The redistributive and stabilising effects of an EMU unemployment benefit scheme under different unemployment scenarios

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PRELIMINARY RESULTS – NOT FOR CITATION!!!

Motivation

- Need for greater risk sharing across member states in order to provide better shock absorption against asymmetric economic fluctuations (European Commission, 2012)
- An EMU unemployment insurance scheme could
  - serve as an insurance mechanism to smooth fluctuations in income across member states (see e.g. Dullien (2013))
  - strengthen national automatic stabilizers
  - improve individual income protection of the unemployed and their families
  - potentially enhance social cohesion.

Our contribution

- A focus on the design of the common EMU scheme in relation to existing national UI schemes
- A focus on the additional effects on household income
- Within-country income stabilisation
- (Indicates how the cost and between-country effects of a complex common scheme could be established)
- Builds on previous work (Jara and Sutherland, 2014)
  - Refines the EMU scheme design
  - Effects on those most likely to become unemployed, rather than all in employment
- Work in progress

Summary of what we do

- Assess the additional effects of an EMU UI
  - ☐ Potential Coverage of UI
  - ☐ Beneficiaries
  - ☐ Within-Country Stabilisation of household income
  - ☐ Protection from risk of poverty
  - ☐ Additional cost
- Two symmetric shocks
  - ☐ "regular" 2% and "large" 6% decrease in employment in each country (based on changes in national employment levels in recessions over recent decades in Europe)
- Based on a microsimulation approach (EUROMOD) and micro-data from EU-SILC
 - ☐ Constraints on modelling some UI features due to limitations of SILC

Plan of the talk

- Introduction
- An EMU unemployment scheme
- Methods and data
- Results
- Concluding remarks
- Future research
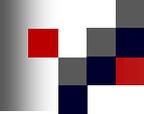
Introduction

- National UI systems vary in many dimensions (Esser et al., 2013)
  - Comparisons and assessments quite complex.
  - Challenges to suggest pathways to harmonisation.
- Dimensions of UIs to take into account:
  - Eligibility: contributions conditions
  - Eligibility: other conditions (e.g. employment status (employed or self-employed), type of employment contract, age).
  - Level of payment.
  - Duration of entitlement.
  - Unemployment assistance, social assistance and other safety net benefits
 - Integration in rest of tax-benefit system (taxable or not etc.)
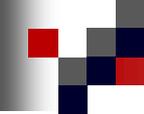
An illustrative EMU unemployment insurance scheme

