

Early estimates on income and poverty during the pandemic

Online Expert meeting on nowcasting and mid-term projections through microsimulation models

16th of July 2021

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Outline

- *Background*
- *Methodological developments for FE 2020- focus on labour transitions*
- *Uprating factors and EUROMOD*
- *Results*
- *Caveats and next steps*



European
Commission

European Commission > Eurostat > Experimental statistics > Income inequality and poverty indicators

EXPERIMENTAL STATISTICS

INCOME INEQUALITY AND POVERTY INDICATORS

FEEDBACK

▲ Overview

Published statistics

European Statistical System
(ESS)

Collaborative economy platforms

European Occupational Diseases
Statistics (EODS)

Income and consumption: social
surveys and national accounts

Income, consumption and wealth

INCOME INEQUALITY AND
POVERTY INDICATORS

Labour market transitions

Micro high-growth enterprises

Multinational enterprise groups
and their structure

QALI

Quarterly registrations and
bankruptcies

Services Trade by Enterprise
Characteristics (STEC)

Why do we need flash estimates of income inequality and poverty indicators?

experⁱmental

Providing timelier social statistics – especially indicators on income poverty and inequality – is a priority for the Commission and the European Statistical System.

In order to better monitor the effectiveness of social policies at EU level, it is important to have timelier indicators.

Therefore, *flash estimates*, released much earlier than the final data, have been developed. These can be used in preliminary discussions and analyses until the final data become available.



SEE ALSO

Dedicated section on EU-SILC
related statistics

*EU-SILC main source for
income and poverty
statistics at EU level*

*→ usually 12-18 month
after the reference period*

Flash estimates to provide early information (6 months):

- published as experimental statistics from 2016*
- based mainly on microsimulation (Rastrigina et al., 2016; Leulescu et al. 2016)*
- national flash estimates (max 6 countries): microsimulation/
registers/current income*

Nowcasting via microsimulation

>> income 2017

...

European
Commission
>> FE for the change 2019-2020
(at-risk-of-poverty rate, deciles...)



eurostat



JRC,
national
teams



NSI

Labour updates:
→ transitions

X Reweighting



Updating/Indexa
tion market
incomes



Policy updates



Plausibility
analysis

- Bilateral consultations with NSIs

Labour transitions

Methodology- labour transitions (1)

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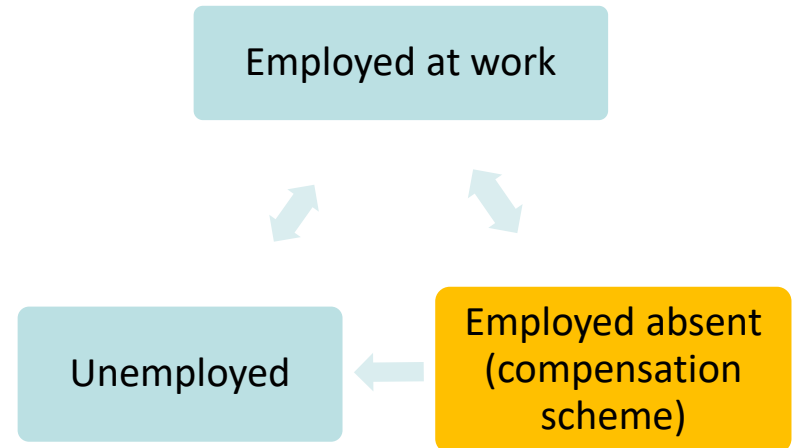
Two steps:

- 2017-2019
- 2019-2020 → quarterly

Main sources:

- Labour force survey- quarterly, including longitudinal info
- Administrative data on beneficiaries of STW schemes - monthly

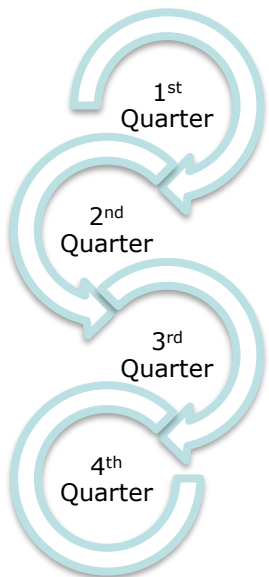
Three types of transitions:



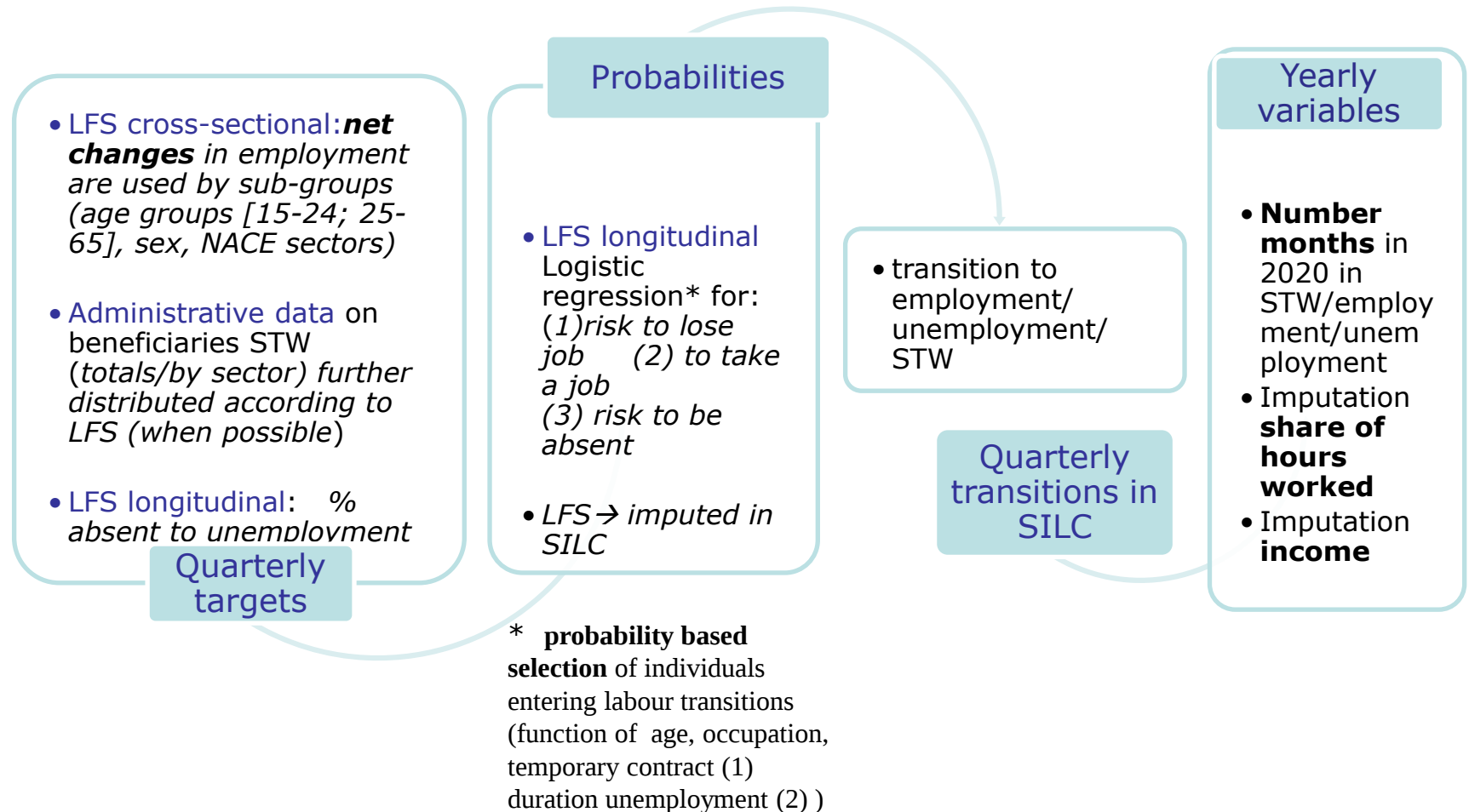
Quarterly transitions

- To capture infra-annual movements on the labour market to model the impact on labour

→ estimate **duration** in unemployment/compensation scheme throughout the year 2020

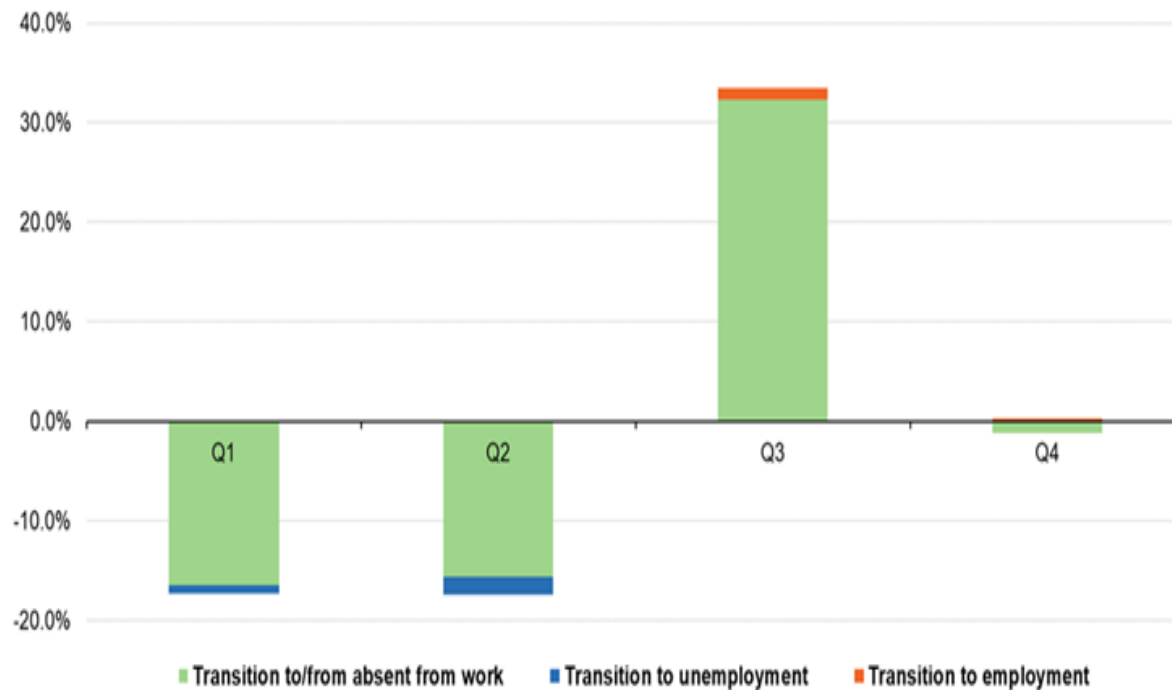


Methodology- labour transitions (2)



