

Forms of employment and labour market transitions before and during the economic crisis in Europe.



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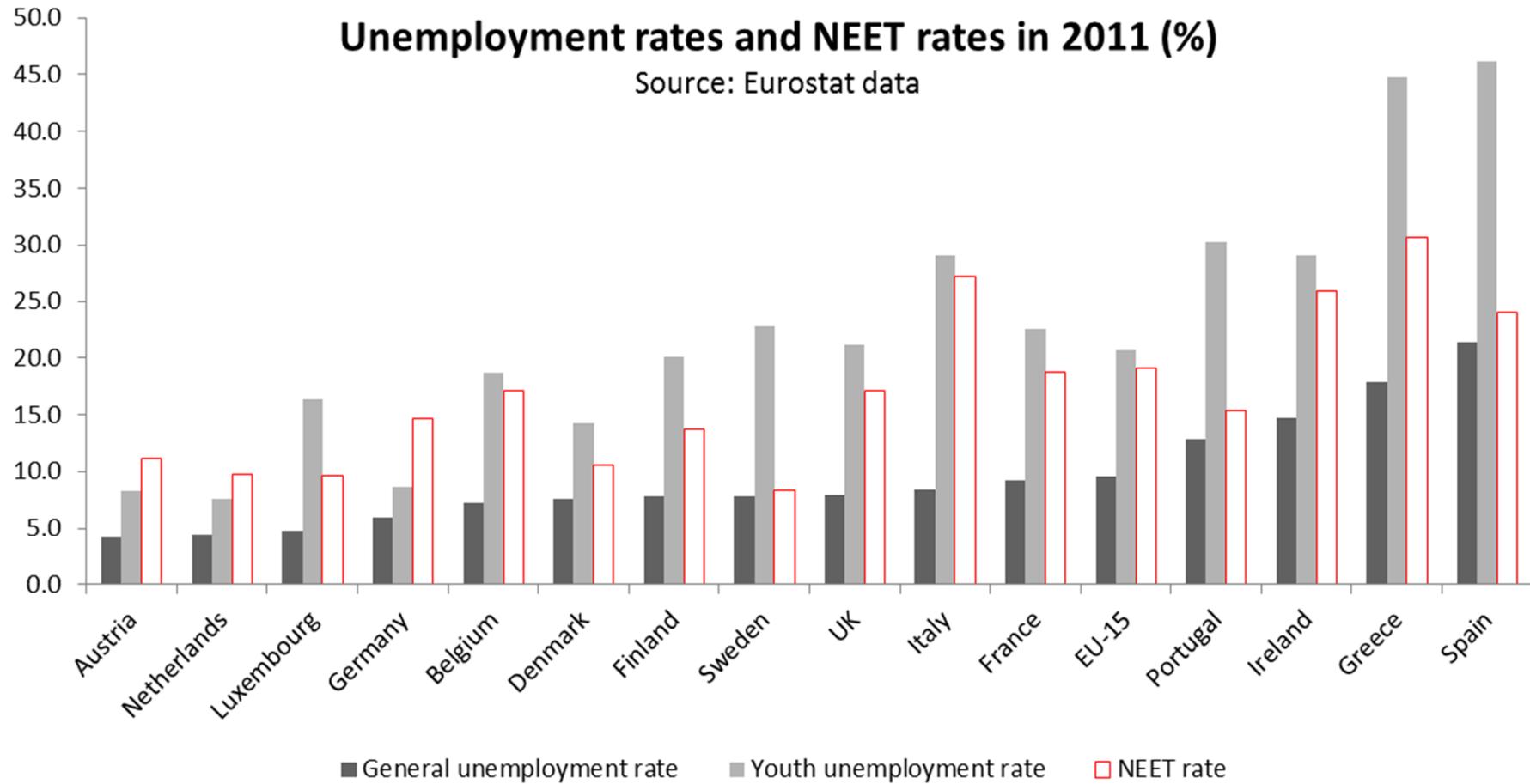
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Research questions