- Based on paper 'On Automatic Stabilisers' by DG-EMPL, with some refinements.
- All currently employed (<u>self-employed excluded</u>) up to age 64.
- Payable from the 4th to 12th month of unemployment.
- Earnings during at least 3 months in the previous 12
- Proportional:
  - □ 50% of most recent own gross monthly earnings
  - □ Floor: 20% median gross earnings in each country (except for part-timers: no floor)
  - □ Ceiling: median gross earnings in each country
- Same treatment as national UI in the rest of the tax benefit system (taxable or not, etc.)
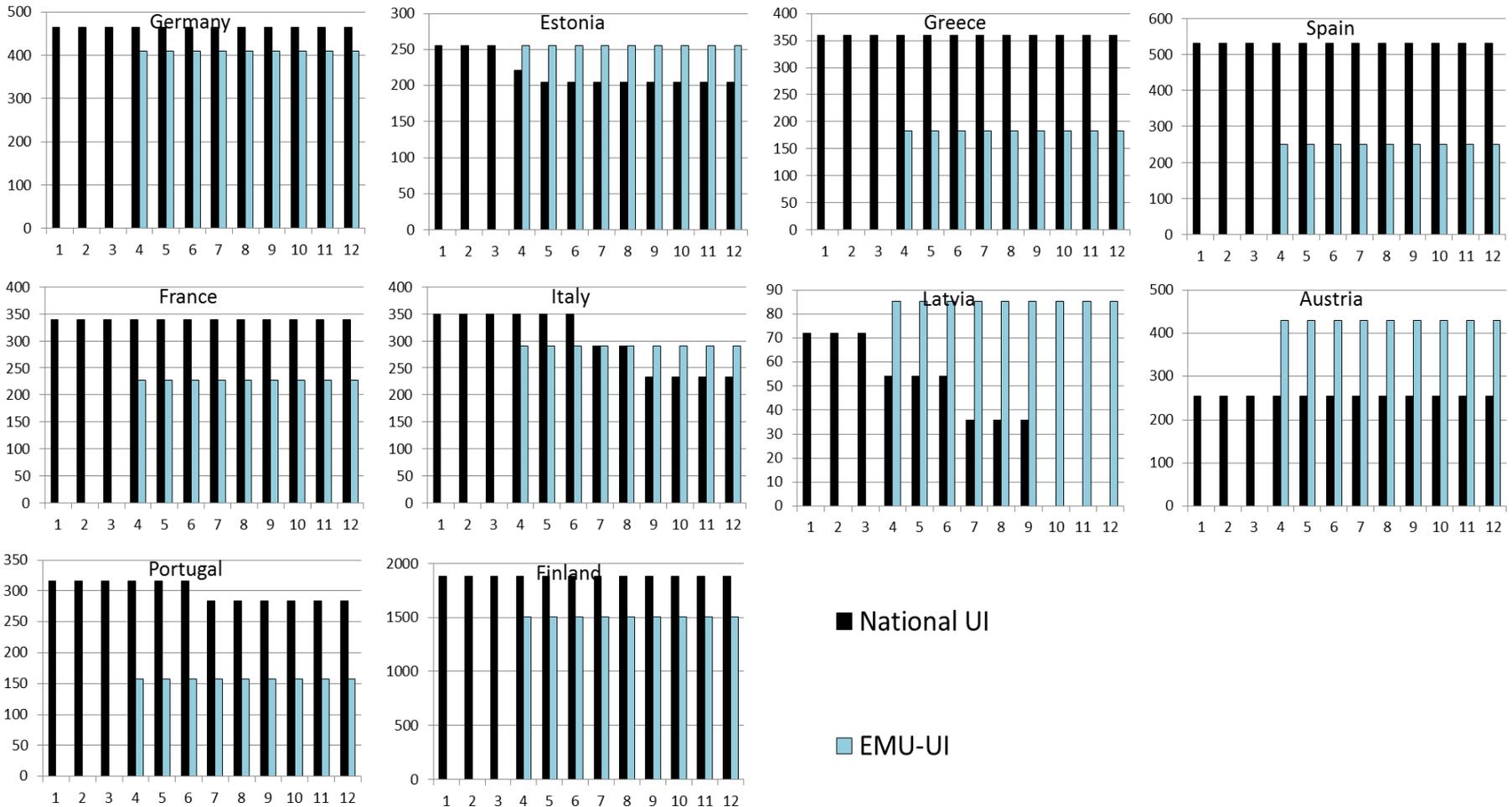