Estimates quarterly transitions, EU

Employment at work, quarter on previous quarter change, 2020



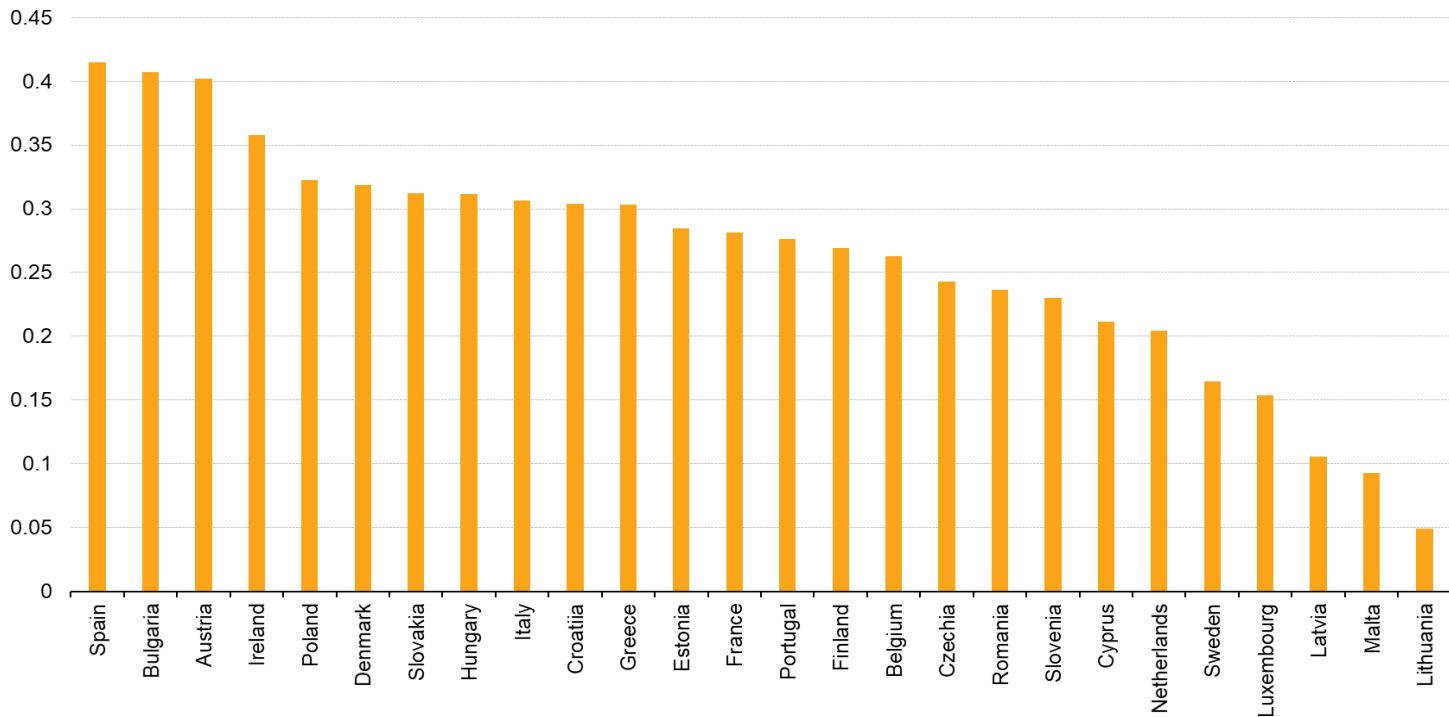
EU(*) - EU27 without Germany for which no quarterly LFS data is available

eurostat 

Recovery in Quarter 3 and stability in Quarter 4

Multiple transitions during 2020, EU

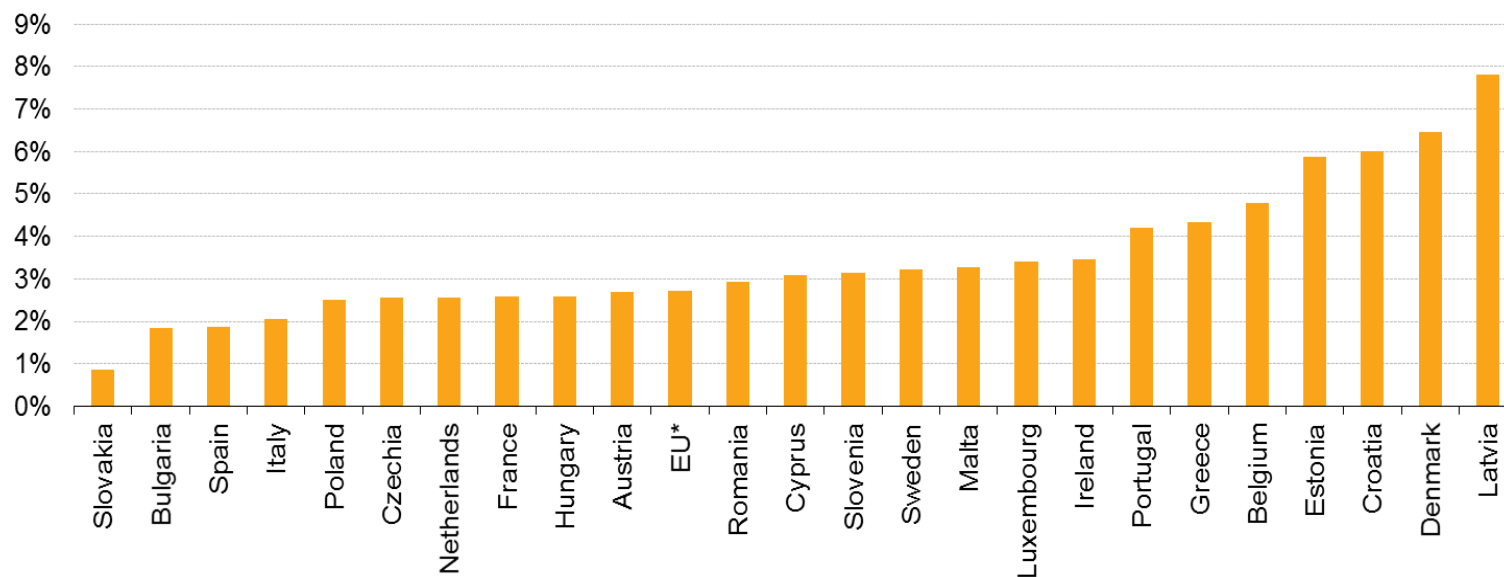
Estimated percentage of people doing multiple transitions by country, 2020



