



# Co-Designing Indicators for Graduate transition to Employment : what should we measure?

---

Emmanuel Ngoy, Ana I. Melo, Cláudia Figueiredo  
and Teresa Carvalho

University of Aveiro/CIPES

April 20th 2026

# Objectives of the Working package 3

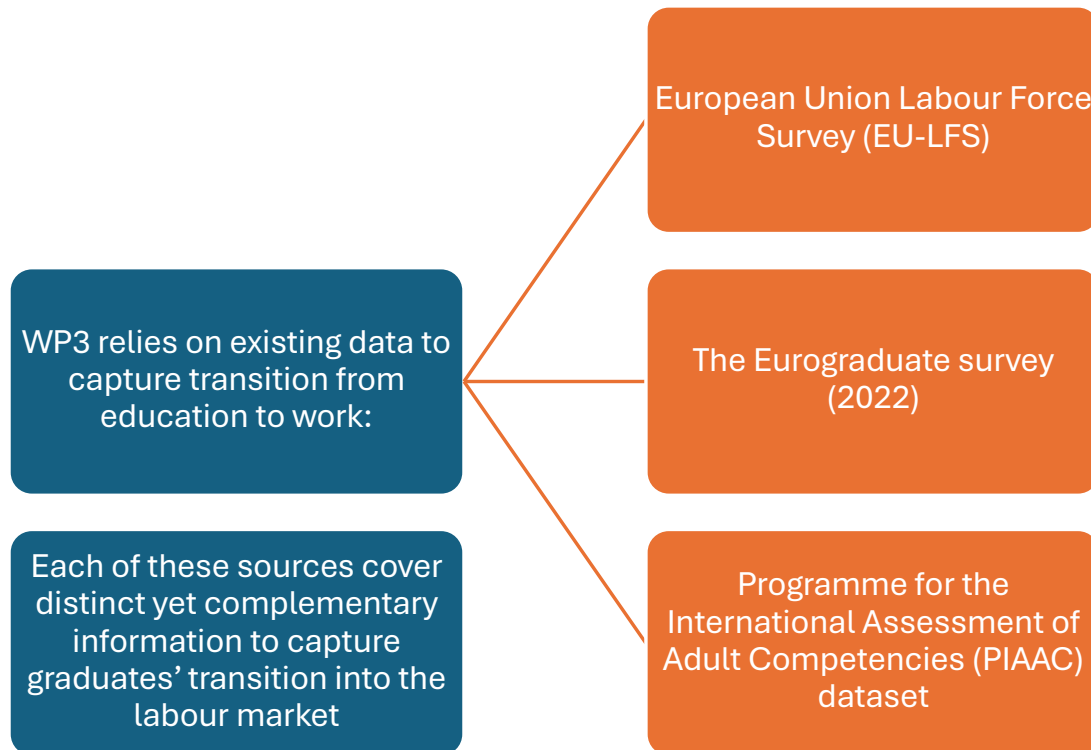
## WP3 focuses on:

- How the COVID-19 crisis has reshaped transition of young people from school-to-work (SWT) across Europe

## Key objectives include:

- Exploring emerging patterns and typologies transition of young people from education to work across Europe
- Analysing pre-vs. post-COVID-19 transition patterns in Europe, including their institutional determinants (e.g., labour market institutions, education systems)
- Examining the extent to which the COVID-19 pandemic has affected the transition path
- Identifying which groups have been disproportionately affected by these shifts (e.g., men vs. women, migrant vs. non-migrant, etc.)

# Data Sources



# EU LFS



Yearly and quartely datasets that provide information on labour market conditions of individuals aged 15 and above in European countries



It assembles information collected by national statistical offices to ensure cross-country comparability



It provides detailed information on educational attainment, field of education, employment status, job characteristics, recent education and training episodes, etc.

# Eurograduate survey (2022)

- It collects detailed information on graduates from higher education in 17 European countries, following the European Council's Recommendation (2017/C 423/01) On improving graduate tracking systems
- Two cohorts : University graduates who completed their degree in 2020/2021 (one year before the survey) and 2016/2017 (five years before the survey)
- It provides detailed information on the learning experience of university graduates and their transition to the labour market (e.g., first employment conditions, length of transition to first employment)

# PIAAC



It is an International survey of skills assessment among individuals aged 16 and 65 in OECD countries



Two cycles : First cycle (2011-2018) and second cycle (2022-2023)



It collects information on skills of respondents and their utilisation in the work place (e.g., literacy, numeracy, problem-solving ), their education level, employment status, etc.