An example: Latvian with median earnings and full contributions (€UI month-by-month), 2012
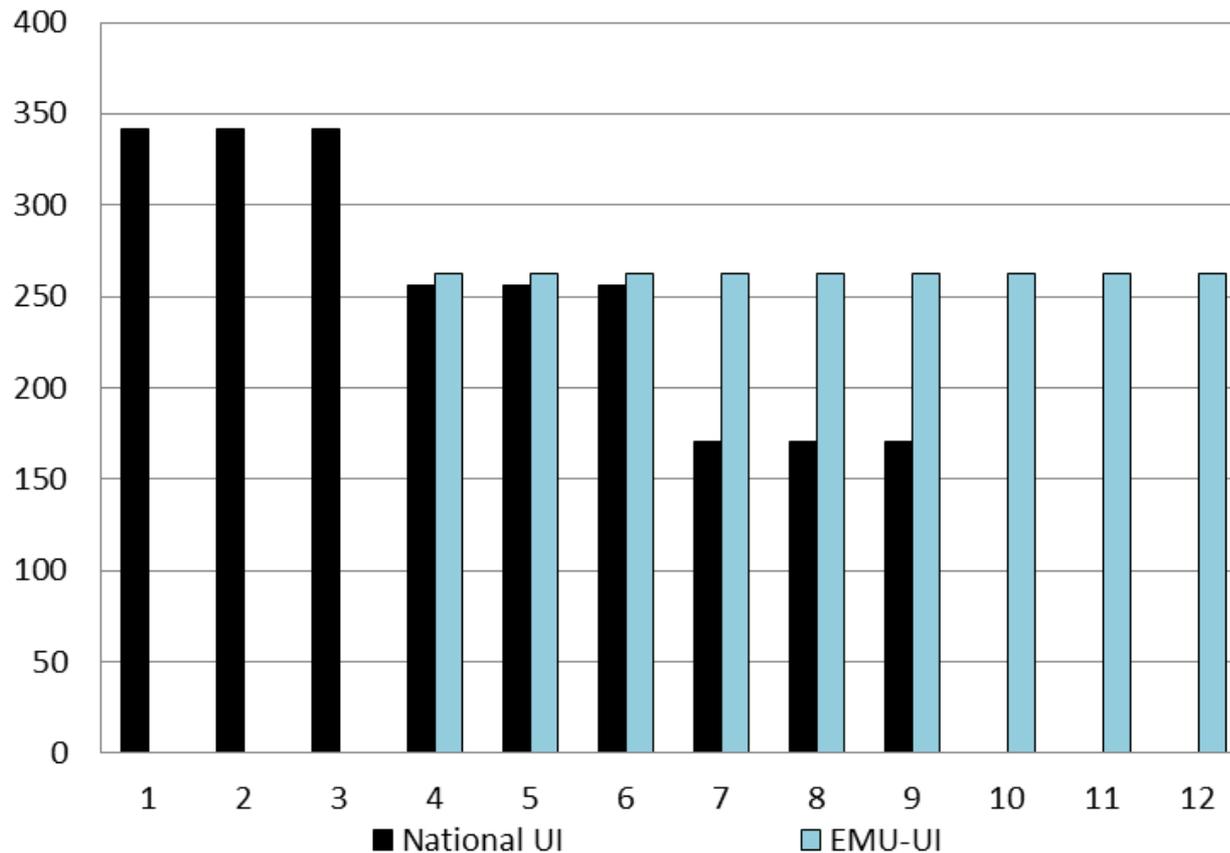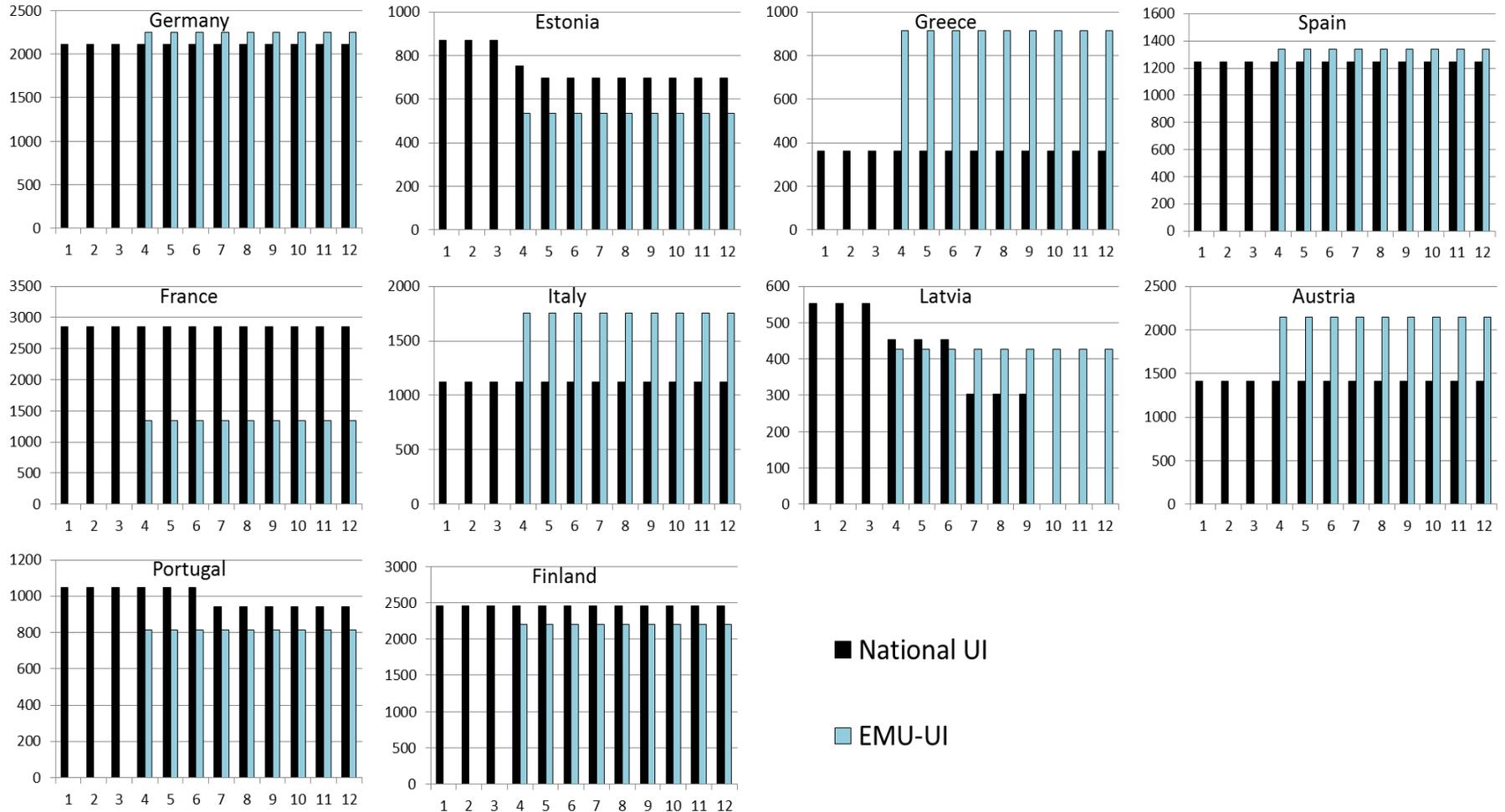
Entitlement to UI Benefits: median earnings and full contributions (€UI month-by-month), 2012
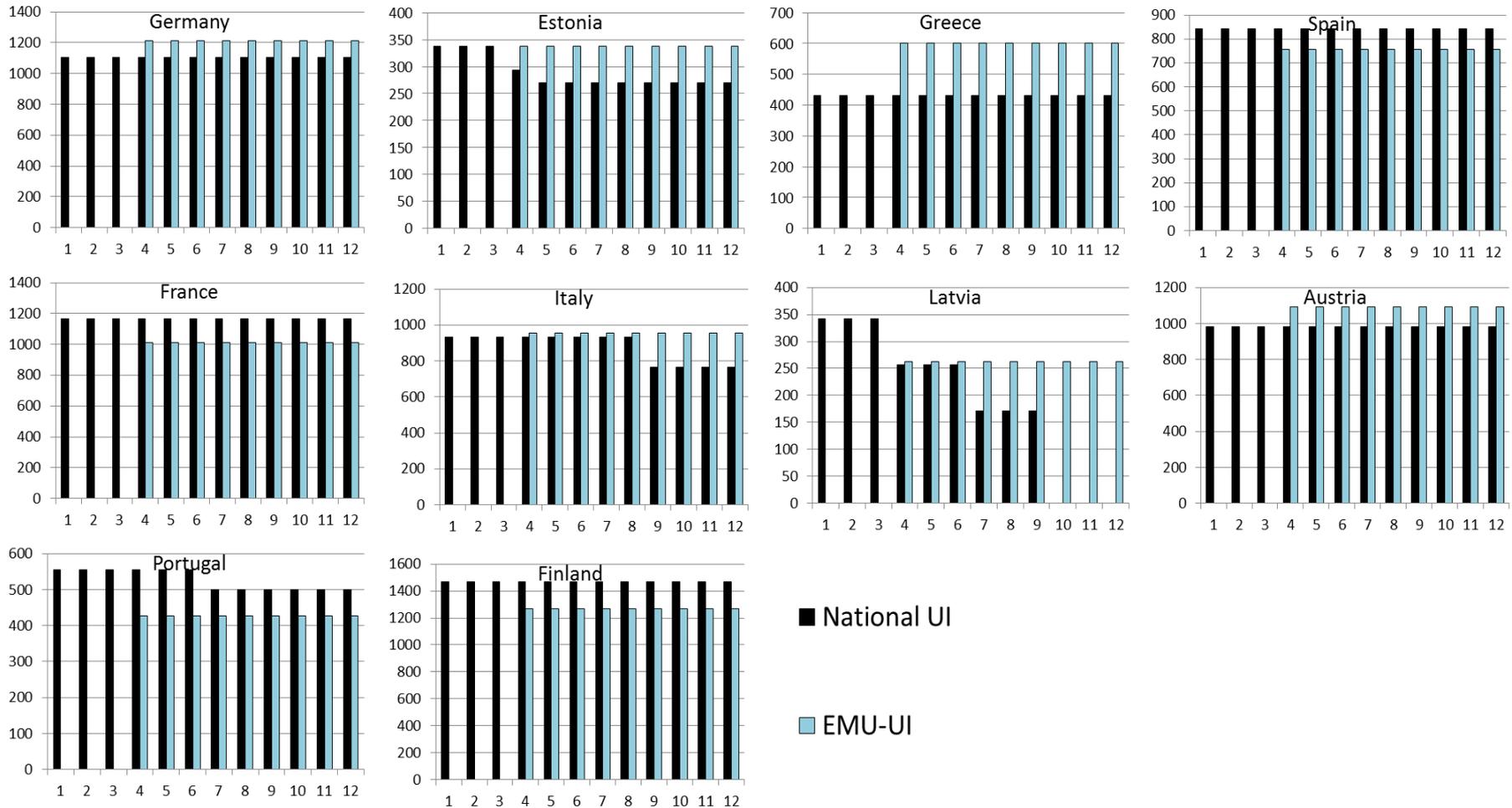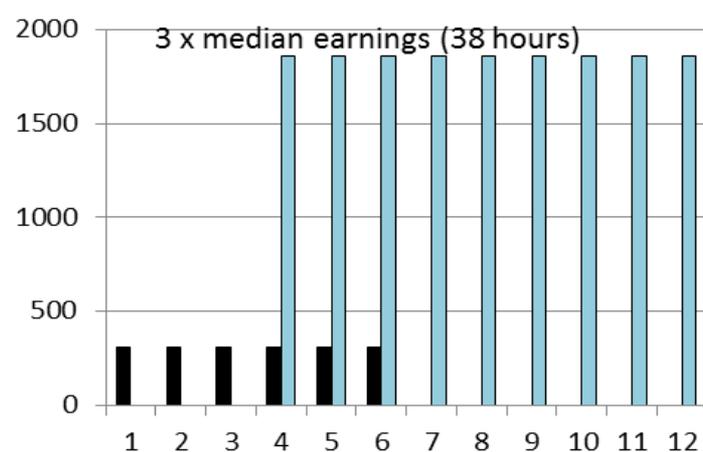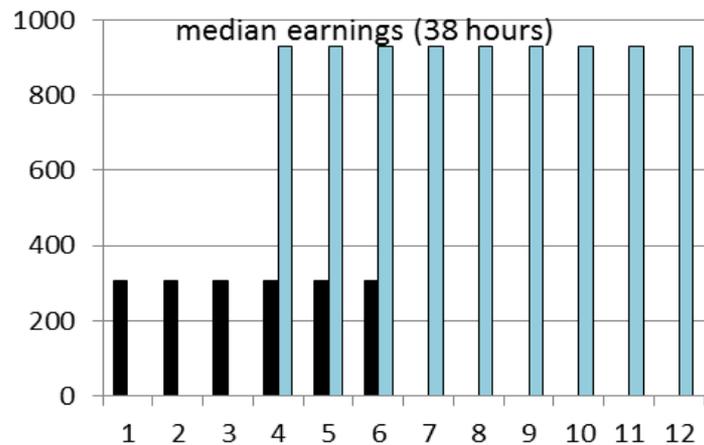
Entitlement to UI Benefits: bottom earnings quintile and full contributions (€UI month-by-month), 2012
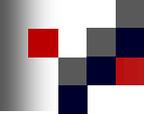
Entitlement to UI Benefits: top earnings quintile and full contributions (€UI month-by-month), 2012