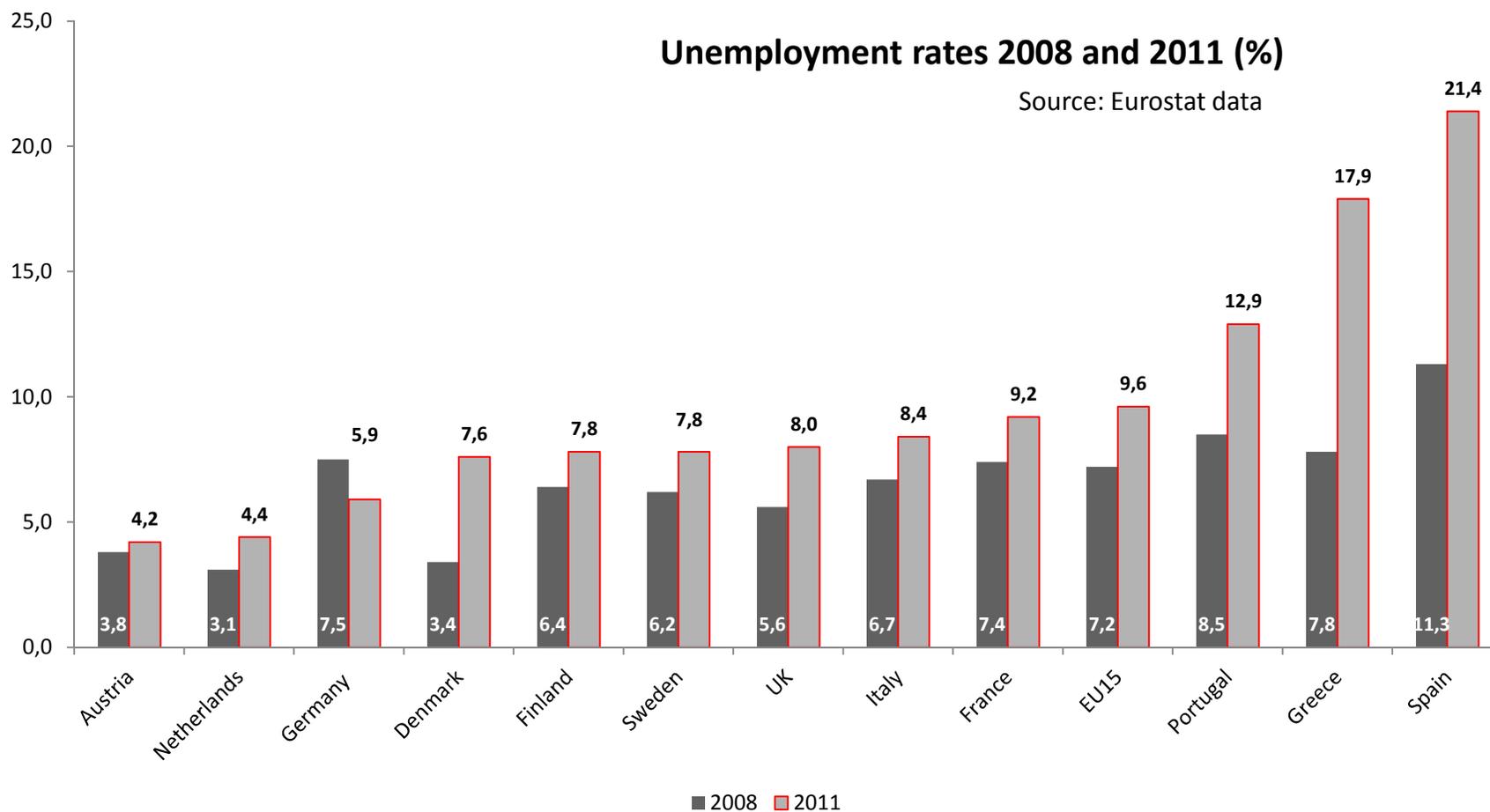
- 1) Do temporary and part-time contracts lead to permanent and full-time employment or do they represent a trap to precariousness and job instability?
- 2) Are transition patterns influenced by socio-economic individual characteristics - education, age, gender, country of residence?
- 3) Are there country differential effects from the recent economic crisis on individuals' labour market trajectories?



