

## CAValli Team: Preliminary report

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**This document is aimed at providing a general sketch of our project.**

### Abstract

We plan to carry out an analysis subdivided in 3 parts, with the NEET dataset as our focus

([https://ec.europa.eu/eurostat/databrowser/view/sdg\\_08\\_20/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/sdg_08_20/default/table?lang=en)).

What we want to tell, our story, is **a broad overview of the phenomenon emphasising the most important aspects of it and a glimpse into Italy** in the final part.

The **first part** will probably use **only the above-mentioned main dataset** and will be a summary of the numbers of the NEET phenomenon in the different European states over the years between 2009 and 2022, expressed according to the following steps:

1. We plan to start with a **choropleth map** of Europe representing the number of NEETs in absolute value through a colourmap. A slider will give the opportunity to select one year at a time and see countries changing the colours.
2. The next visualisation will consist of **N bar charts**. We will have one bar for every state but, instead of having just one big bar chart with 34 bars, we would like to split it into distinct bar charts highlighting the differences among states in the same region or presenting rankings of states that looked similar in the map because of the colours to which they had been mapped (**still to be decided**).
3. Then we want to add a **line chart** to visualise single states one by one and observe in a clearer way the changes they went through over the

years. In the line chart we also plan to make possible comparisons by putting multiple lines next to one another in the same chart.

4. In the end, we plan to use a **pyramid chart** to show the gender gap in the amount of NEETs in every state (possibly relying on percentages).

The specific year shown by both this pyramid chart and the bar charts described above should be controlled by the choropleth map slider, so that all these visualisations are forced to stay consistent.

In our view, the **second part** should dive into **some of the major risk factors** that can lead someone to become eventually a NEET. We read up on this topic, in particular we studied [this Eurofound report](#).

The following paragraph is food for thought:

*In general there is reasonable agreement about the range of social, economic and personal factors that increase the chances of an individual becoming NEET. It is generally perceived that NEET status arises from a complex interplay of institutional, structural and individual factors (Bynner, 2005; Hodkinson, 1996; Hodkinson and Sparkes, 1997).*

*More specifically, the literature suggests that there are two principal risk factors relating to vulnerable NEET status: disadvantage and disaffection. While educational disadvantage is associated with social factors such as family, school and the personal characteristics of the young person, disaffection is concerned with the attitudes young people have towards education and schooling specifically, as expressed by truancy or behaviour that leads to school exclusion. There also seems to be a clear correlation between both educational disadvantage and disaffection among those aged under 16 years and later disengagement (Social Exclusion Unit, 1999).*

*Both educational disadvantage and disaffection are linked to a number of background factors. These include family disadvantage and poverty, having one or both parents unemployed, living in a high unemployment area, membership of an ethnic minority group, and having a chronic illness, disability or special education needs (Coles et al, 2002). This corresponds with other findings. Using data from two British cohort studies (the National Child Development Study of 1958 and the British Cohort Study of 1970), Bynner and Parsons (2002) identify family socioeconomic background (social class), parental education, parental interest in the child's education,*

area of residence, and children's educational attainment as strong predictors of later-life NEET status.

Similarly, research undertaken by the UK Department for Education and Skills (now Department for Children, Schools and Families) finds 10 factors associated with being NEET: no educational qualifications, school exclusion, previous truancy, low skill occupation of parents, living in a household where neither parent works full time, having children at an early age, living outside the family home, having a health problem or disability and having parents living in rented accommodation.

Existing research puts great emphasis on family background and individual characteristics as determinants of NEET status (Stoneman and Thiel, 2010). At the individual level, characteristics overrepresented among the NEET population are: low academic attainment (Coles et al, 2002; Meadows, 2001; Dolton et al, 1999); teenage pregnancy and lone parenthood (Morash and Rucker, 1989; Cusworth et al, 2009; Coles et al, 2002); special education needs and learning difficulties (Cassen and Kingdon, 2007; Social Exclusion Task Force, 2008); health problems and mental illness (Meadows et al, 2001); involvement in criminal activities; low motivation and aspiration including lack of confidence, sense of fatalism, and low self-esteem (Social Exclusion Task Force, 2008; Strelitz, 2003). Among the non-vulnerable, voluntary NEETs, motivation is often identified as one of the key factors; those who are more likely to come from a privileged background and remain briefly outside labour market and education are likely to do so in order to sample jobs and educational courses (Pemberton, 2008; Furlong et al, 2003). At the family level, frequent NEET characteristics are: economic deprivation and non-working parents (Cusworth et al, 2009; Comptroller and Auditor General, 2007; Meadows, 2001; Dolton et al, 1999; Cassen and Kingdon, 2007; Strelitz, 2003; MacDonald and Marsh, 2005); large family size (Meadows, 2001; Dolton et al, 1999), and overcrowding and poor housing (West and Farrington, 1973; Strelitz, 2003.)