An illustrative EU-UI in the UK context: (£UI month-by-month), 2012

Methods and data

- Use EUROMOD version G2.0
  - □ EU-SILC 2008
  - □ 2012 policies (UI and other)
- Simulate transitions from work to unemployment
  - □ For individuals with the highest unemployment risk
  - □ Select 2% and 6% of those with highest unemployment risk
  - □ Compare disposable hh income before and after transition, with and without EMU-UI
- Focus on additional effects of a common EMU-UI scheme at national level
- The first year of unemployment
  - □ Duration of unemployment is a separate issue and not modelled

Results

- 10 EMU countries: Germany, Estonia, Greece, Spain, France, Italy, Latvia, Austria, Portugal & Finland

- Estimation of unemployment risk

- Potential Coverage of UI (any UI): how much is it extended?

- Beneficiaries of EMU-UI (increase in total UI)

- Income stabilisation: household disposable income after all direct taxes and cash benefits (including UI)

- Risk of poverty on becoming unemployed: how much is it reduced?

- Additional cost

Probability of unemployment risk

- Select individuals for transition to unemployment
  - 2% decrease in employment
  - 6% decrease in employment
- Estimate risk of unemployment
  - Use cross sectional SILC data
  - Unemployment experience has negative effect in future employment prospect (Arulampalam et al., 2000)
  - Probit: 1 if at least one month in unemployment during reference period, 0 otherwise.
  - Based on those with positive earnings, aged 15-64, not in education or armed forces
- Controlling for:
  - Sex, age group (5), education (6), citizenship, earnings decile group, industry (12), occupation (9), work experience in year, whether part-time worker, marital status (5), household size, whether living with a partner, number of children by age group (3), number of earners, housing tenure (3), months worked in reference period (4).
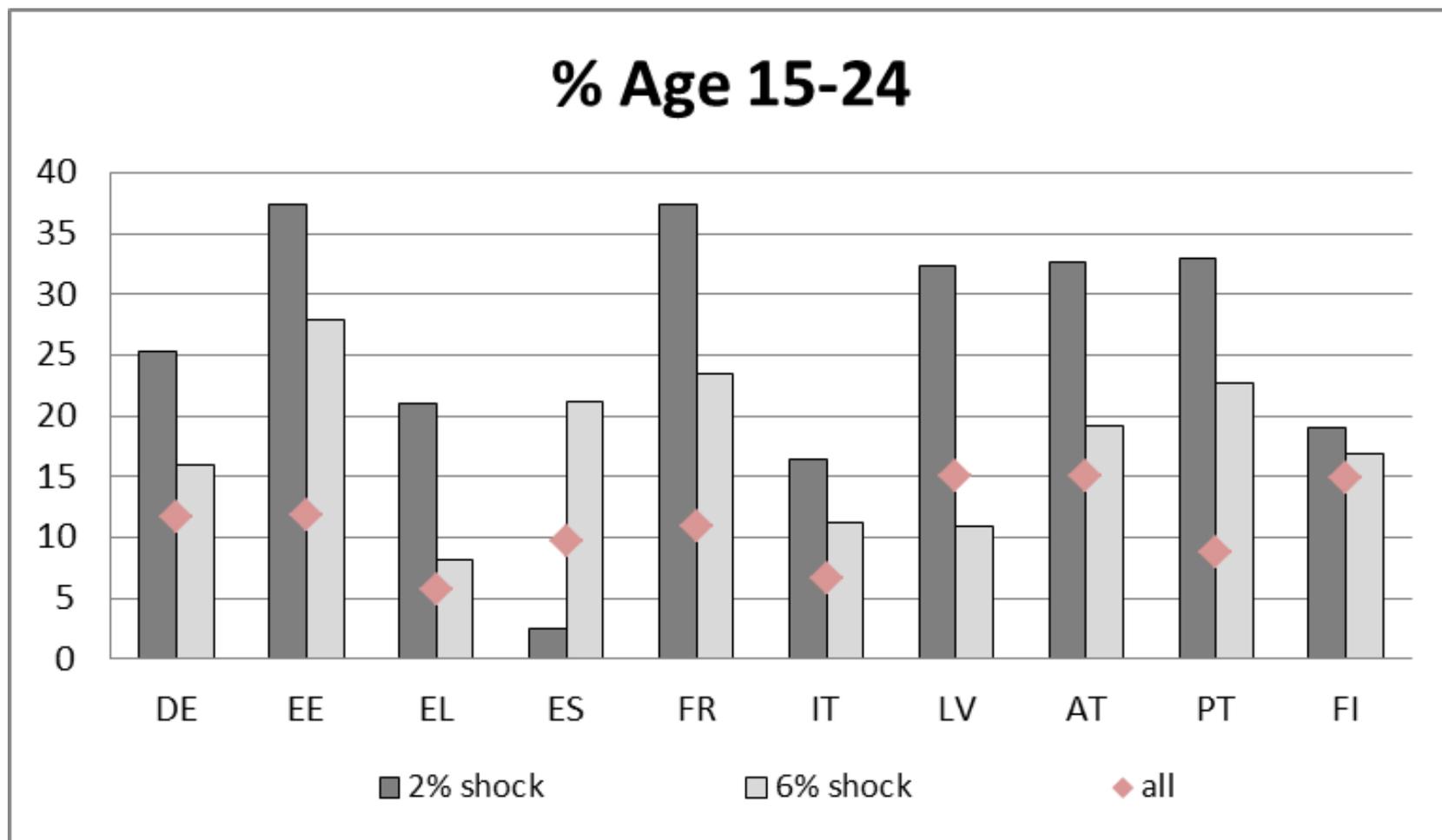
New unemployed: Sample sizes

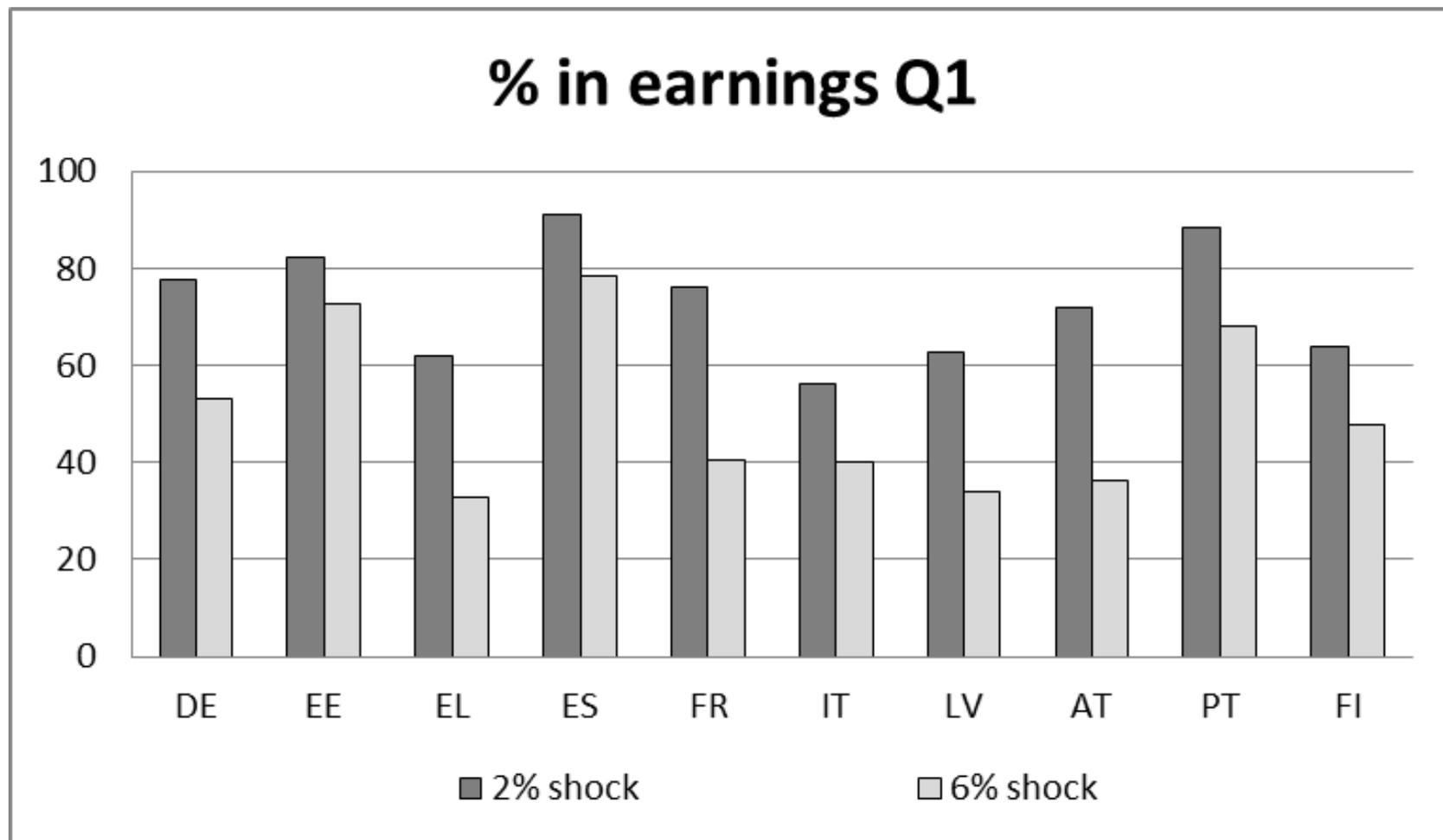| SHOCK	DE	EE	EL	ES	FR	IT	LV	AT	PT	FI
2%	237	163	145	302	197	388	112	114	84	228
6%	694	418	379	959	547	1,087	308	314	282	781