The European economic crisis in numbers



The European economic crisis in numbers



The EU-SILC longitudinal dataset

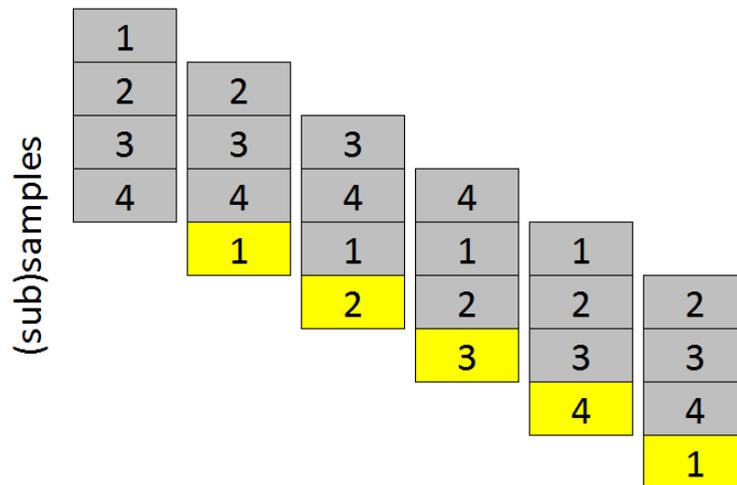
- EU-SILC provides two types of annual data: cross-sectional and longitudinal.
- The main objective of the longitudinal dataset is to study individual-level changes over time.
- It is organised in two levels of data: the household level and the personal level. I will use the personal level data.
- The dataset is based on a rotational panel design, rotating a part of the sample from year to year and retaining the other part the same.
- For most of the countries, the maximum duration of the panel is 4 years. I will analyse two time periods; 2005-2008 and 2008-2011.



The EU-SILC rotational design

 new rotational group  old rotational group

year of survey t t+1 t+2 t+3 t+4 t+5
 e.g. 2005 2007 2008 2009 2010 2011



- ❖ The panel duration is, for most countries, 4 years.
- ❖ The sample consists of 4 sub-samples (replications).
- ❖ Each sub-sample is representative of the whole population and similar to the structure of the whole target.
- ❖ The first year there are selected 4 replications, each year one of these four from the previous year is dropped and a new one is added.
- ❖ Between year T and T+1 the sample overlap is 75%, between T and T+2 is 50%, between T and T+3 is 25% and is zero for longer time intervals.



The sample of analysis

- The sample includes individuals who have been followed all four years: 2005-2008 (before the crisis) and 2008-2011 (during the crisis).

| Year | Run | | | | | | | |
|------|-----|---|---|---|---|---|---|---|
| 2008 | 1 | 1 | 1 | 1 | | 1 | | |
| 2009 | | 2 | 2 | 2 | 1 | | | |
| 2010 | | | 3 | 3 | 2 | 1 | 1 | |
| 2011 | | | | 4 | 3 | 2 | 2 | 1 |

- Focus on people aged between 16 and 60 years old.
- Balanced panel using only cases with full data on the employment status variable over all 4 years.
- Three country comparison: France, Greece and The Netherlands.



Country comparisons

Comparisons of three European countries, with different characteristics.

- The Netherlands: Occupational Labour Market; Strong links between education system and LM; Education system focused on occupational skills; Rapid LM integration; Low unemployment risk.
- Greece: Internal Labour Market; Weak links between education system and LM; Education system focused on general skills; Slow LM integration; High unemployment risk.
- France: mixed type country.



The variables



The main variable of analysis is a constructed variable using the following items of the questionnaire:

- Self-defined current economic status (pl030 until 2008 and pl031 from 2009 onwards);
- Type of contract (pl140) for the employed sample.

I will study the labour market transition patterns and explore if they are influenced by individual and country-level factors.

- Individual characteristics: age group focused on youth transitions, gender and highest education level attained.
- Country-level characteristics: economic situation and the effects of the crisis, comparing two time periods; one before and one during the economic crisis.

The method: Sequence Analysis (SA)

Why Sequence Analysis?

- To analyse the employment trajectories of an individual as a whole sequence of events and not as single events or just partial elements within a full sequence.
- To assess similarities and differences of ordered sequences, to explore stability or change in the combinations of employment status over time.