The best **datasets supporting our plan for this part will probably be selected from [this rich source](#) in the Eurostat database.**

As far as we understood, people with disability are also technically considered NEETs if they meet the “not in employment, not in education, not in training” definition. So, extracting the amounts of disabled and non-disabled NEETs could be meaningful for further comparisons.

Other interesting factors could be the average income of families, to see the link between poverty and the NEET phenomenon, and the number of

early leavers. Final contents of this second part will depend on the datasets that we'll be able to find.

The **third part**, a glimpse into Italy, **should examine the high number of NEETs that are reported to live in our country**, presenting more specific data.

The types of visualisation idioms we would like to introduce in the second and third parts are strongly connected with the datasets we'll find in the Eurostat subset. We discussed the opportunity to design **Sankey diagrams** and **waffle charts** due to the categoric nature of these data.

## Website setup

### GitHub repository

[https://github.com/VittorioBartolomeoSecondin/DVISProject-CAValli\\_Team](https://github.com/VittorioBartolomeoSecondin/DVISProject-CAValli_Team)

### Website homepage

[https://vittoriobartolomeosecondin.github.io/DVISProject-CAValli\\_Team/](https://vittoriobartolomeosecondin.github.io/DVISProject-CAValli_Team/)

## Some snapshots of UI and our first visualisation

**NEET phenomenon**

The acronym

About NEETs

In Europe

Risk factors

In Italy

Conclusions

HEY! LET'S TALK ABOUT THE ACRONYM

**NEET**

People that are Not in Trainin

## About NEETs

Welcome to our broad overview of the NEET phenomenon through which we would like to highlight its most important aspects.  
First of all, you may be wondering what a NEET is.

*A NEET, an acronym for "Not in Education, Employment, or Training", is a person who is unemployed and not receiving an education or vocational training.* — Wikipedia

The classification originated in the United Kingdom in the late 1990s, and its use has spread, in varying degrees, to other countries, including Japan, South Korea, China, Taiwan, Serbia, Canada, and the United States.

The NEET category includes individuals without a job and seeking one, as well as individuals without a job and not seeking one.  
It is usually age-bounded to exclude people in old-age retirement.

## In Europe

In this first part of our analysis, the focus will be on the European level.  
We are going to present a comparison among 34 countries belonging to the European continent for the time span between 2009 and 2022.

The target will be getting an overview of the phenomenon and identifying countries suffering from it the most.  
An additional objective will be understanding whether NEETs are increasing or decreasing over the considered period of time.

Spatial exploration

Temporal exploration

Gender gap

### Spatial exploration

#### A map of NEET abundance in Europe

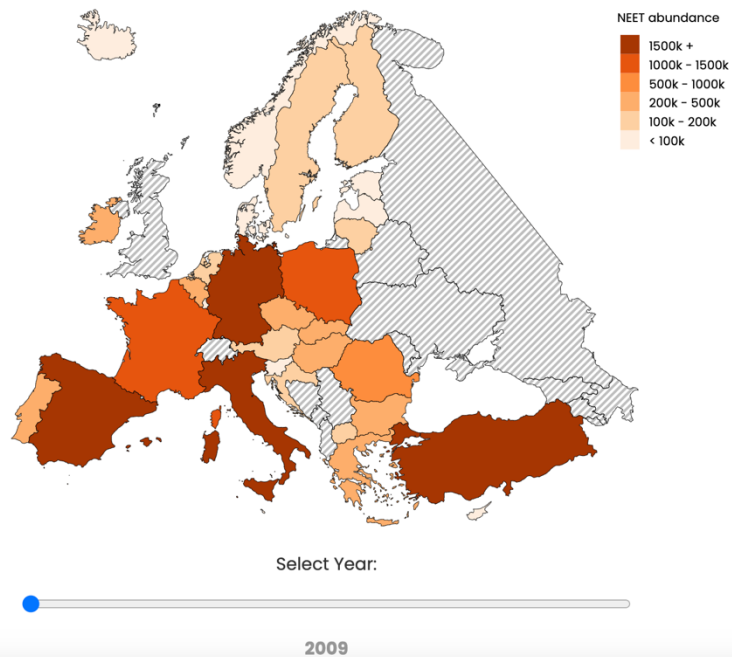
##### Choropleth map

The following map shows...  
By using the slider, you can...  
We observe that...

### — Spatial exploration

#### Temporal exploration

#### Gender gap



## Conclusions

Describing conclusions

### See again

The acronym

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# CAValli Team