New unemployed: Characteristics

New unemployed: Characteristics

New unemployed: Characteristics

% in earnings Q1

	DE	EE	EL	ES	FR	IT	LV	AT	PT	FI

Legend: ■ 2% shock   □ 6% shock

Potential Coverage

- Several different ways to measure coverage (European Commission, 2013)

- Here, 'Potential' Coverage:
  - □ Proportion of the potential new unemployed entitled to any UI in the first 12 months of unemployment.

- Potential coverage likely to exceed 'usual' coverage estimates
  - □ Most currently employed have full year employment (assumed to have full contribution when put into unemployment)
  - □ Long term unemployment disregarded (we consider only first year of unemployment)

Potential Coverage (2% shock): % new unemployed covered by any UI

EUROMOD G2.0
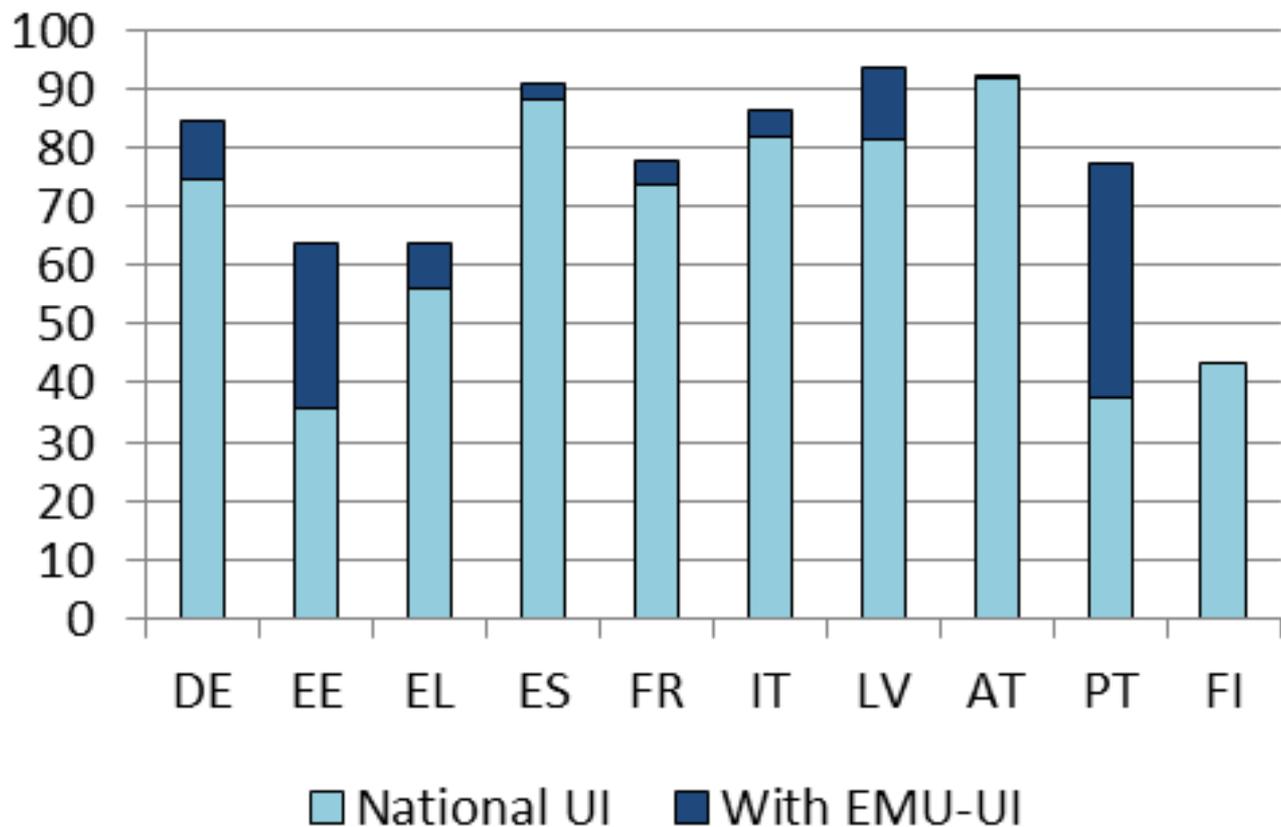
Potential Coverage (6% shock): % new unemployed covered by any UI