Source: Eurostat

Transitions from STW to unemployment

Share of people absent going to unemployment by country, 2020



Source: Eurostat

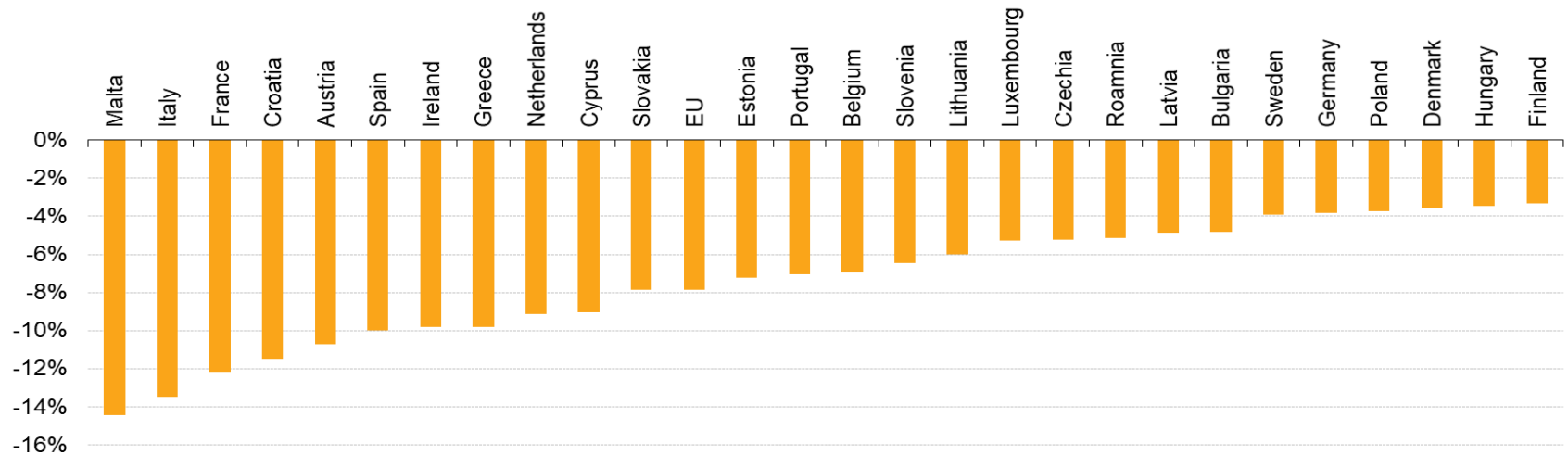
EU* - EU except Germany

Not available: Germany

Low reliability: Italy and Finland

Reduction in number of months worked during 2020,%

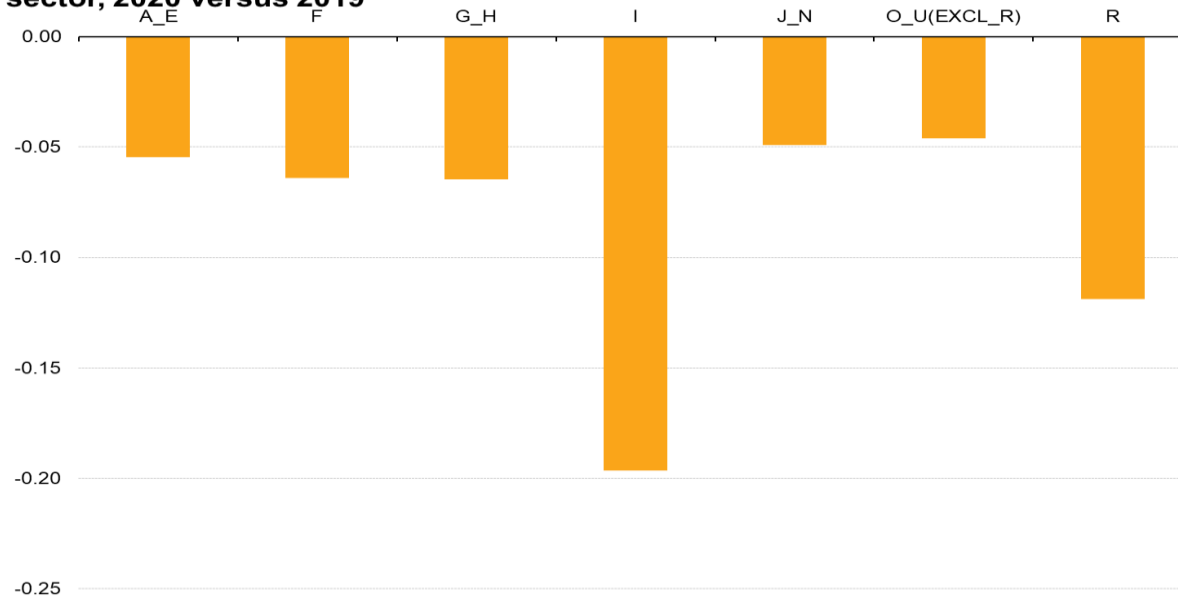
Year on year change for number of months worked by country, 2020 vs 2019



Source: Eurostat

Reduction in number of months worked during 2020, by sector (%)

Year on year change for number of months worked by activity
sector, 2020 versus 2019



