 7%, compared to 16.1% in 2014
- The introduction of a NMW aims to:
  - Increase the coverage of protected workers
  - Enhance protection against unduly low pay
- MLWSI was asked to undertake qualitative and quantitative empirical studies
  - Backing-up consultation process with social partners
- In close technical collaboration with the ILO
  - Qualitative validation of the results of quantitative analyses by the ILO

Presentation outline

- Quantitative empirical analyses
  - Aims and policy questions addressed
- #1- Current state analysis of labour market, focusing on earnings
  - Progress to-date
- #2 - Impact assessment using microsimulations
  - Work in progress
- #3 - Measuring work incentives for social protection beneficiaries
  - Work in progress
- Concluding remarks

Quantitative empirical analyses

- **#1 - Current state analysis of labour market, focusing on earnings**
  - *Aim*: analyse the earnings profile of wage employee population in terms of earnings distribution, earnings inequality, gender earnings gap and who the low paid are
  - *Policy question addressed*: should there be different rates of minimum wage for different groups, sectors and occupations?

- **#2 - Impact assessment using microsimulations**
  - *Aim*: measure the social impact in terms of individual earnings and household income and the economic impact in terms of labour cost and employment
  - *Policy question addressed*: how to fix the minimum wage at the right level from a social and economic perspective?

- **#3 - Measuring work incentives for social protection beneficiaries**
  - *Aim*: analyse the profile and behaviours of GMI beneficiaries and assess the level of incentives to return to work
  - *Policy question addressed*: is the interaction between minimum wage and GMI effective?

#1 - Current state analysis of labour market, focusing on earnings

- Data sources and methods

- Earnings distribution

- Earnings inequality

- Gender earnings gap

- Who are the low paid?

Data sources and methods

- Main data source used
  - Dataset: EU SILC 2017
  - Income reference year: 2016
  - Covering all private households living in the government-controlled area of the Republic of Cyprus
  - Focusing on assessing the impact on individual and HH income
- Reference population
  - Wage employees (FT or PT) at working age (between 16 and 65 years)
  - Special groups/occupations are excluded: military personnel and foreign domestic servants
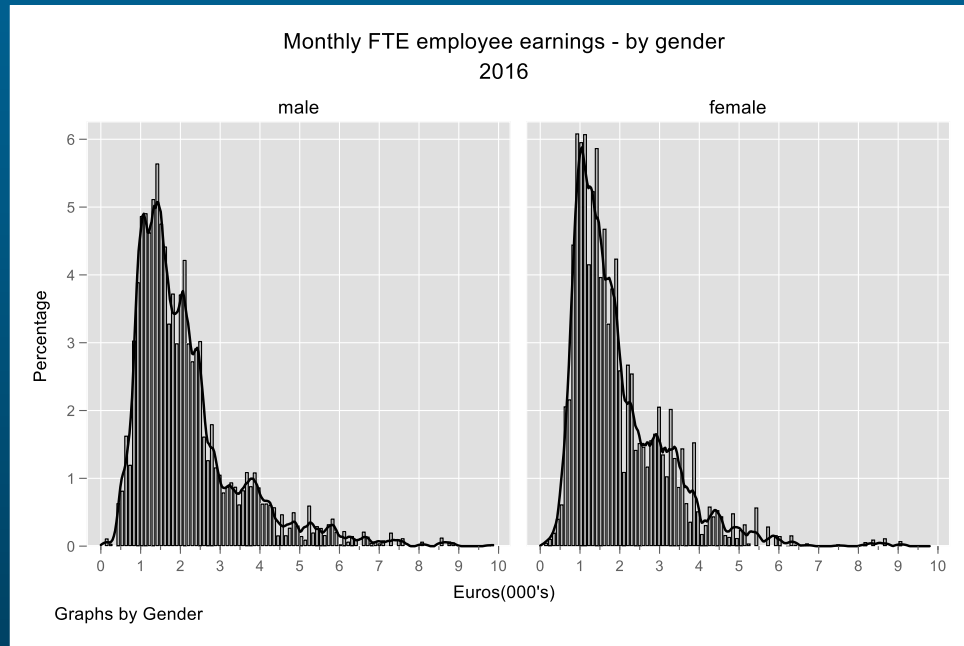
Data sources and methods