# Defining and measuring transition to employment

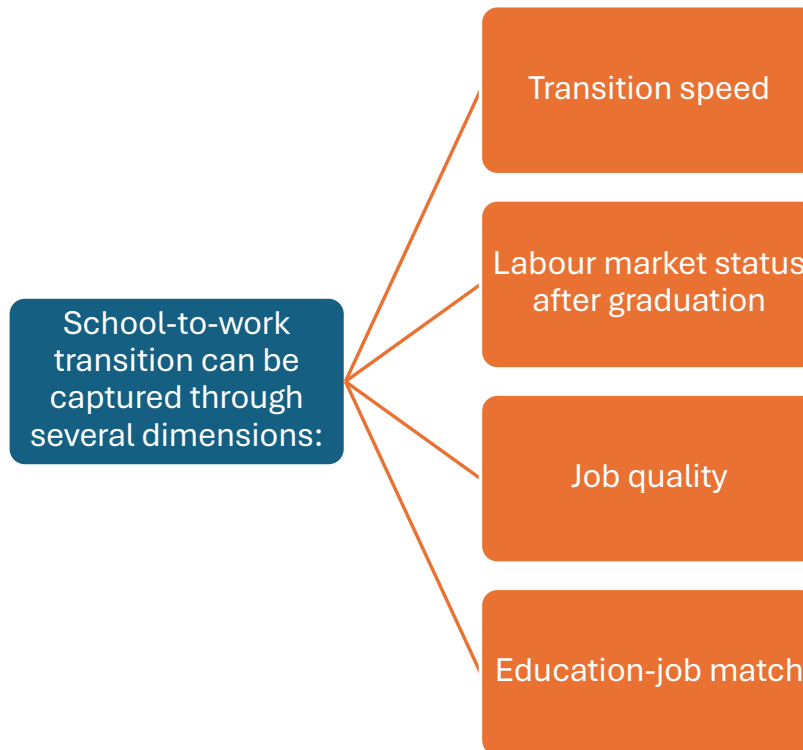
School-to-work transition refers to the phase from school completion to stable employment (ILO, 2015).

- Complete secondary education to employment
- Tertiary education to employment

Labour market entrants are captured from the available data (e.g., EULFS and PIAAC) using the following information

- Age: 18 to 29
- Education level : At least complete secondary education
  - Secondary education graduate: Age 18-29
  - University graduate: Age 22-29
  - Master graduate : Age 24-29

# Defining and measuring transition to employment



# Defining and measuring transition to employment

## Transition speed :

- Time to first employment
  - Share of graduates who find employment within 6 months
- Unemployment duration
  - Share of graduates unemployed for 12 months or more
  - % time spent in unemployment since graduation

## Labour market status:

- Employment status :
  - Employed/unemployed/inactive
- Not in Employment, Education or Training (NEET) Status: % graduates not employed/ not participating in education and training in the past 4 weeks /12 months

# Defining and measuring transition to employment

- Job quality :
  - Type of contract
    - Permanent/ fixed-term
  - Working hours
    - Full-time/part-time
  - Wage levels
  - Degree of satisfaction of the graduate in his/her current work

# Defining and measuring transition to employment

- Education-Job match : Fit between the worker's level of education /field of education and the one required in his job.
  - Vertical match (Subjective measure)
    - Matched: Worker's education level=His/her self-reported educational requirements for his/her job
    - Overeducated : Worker's level of education exceeds the self-reported educational requirements for his/her job
    - Undereducated : Worker's level of education is below the self-reported educational requirements for his/her job

# Defining and measuring transition to employment

- In the absence of this information:
  - Vertical match (Objective measure):

Correspondence table between education and occupation based on ISCO-08 educational requirements

ISCO-08 skill level: ISCED-11 levels of education:	ISCO-08 skill level:									
	X-No schooling	0 Early childhood education	1 Primary education	2 Lower secondary education	3 Upper secondary education	4 Post-secondary non-tertiary education	5 Short-cycle tertiary education	6 Bachelor or equivalent level	7 Master or equivalent level	8 Doctoral or equivalent level
ISCO-08 major groups:										
1 Managers										
2 Professionals										
3 Technicians and Associate Professionals										
4 Clerical Support Workers										
5 Services and Sales Workers										
6 Skilled Agricultural, Forestry and Fishery Workers										
7 Craft and Related Trades Workers										
8 Plant and Machine Operators and Assemblers										
9 Elementary Occupations										

Legend:

- Undereducated
- Matched
- Overeducated

Source: ILO

- Matched: Worker's level of education=the educational requirements for his/her occupational groups (ISCO-08, 1-digit)
- Overeducated : Worker's level of education exceeds the educational requirements for his/her occupational groups (ISCO-08, 1-digit)
- Undereducated : Worker's level of education is below the educational requirements for his/her occupational groups (ISCO-08, 1-digit)

# Defining and measuring transition to employment

- In the absence of this information:
  - Vertical match (Objective measure):
    - Matched: worker's level of education=the modal (the observed most frequent) education level for his/her occupation (e.g., ISCO-08, 3-digit)
    - Overeducated : Worker's level of education exceeds the modal level of education for his/her occupation (e.g., ISCO-08, 3-digit )
    - Undereducated : Worker's level of education is below the modal level of education for his/her occupation (e.g., ISCO-08, 3-digit)

# Defining and measuring transition to employment

- Horizontal match
  - Horizontal match (Subjective measure):
    - Respondents' self-assessment of their occupation relative to their field of study
  - Horizontal match (Objective measure):
    - Worker's field of education = his/her occupational groups (e.g., ISCO-08, 3-digit)
  - Horizontal match (Objective measure):
    - Worker's field of education = Modal level of field of education for his/her occupational groups (e.g., ISCO-08, 3-digit)

# Future work

- Cross-national analysis of transition of graduate to the labour market across Europe
- Pre-vs. post-COVID-19 pandemic comparison
- Analysis of Institutional drivers (e.g. labour market institutions and educational systems, welfare system, etc.) and inequalities (e.g. gender, socioeconomic backgrounds, etc.)

Thank you

[emmanuel.ngoy@ua.pt](mailto:emmanuel.ngoy@ua.pt)