Preparing the data...

- Define a finite set of employment status.

[Elements of sequences:

1. Full-time permanent employment;
2. Full-time temporary employment;
3. Part-time permanent employment
4. Part-time temporary employment;
5. Unemployment;
6. Education;
7. Retirement;
8. Inactivity]

- Using longitudinal data, we attribute one status to each time unit (year) for a given time frame, between 2005-2008 and 2008-2011.

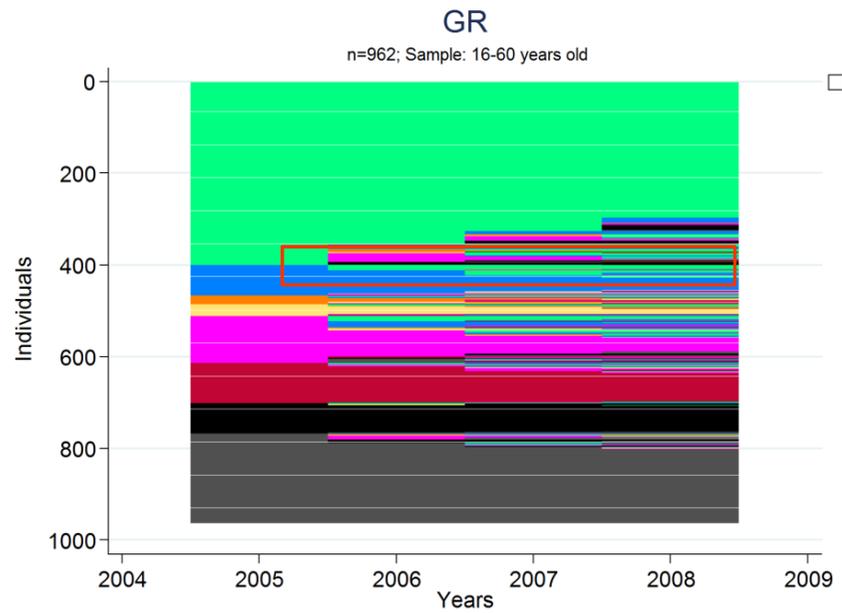


Results

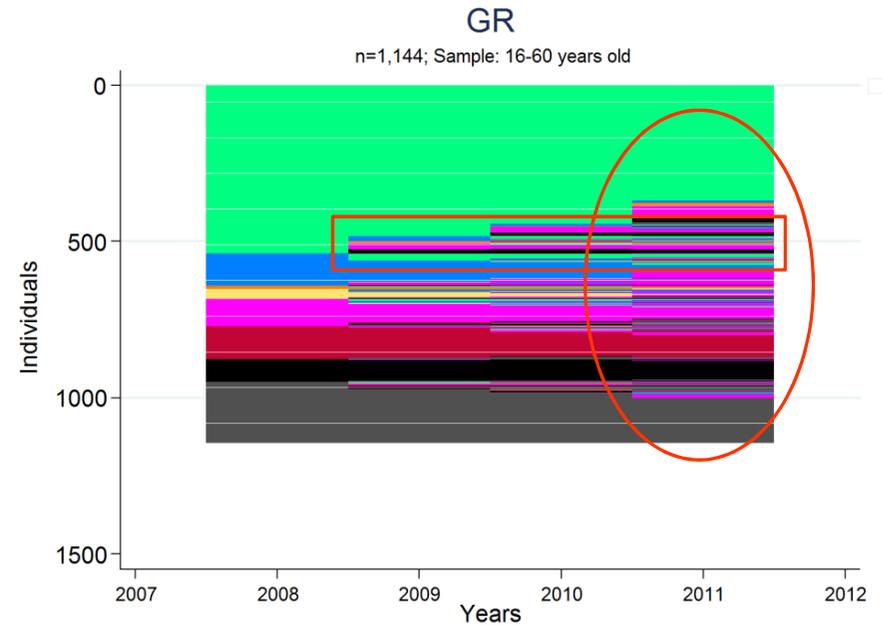


Sequence patterns: Greece

Before the economic crisis (2005-2008)



During the economic crisis (2008-2011)



Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

The most frequent sequence patterns

| GREECE | |
|-----------|-----------|
| 2005-2008 | 2008-2011 |
| 1 1 1 1 | 1 1 1 1 |
| 8 8 8 8 | 8 8 8 8 |
| 6 6 6 6 | 6 6 6 6 |
| 7 7 7 7 | 7 7 7 7 |
| 5 5 5 5 | 5 5 5 5 |
| 2 2 2 2 | 1 1 1 5 |
| 1 1 1 2 | 2 2 2 5 |
| 1 1 1 7 | 1 1 1 7 |
| 2 1 1 1 | 2 2 2 2 |
| 4 4 4 4 | 2 1 1 1 |
| 1 1 2 2 | 1 5 5 5 |
| 5 1 1 1 | 1 7 7 7 |
| 1 1 7 7 | 1 1 5 5 |
| 1 2 1 1 | 8 8 8 5 |
| 1 5 1 1 | 1 1 1 3 |

- | | |
|-----------------------------------|-----------------------------------|
| 1. Full-time permanent employment | 4. Part-time temporary employment |
| 2. Full-time temporary employment | 5. Unemployed |
| 3. Part-time permanent employment | 6. Student |
| | 7. Retired |
| | 8. Inactive |

From 2008 to 2011:

- ✓ Full-time permanent and temporary employment → Unemployment
- ✓ Full-time permanent employment → Part-time permanent employment
- ✓ Inactivity → Unemployment

From 2005 to 2008:

- ✓ Full-time permanent ↔ Full-time temporary
- ✓ Use of part-time temporary employment
- ✓ Unemployment → Full-time employment

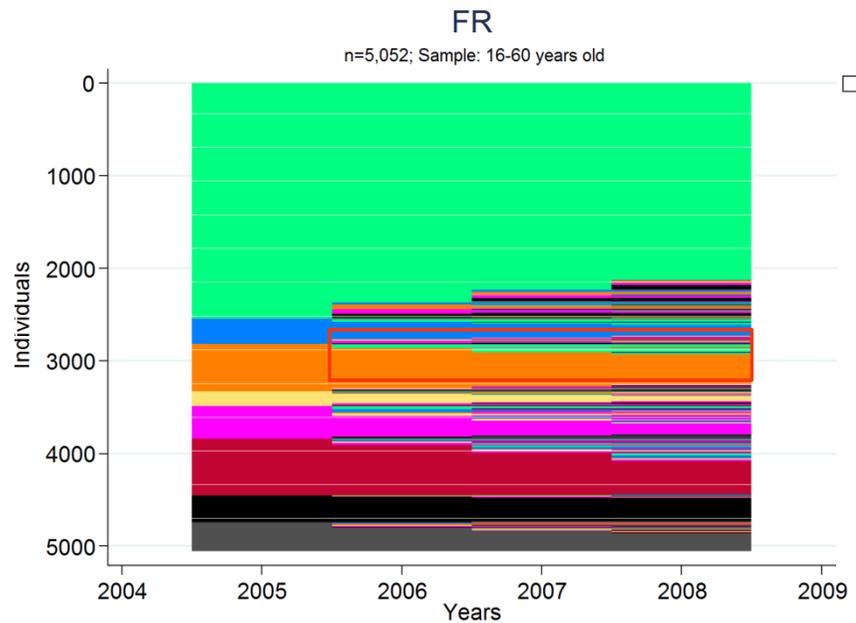
During both periods:

- ✓ Full-time temporary employment → Full-time permanent employment
- ✓ Part-time permanent employment not commonly used (undeclared employment?)