- Dataset adjustments

  - Grossing-up to total population: frequency weighted dataset

  - Use of FTE monthly earnings (Atkinson's approach) to account for the inclusion of PT workers

  - Imputing in-kind income for wage earners in agriculture: equal to 30% of their reported cash earnings

- Macro-validation exercises: currently under progress

  - How close survey sample estimates are to reality

  - Comparison between EU-SILC data, and information derived from administrative data

Earnings distribution of wage employees

Monthly FTE employee earnings - by gender
2016

male · female

Percentage · Euros(000's) · Graphs by Gender

Monthly earnings in Euros (000's) - 2016

	MALE	FEMALE	ALL
Mean	2.4	2.2	2.3
1st Quartile	1.3	1.2	1.2
Median	1.9	1.7	1.8
3rd Quartile	2.8	2.8	2.8

◆ Average earnings of men higher than of women by approx. 10%

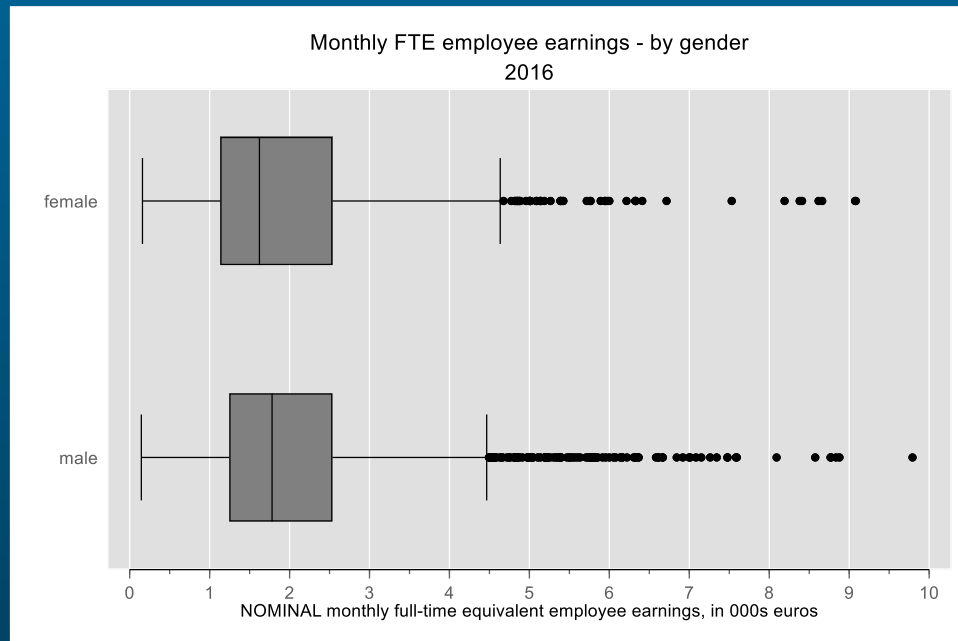◆ There appears to be more lower paid women than men