Source: Eurostat

A_E: Agriculture, mining and manufacturing, electricity and water supply

F: Construction

G_H: Trade and transport

I: Food and accommodation

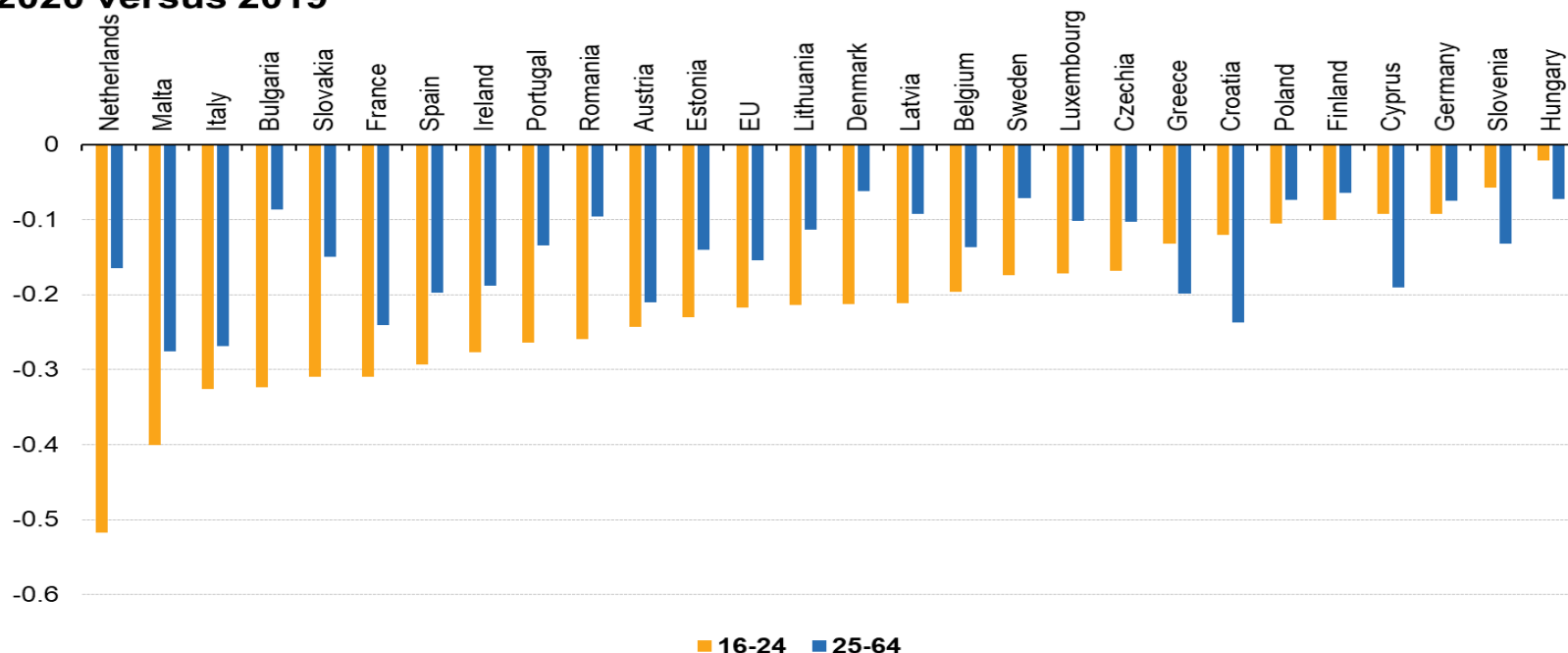
J_N: Information, communication and financial services

O_U(EXCL_R): Non-financial services excluding "art and entertainment"

R: Art and entertainment

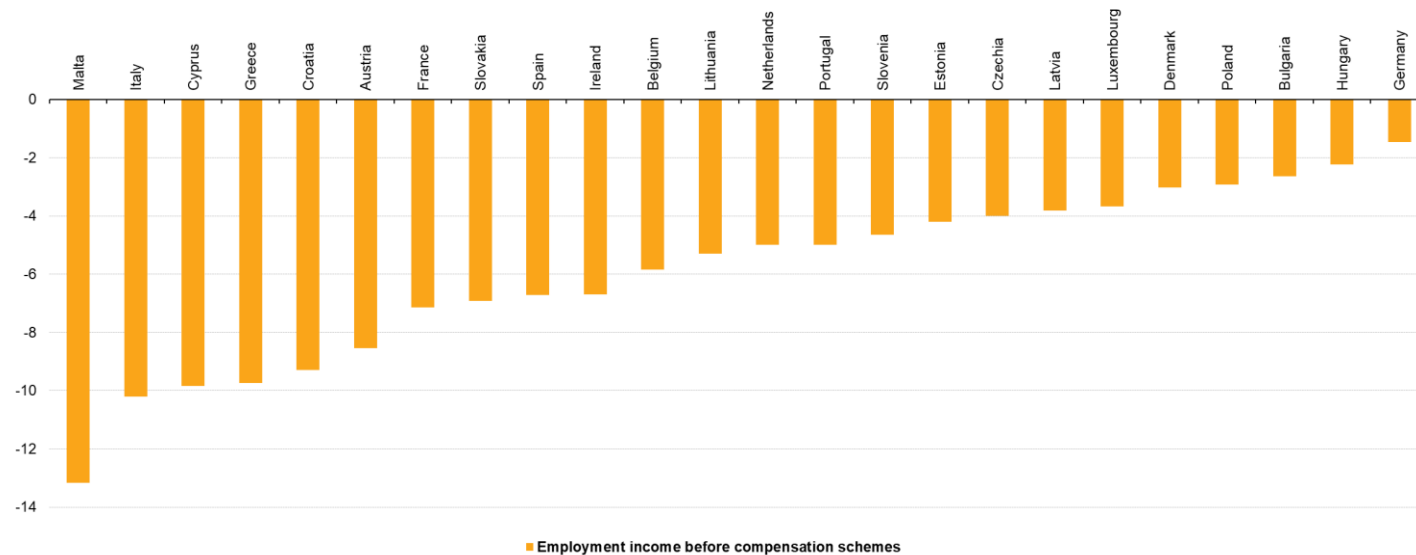
Reduction in number of months worked during 2020, by age group(%)