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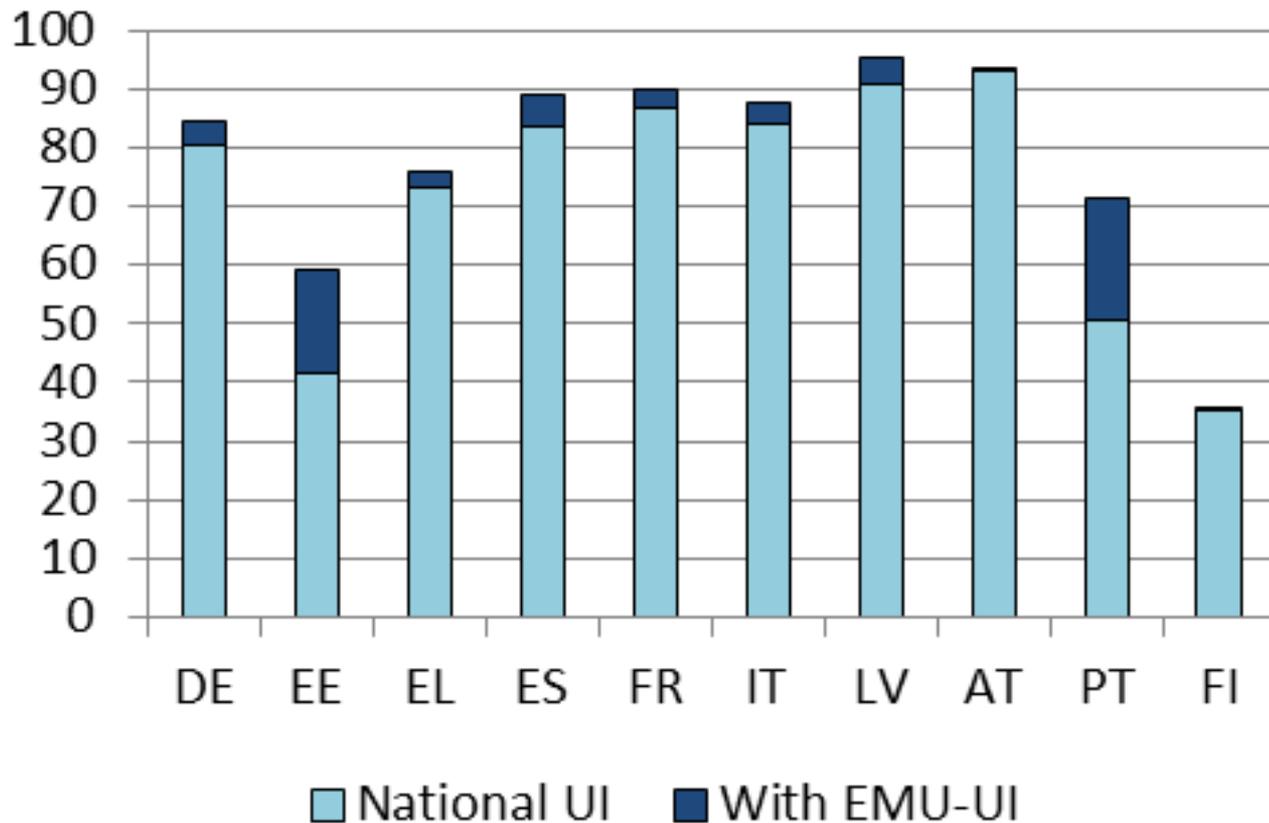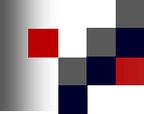
Beneficiaries

- Proportion of potential new unemployed who would receive an additional benefit from the EMU-UI

- Beneficiary if EMU-UI is higher than the national UI in at least one month over the first year of unemployment

- Distinguish between
  - Beneficiaries not entitled to national UI (captures increase in coverage)
  - Beneficiaries entitled to national UI (captures increase in benefit amount or duration)

Beneficiaries by unemployment shock scenario: % new unemployed who would receive additional EMU-UI

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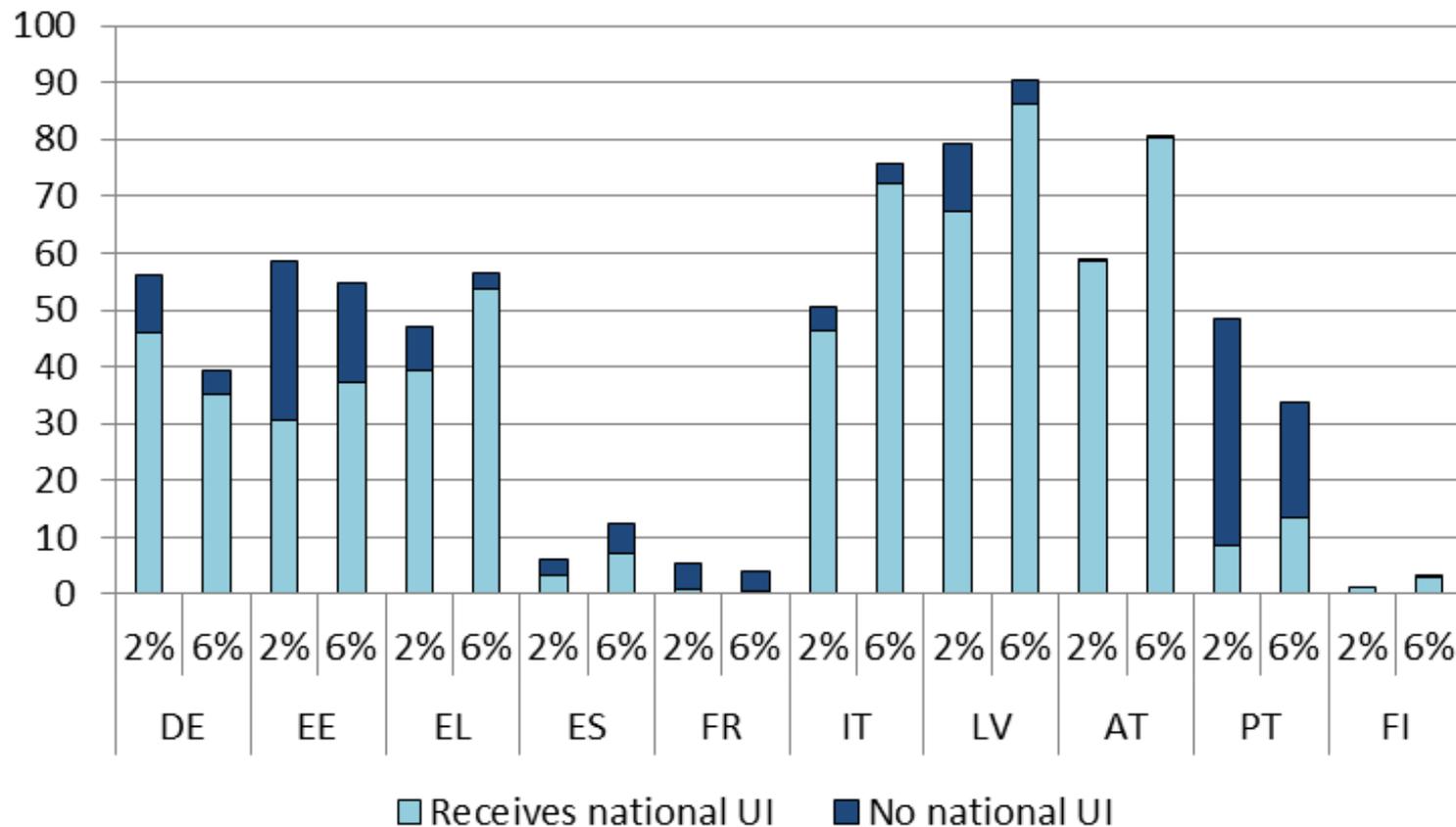
Within-Country Income Stabilisation

- Net effects of EMU-UI on household disposable income are of interest
  - Higher UI may mean paying higher taxes and SICs
  - Higher UI may mean reductions in benefits assessed on other incomes
- Assess the contribution of the EMU-UI to national automatic stabilisation resulting of national tax-benefit systems
- Income stabilisation coefficient (Bargain et al., 2013):

$$\tau = 1 - \frac{\sum_i (Y_i^{post} - Y_i^{pre})}{\sum_i (X_i^{post} - X_i^{pre})}$$

  where Y is household disposable income and X is market income

- Represents the percentage of the gross income from work, lost on becoming unemployed, that is retained in the form of reduced taxes and increased benefits, particularly UI.