Earnings Inequality

Decile share of total earnings
2016
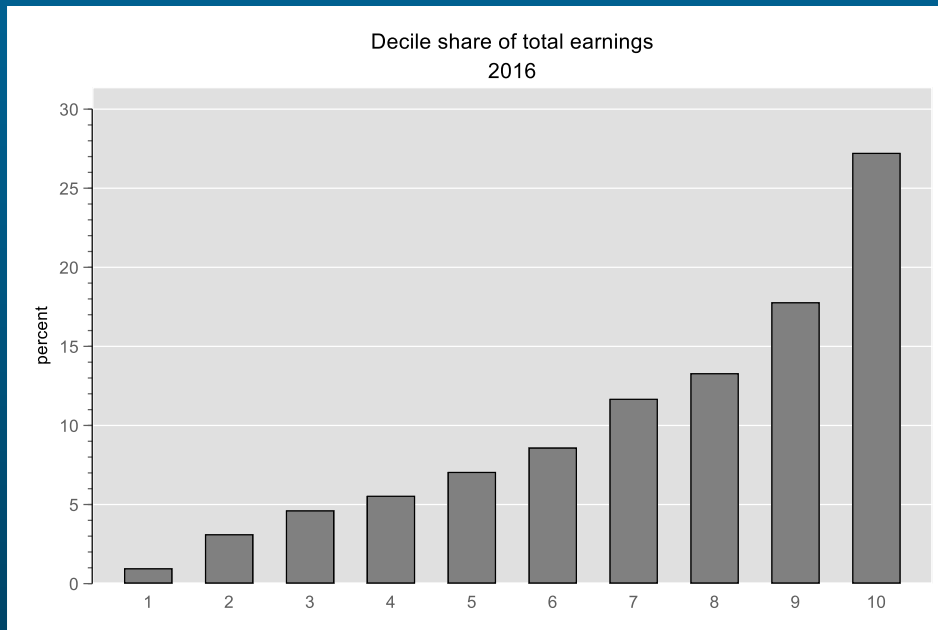
High degree of inequality:

◆ 2nd decile earns 3% of total earnings

◆ 9th decile earns 18% of total earnings

◆ Percentile ratios:
  ✓ 90th highest ≈ **4.2** × 10th highest
  ✓ 50th highest ≈ **1.9** × 10th highest

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The Gender Earnings Gap

Monthly FTE employee earnings - by gender
2016

◆ Difference in average earnings between men and women rather small

◆ Higher dispersion of earnings for men

◆ (Unadjusted) Gender Earnings Gap equal to **12.4%**

Who are the low paid?

- ■ "Low paid" defined as those with FTE monthly earnings below 60% of the corresponding median earnings

- ■ Approx. equal to 20% of working-age wage earners

- ■ Which subgroup has the highest number of "low paid" as % of working-age wage earners (*absolute terms*)?

  - ◆ *Gender*: Women (10.3%)

  - ◆ *Age group*: 26-35 (7.7%)

  - ◆ *Occupational group*: Service & Sales workers (6.8%)

  - ◆ *Economic sector*: Trade (6.9%)

Who are the low paid?

■ Which subgroups have the highest incidence of "low paid" as % of their size (*relative terms*)?

   ◆ *Gender*: Women (22.7%)

   ◆ *Age group*: 16-25 (65.1%)

   ◆ *Occupational group*: Elementary Occupations (45.7%) and Service & Sales workers (40.3%)

   ◆ *Economic sector*: Agriculture (63.0%), Arts, Entertainment, Other Private and Household activities (47.5%), Hospitality Industry (44.3%) and Trade (34.6%)

#2 - Impact assessment using microsimulations

- **Scope of exercise**
  - ◆ Assessing both social and economic impact
  - ◆ Data sources and methods
- **Choice of NMW scenarios**
  - ◆ Range of different scenarios between min. and max.

Scope of exercise

Simulate monthly earnings at different NMW levels and then assess, for each level:

1. Impact on **individual earnings:**
   - Who is affected, by how much, impact on earnings inequality and gender earnings gap
   - *Data sources*: EU SILC, administrative data