Year on year change for number of months worked by age group, 2020 versus 2019



Estimated losses in employment income via labour transitions

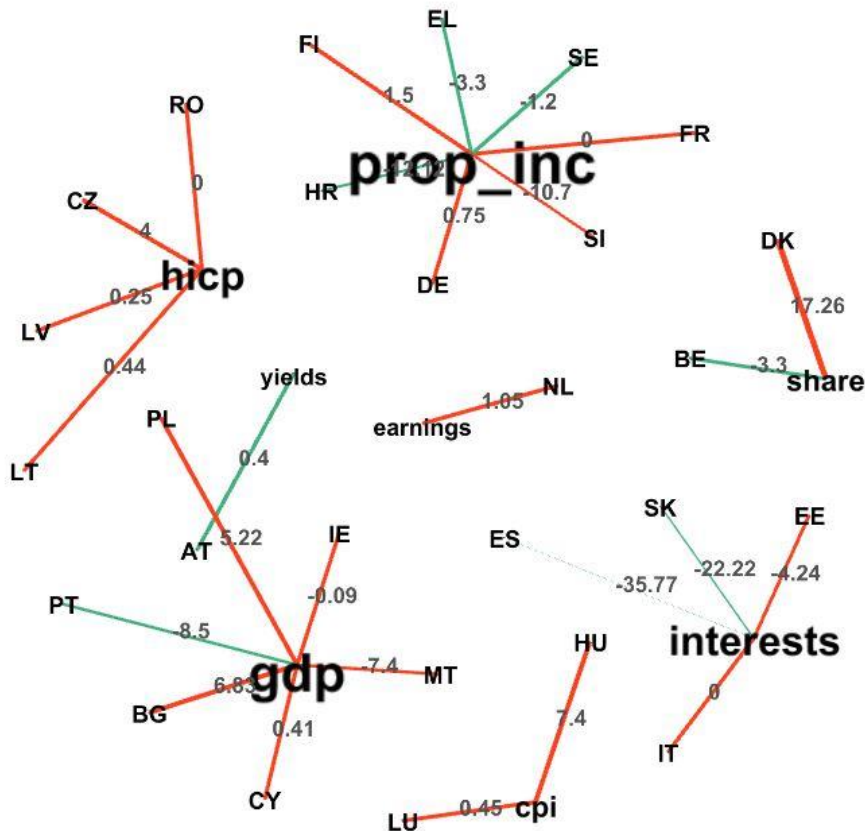
Year on year change country, age group 16-64, 2020 versus 2019



Source: Eurostat
Not available: Romania and Sweden
Not applicable: Finland

Uprating market incomes

Uprating factors



Issues:

- Timeliness
- Heterogeneity- e.g. very low comparability in the context of COVID for property income (HY090)
- HICP (very stable) vs. GDP/Investment income (much larger drops)

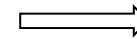
Solutions:

- Further harmonisation
- Updates

Uprating wages

X Labour cost index:

- Reduced working hours in 2020
- Stable wages (due to compensation benefits included in several countries)



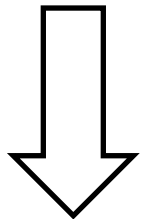
Very large range of values (-20%;40%)

X Euromod uprating factors:

- Lack of harmonisation
- Risk of distorting the losses (negative uprate + labour transition to absence)

? National accounts- used in a few cases after consultation NSIs:

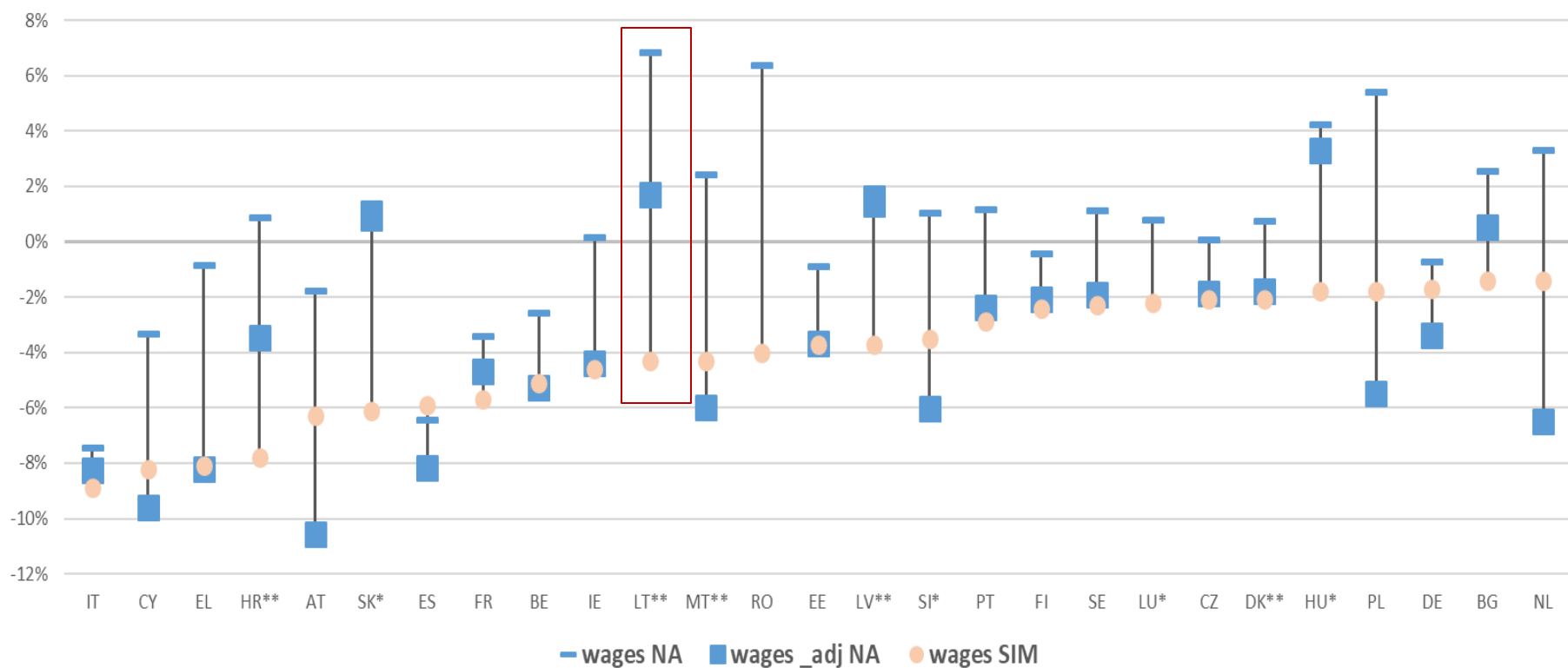
- Wages can include subsidies and compensation