Within country income stabilisation coefficient by unemployment shock scenario: with and without EMU-UI
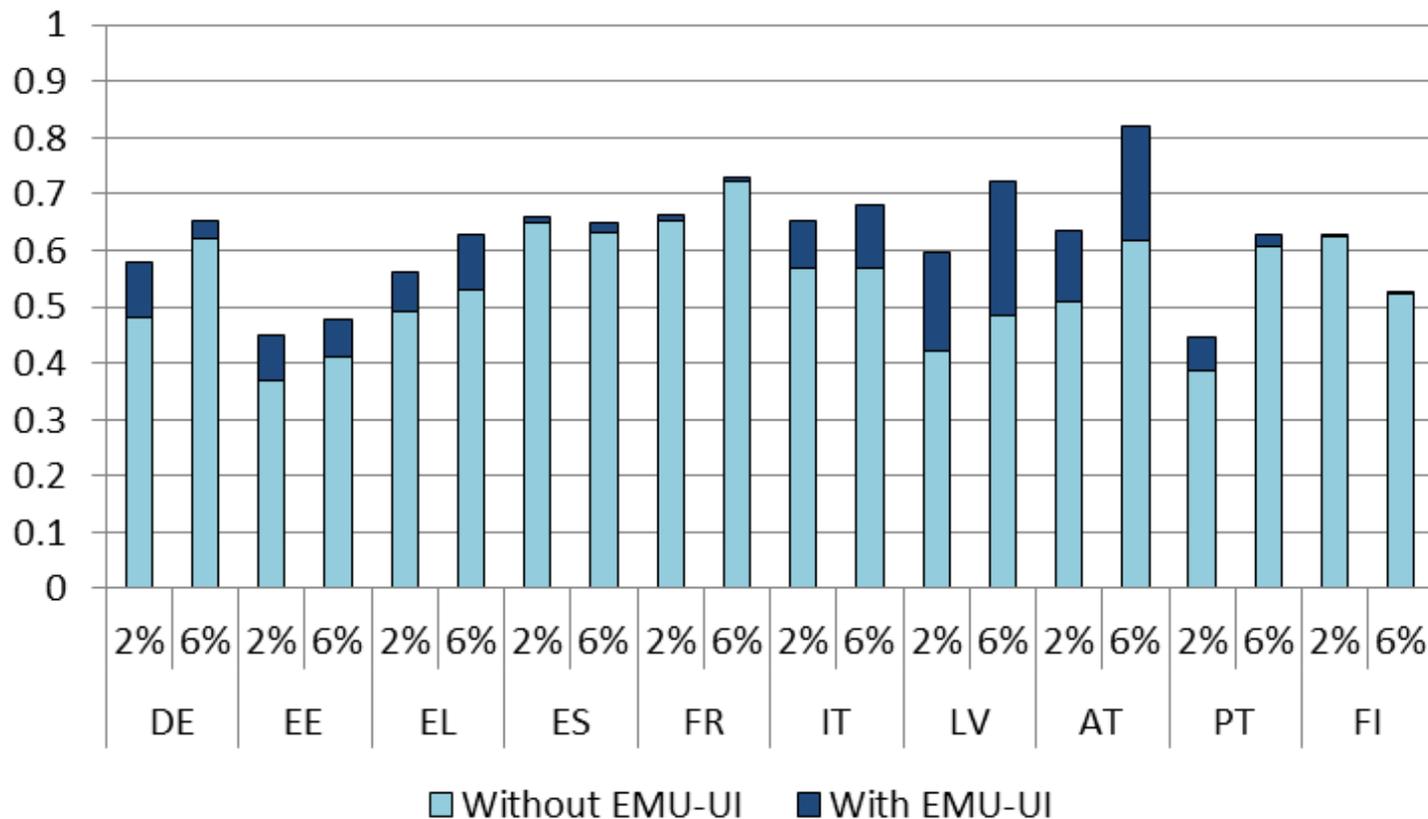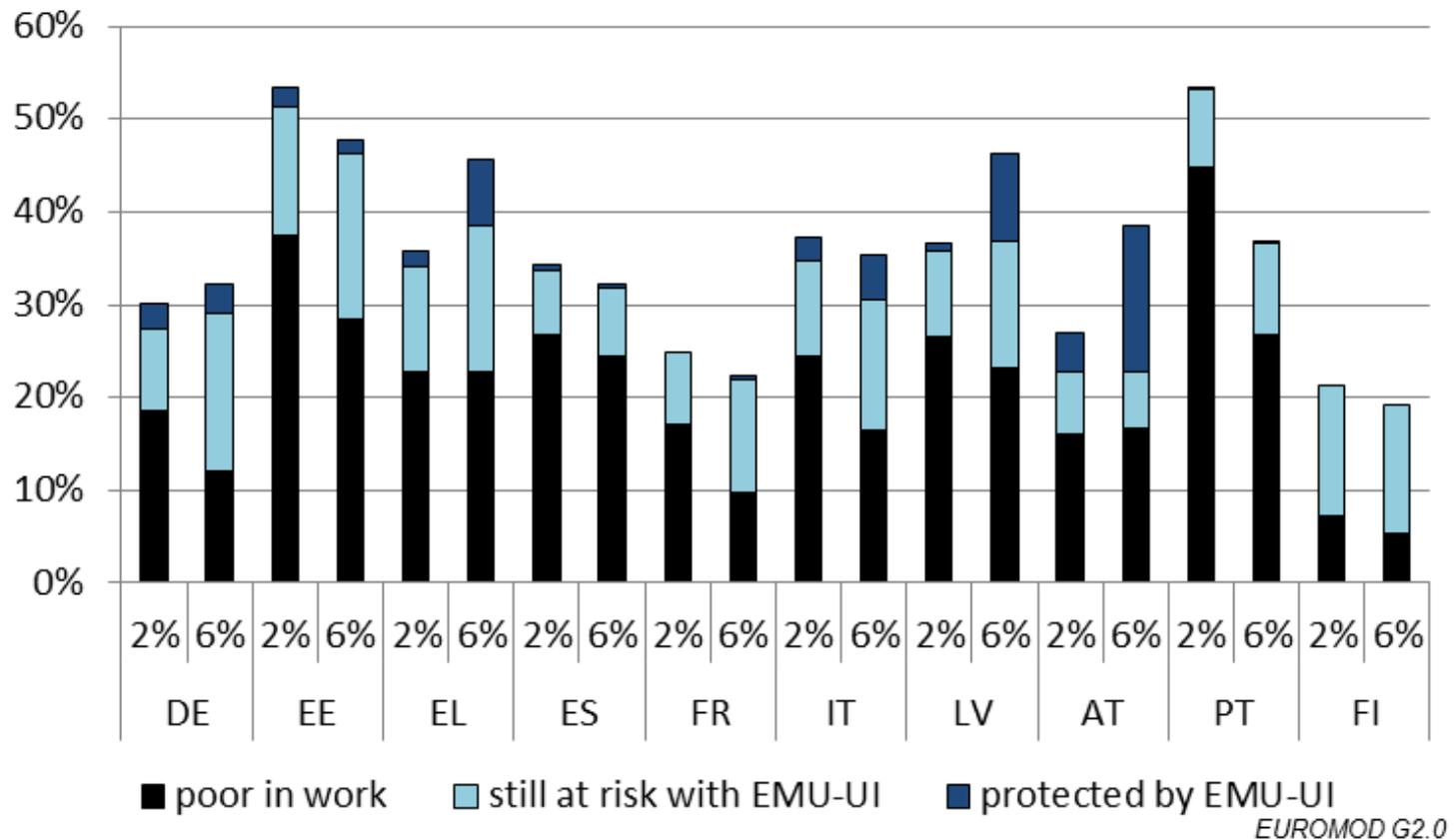
At risk of poverty