2. Impact on **household income**:
   - Which HH are affected, by how much and impact on income inequality
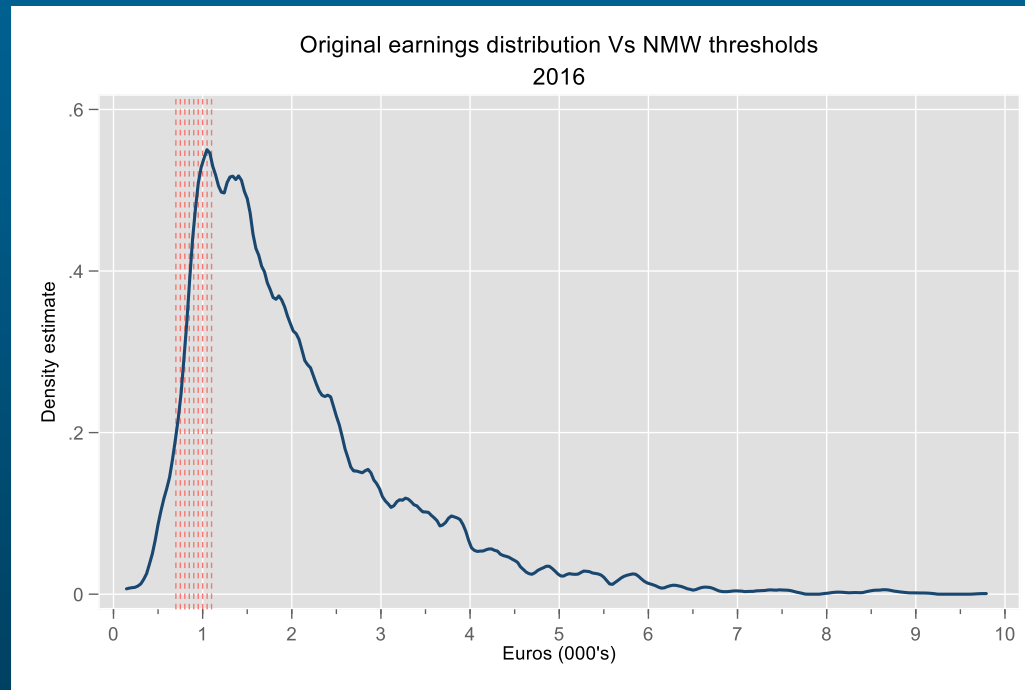   - *Data sources*: EU SILC

Scope of exercise

3. Impact on **labour cost**

   ➢ The Total Earnings Bill and Labour Shares, overall and by subgroup (sector, size of firm)

   ➢ *Data sources*: EU SILC, Survey of Enterprises

4. Impact on **employment**

   ➢ Utilise information on (changes in) employment in occupations covered by NMW since 2012 to assess potential impact of a NMW on employment

   ➢ *Data sources*: administrative data from Social Security records which includes high frequency (monthly) earnings data

   ➢ *Methodology*: difference-in-difference estimation

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YEKA

Choice of NMW scenarios

Original earnings distribution Vs NMW thresholds
2016

- ◆ *Min. scenario of NMW*:
  40% × median FTE monthly earnings

- ◆ *Max. scenario of NMW*:
  60% × median FTE monthly earnings
  (EU commonly used approach)

- ◆ Allow for a ripple effect affecting earnings up to 5% or 10% above the given level of NMW

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3# - Measuring work incentives for GMI beneficiaries

- **Scope**
  - ◆ Analyse the profile of GMI beneficiaries, long-term unemployed and working poor, by HH type, gender, age group, economic sector and occupation
  - ◆ Assess the impact of different levels of NMW on the work incentives for typical profile of GMI beneficiaries

- ◆ **Data sources**
  - ◆ Administrative data

- ◆ **Also, useful to modify certain design parameters of GMI scheme**

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Concluding remarks

- Quantitative empirical analyses are very useful in policy design of a NMW system

    - Particularly, impact assessments using microsimulations

    - Provide for evidence-based social dialogue

    - Form the basis for on-going monitoring the effectiveness of NMW system

- Some evidence to suggest differentiation in the rate of NMW

    - Younger age groups (16-35)

    - Economic sector – (i) Agriculture (special treatment), (ii) Arts, Entertainment, Other Private and Household activities and (iii) Hospitality Industry

    - Elementary Occupations and Service & Sales workers