	BE	CZ	DE	DK	IE	EL	ES	FR	HU	HR	IT	CY	LV	LT	MT	NL	AT	PT	PL	FI	SK	SI	SE
	Belgium	Czechia	Germany	Denmark	Ireland	Greece	Spain	France	Hungary	Croatia	Italy	Cyprus	Latvia	Lithuania	Malta	Netherlands	Austria	Portugal	Poland	Finland	Slovakia	Slovenia	Sweden
Short-time work	x	x	x	x	x	x		x	x	x	x			x	x	x	x	x	x	x		x	x
recorded as subsidies on production (D39) (to employers)		x	x	x	x	x			x	x				x	x	x	x	x	x			x	x
recorded as social benefits (D62)	x	x	x		x			x			x				x			x		x			

$$D11_{20} \text{ Adjusted} = D11_{20} - (D39_{20} - D39_{19})$$

WAGES SIMULATED VS NATIONAL ACCOUNTS



Policy updates (EUROMOD)



Methodology: policies

➤ Wage compensation schemes

- Payments from government to workers/firms
- Fixed amount (EL, HR, MT);
- % of wage (min and/or max); other (% of net earnings, AT, IE)

➤ Self –employment compensation schemes

- Belgium, Cyprus, Czechia, Denmark, Greece, Spain, Finland, France, Croatia, Italy, Malta, Portugal, Romania and Sweden.

➤ Taxes (reduction)

- E.g. → in AT supplements to tax credit have been implemented in 2020, leading to an important decrease in taxes.

➤ Other benefits:

- e.g. → minimum income schemes; parental leave, one-off payments for children; pensions increase

Results FE 2020 - published in July 2021

European Commission > Eurostat > Products Eurostat News > Early estimates of income and poverty in 2020

Early estimates of income and poverty in 2020

05/07/2021



experimental



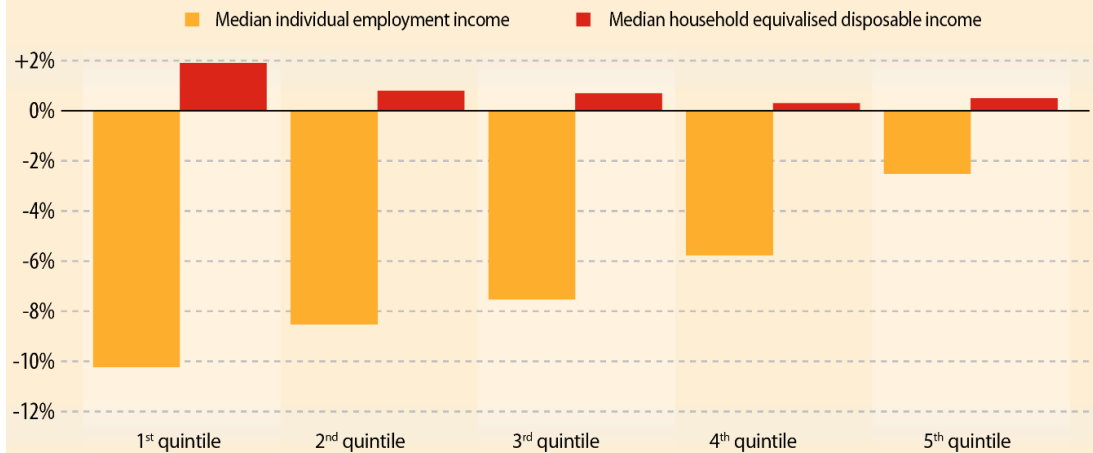
In 2020, the year of the COVID-19 outbreak, the [median](#) employment income of the working age population (18-64) in the EU decreased by 7% compared with 2019. However, the median [disposable household income](#) as well as the [at-risk-of-poverty rate](#) remained stable, with varying trends across countries.

This information comes from the [early estimates](#) on income inequality in 2020 published by Eurostat today. This article presents a handful of findings from the more detailed [Statistics Explained article](#).

Left part of the income distribution more affected by the labour market shock

Strong policy effects that mitigate the losses in earnings

Median employment income vs. median disposable income in the EU, 2020 (% change compared with 2019, by quintile)



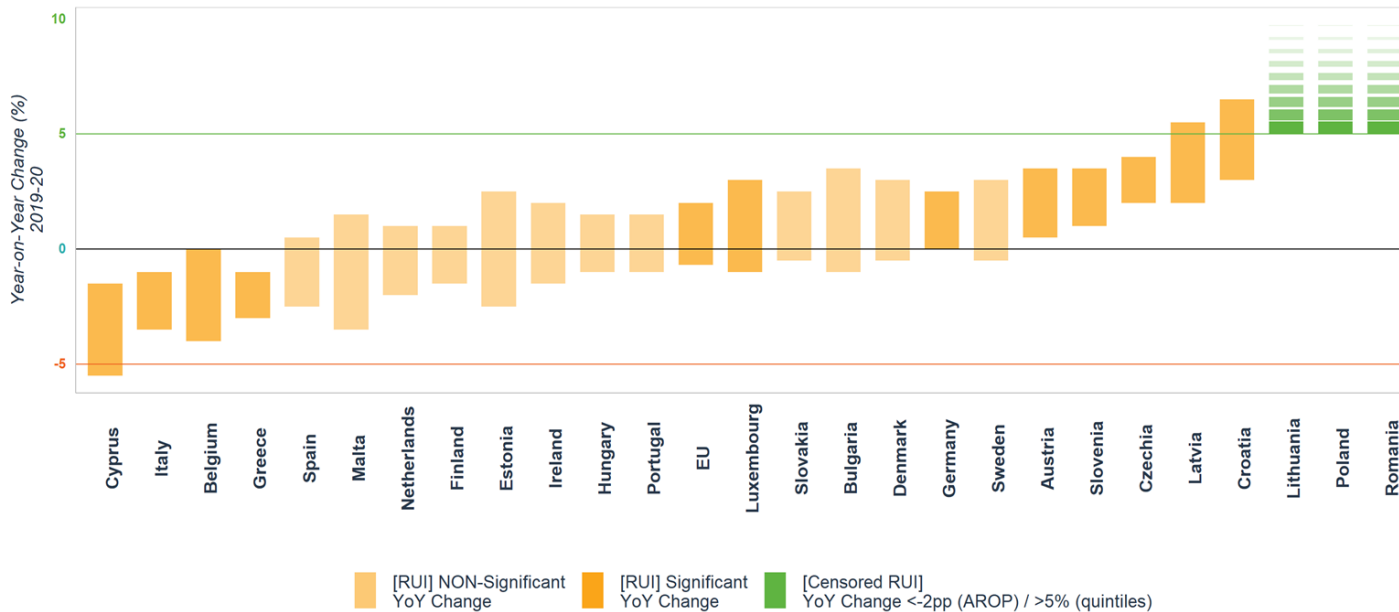
Results FE 2020 - published in July 2021