- Becoming unemployed increases the risk of falling into poverty
- Evaluate the potential of the EMU-UI to reduce risk of poverty for the new unemployed

At risk of poverty in unemployment with and without EMU-UI, by unemployment shock scenario


EUROMOD G2.0

# Average additional budgetary cost

- First round additional net budgetary cost in terms of average cost across all potential new unemployed in each country.

- Measured as proportion of median hh disposable income in each country
    - to factor out cross country differences in income levels

Average additional budgetary cost per unemployed person (as % of median household disposable income)
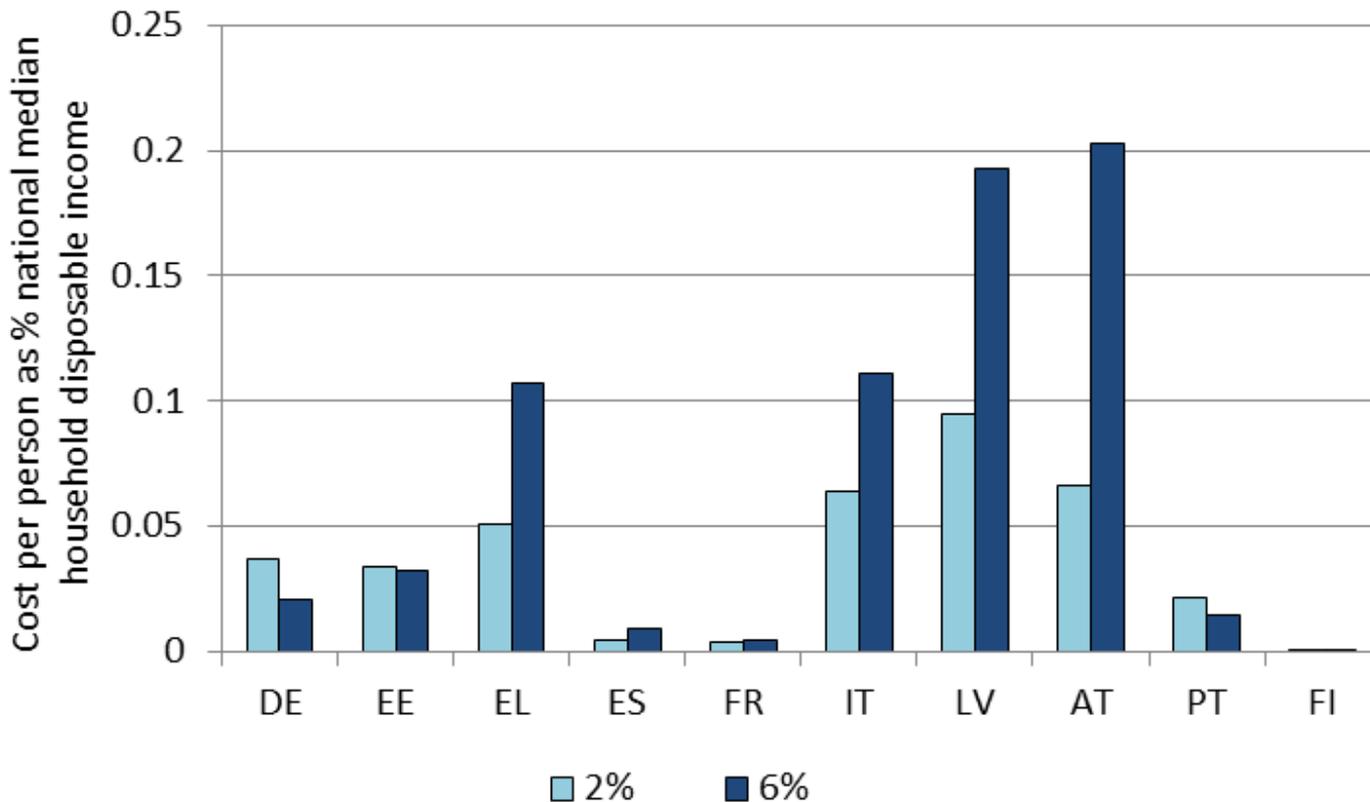
Concluding remarks

- Variations in design of national UIs, in many dimensions
  - FR, FI: national > EMU in most/all dimensions
  - EL, IT, LV, AT: EMU-UI>national in one or more important ways
    - LV national UI 9 months only
    - EL flat rate provides low income replacement
    - IT, AT: low ceilings and net earnings base in AT
- Variations in characteristics
  - Months in employment before transition, previous gross earnings, and contracts without insurance in IT
- EMU effect variations with shocks
  - Coverage and beneficiaries (with national UI) increase with the size of the shock: new unemployment entrants are more likely to fulfil eligibility conditions
  - Effect on income stabilisation higher under 6% shock, except in DE and PT where it decreases.
  - Effect on poverty fairly similar except in EL, LV and AT where higher under the 6% shock
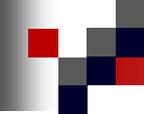
Concluding remarks

- A measure of the extent to which a common EMU-UI could replace national UIs providing a cross-country insurance mechanism minimising additional cost (and losers)
 - ☐ Challenging … but could go further

- Improving the protective and stabilising effects in addition to a cross-country insurance mechanism; necessary to
  - ☐ Improve generosity in Greece
  - ☐ Improve inclusiveness in Italy
  - ☐ Lengthen duration in Latvia

- Some gaps/inadequacies in most national benefits that a EMU-UI could fill

Future research

- Sensitivity test of the underlying assumptions of transitions to unemployment
- Cover all EMU countries
- Simulation of other unemployment scenarios
  - Asymmetric shocks
- Cost and financing options
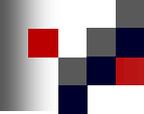
Thank you!

Acknowledgements and further information