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Only uncertainty
interval published
at country level- no
point estimates

Median income : Year-on-Year Change (%) 2019-20

Flash Estimates (FE) for income year 2020 as Rounded Uncertainty Interval (RUI)



Not published : France

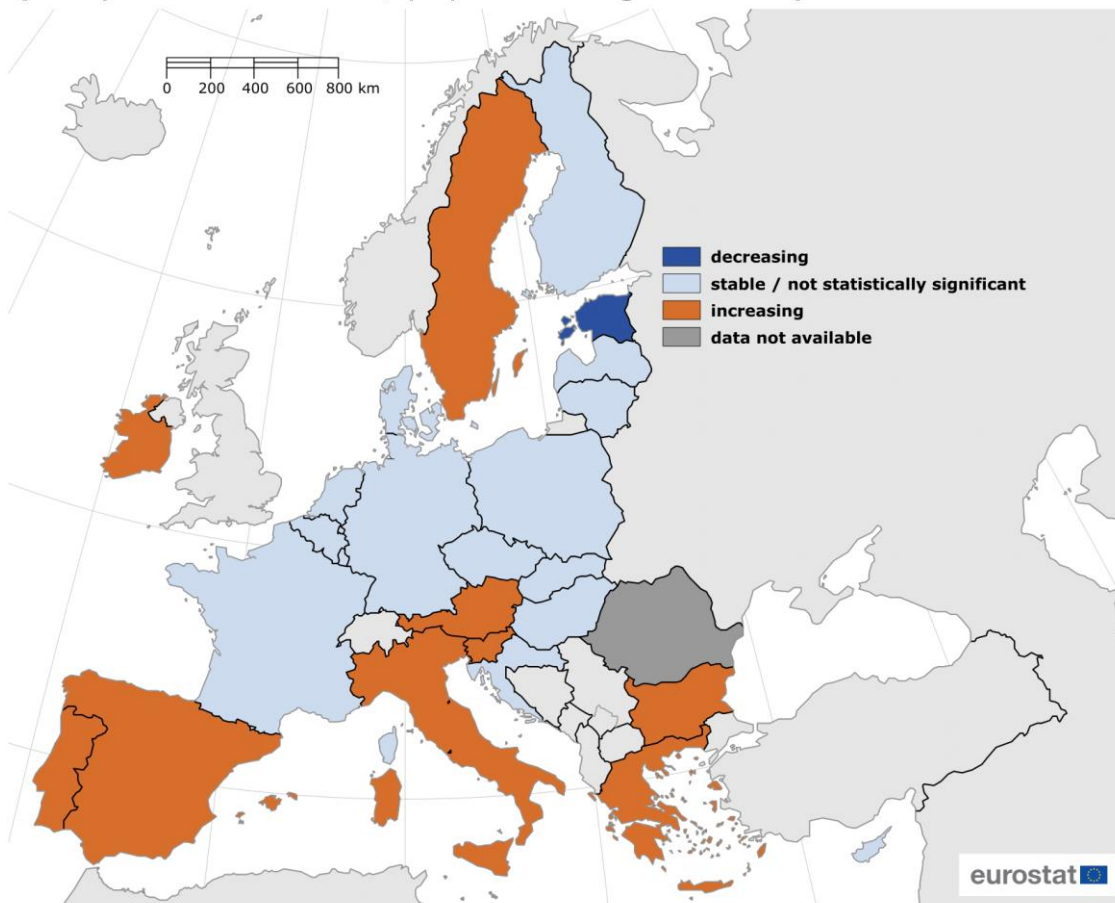
Source: Eurostat

eurostat

Romania, Sweden
based on national
estimates



At-risk-of-poverty rate in 2020, early estimates (compared with 2019; population aged 18-64)



Explanatory note for 'stable / not statistically significant': expected changes have a high level of uncertainty and should be considered not significantly different from 0.

Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat – IMAGE, 07/2021

Results FE 2020 - published in July 2021

Only uncertainty
interval published
at country level- no
point estimates

[Early estimates of income and poverty in 2020 -
Products Eurostat News - Eurostat \(europa.eu\)](#)

FE 2020 : caveats

- *Discrepancies in auxiliary sources for uprating factors*
- *High uncertainty for the estimation of self-employment income*

- *Overcompensation of losses via EUROMOD?*

Eligibility criteria for STW and possible over-simulation of benefits

- we estimate that 15 EU countries at least 10% of employees have a full-time equivalent salary below the national minimum wage.
- in several countries we have more than 20% employees in quintile 1 with higher earnings after STW
- Informal workers /self-employed
- Full take-up assumption for other benefits: e.g. minimum income in Spain
- *Registration of taxes: at payment (SILC) or accrual (EUROMOD?)*

Next steps

- *September/October: working paper for labour transitions and income from work (data also to be released)*
- *Further analysis breakdowns, low work intensity- household factor?*
- *Test the labour transitions using 2021 LFS data- expected changes due to new framework regulation*
- *Further work on better integration of labour transitions into Ima add-on (with JRC)*
- *Further work on over-compensation and uprating factors? Feedback from EUROMOD network?*