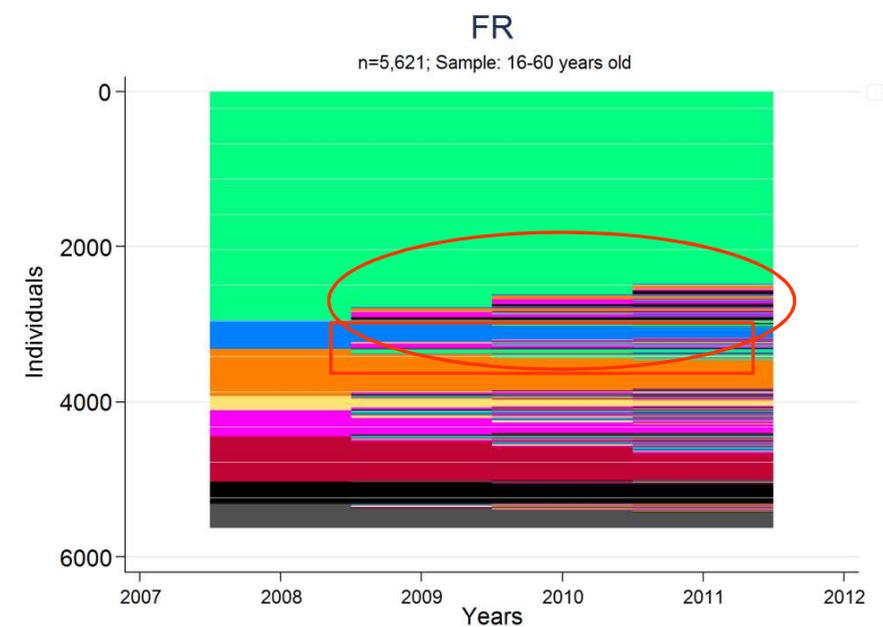


Sequence patterns: France

Before the economic crisis (2005-2008)



During the economic crisis (2008-2011)



Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

The most frequent sequence patterns

| FRANCE | |
|-----------|----------------|
| 2005-2008 | 2008-2011 |
| 1 1 1 1 | 1 1 1 1 |
| 6 6 6 6 | 3 3 3 3 |
| 3 3 3 3 | 6 6 6 6 |
| 7 7 7 7 | 7 7 7 7 |
| 8 8 8 8 | 8 8 8 8 |
| 5 5 5 5 | 2 2 2 2 |
| 2 2 2 2 | 5 5 5 5 |
| 4 4 4 4 | 4 4 4 4 |
| 1 1 1 7 | 1 1 1 3 |
| 3 1 1 1 | 3 1 1 1 |
| 1 1 7 7 | 1 1 5 5 |
| 3 3 1 1 | 1 1 3 3 |
| 6 6 6 2 | 1 1 1 7 |
| 2 1 1 1 | 3 3 1 1 |
| 1 7 7 7 | 6 6 6 2 |

- | | |
|-----------------------------------|-----------------------------------|
| 1. Full-time permanent employment | 4. Part-time temporary employment |
| 2. Full-time temporary employment | 5. Unemployed |
| 3. Part-time permanent employment | 6. Student |
| | 7. Retired |
| | 8. Inactive |

From 2008 to 2011:

- ✓ Full-time permanent employment → Part-time permanent employment or Unemployment

From 2005 to 2008:

- ✓ Full-time temporary employment leads to full-time permanent employment

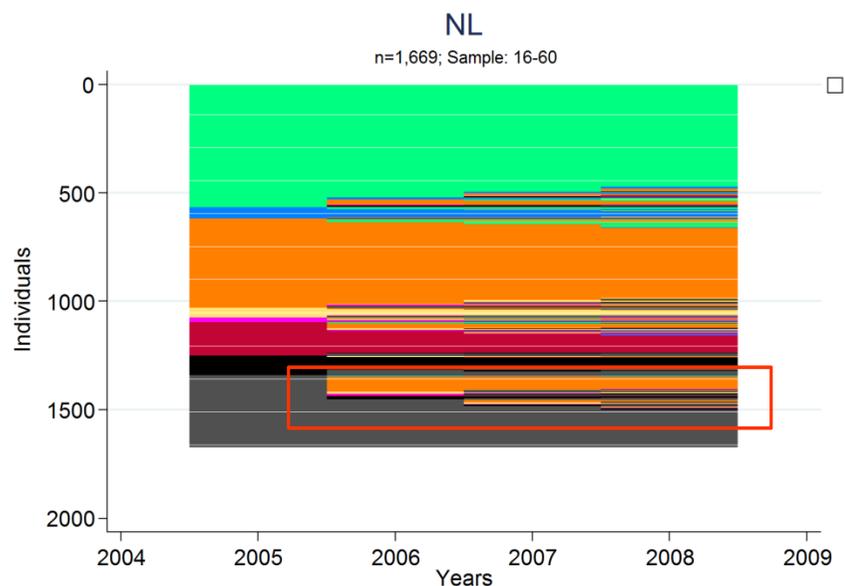
During both periods:

- ✓ Many stable trajectories
- ✓ Use of part-time permanent and temporary jobs
- ✓ Part-time employment leads to full-time employment
- ✓ Education → Full-time temporary employment



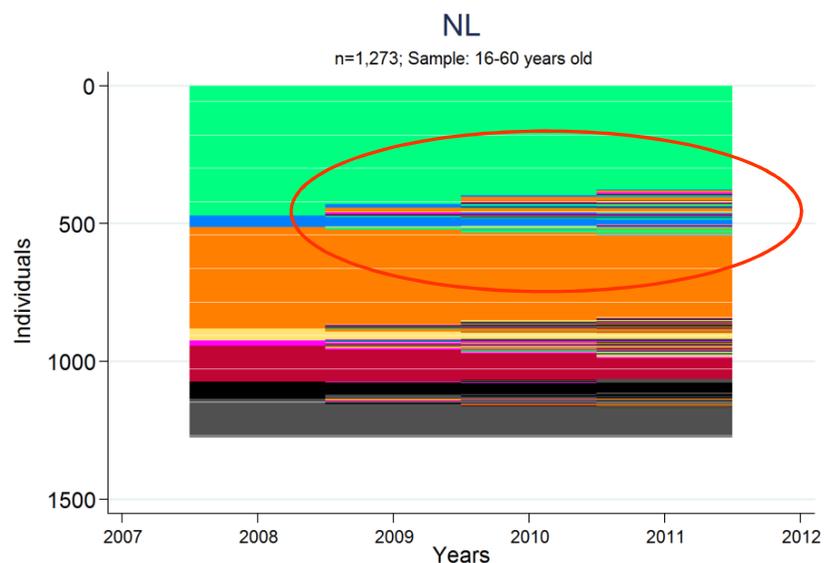
Sequence patterns: The Netherlands

Before the economic crisis (2005-2008)



Source: EU-SILC longitudinal dataset 2008; own calculations

During the economic crisis (2008-2011)



Source: EU-SILC longitudinal dataset 2011; own calculations

- ✓ Dutch graphs are very 'orange' in comparison to Greece and France!
- ✓ Part-time permanent jobs are a very common form of employment.
- ✓ 2005-2008: Part-time permanent employment used to integrate inactive individuals.



Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

The most frequent sequence patterns

| The Netherlands | |
|-----------------|-----------|
| 2005-2008 | 2008-2011 |
| 1 1 1 1 | 1 1 1 1 |
| 3 3 3 3 | 3 3 3 3 |
| 8 8 8 8 | 8 8 8 8 |
| 6 6 6 6 | 6 6 6 6 |
| 8 3 3 3 | 7 7 7 7 |
| 7 7 7 7 | 2 2 2 2 |
| 2 2 2 2 | 4 4 4 4 |
| 4 4 4 4 | 1 1 3 3 |
| 1 3 3 3 | 1 3 3 3 |
| 3 3 3 1 | 3 3 1 1 |
| 6 3 3 3 | 1 1 1 3 |
| 7 8 8 8 | 3 1 1 1 |
| 1 3 3 3 | 1 1 1 5 |
| 2 1 1 1 | 3 3 3 1 |
| 1 1 1 2 | 4 3 3 3 |

- | | |
|-----------------------------------|-----------------------------------|
| 1. Full-time permanent employment | 4. Part-time temporary employment |
| 2. Full-time temporary employment | 5. Unemployed |
| 3. Part-time permanent employment | 6. Student |
| | 7. Retired |
| | 8. Inactive |

From 2008 to 2011:

- ✓ Full-time permanent employment → Unemployment
- ✓ Part-time temporary employment leads to Part-time permanent employment

From 2005 to 2008:

- ✓ Inactive → Part-time permanent employment
- ✓ Education → Part-time permanent employment

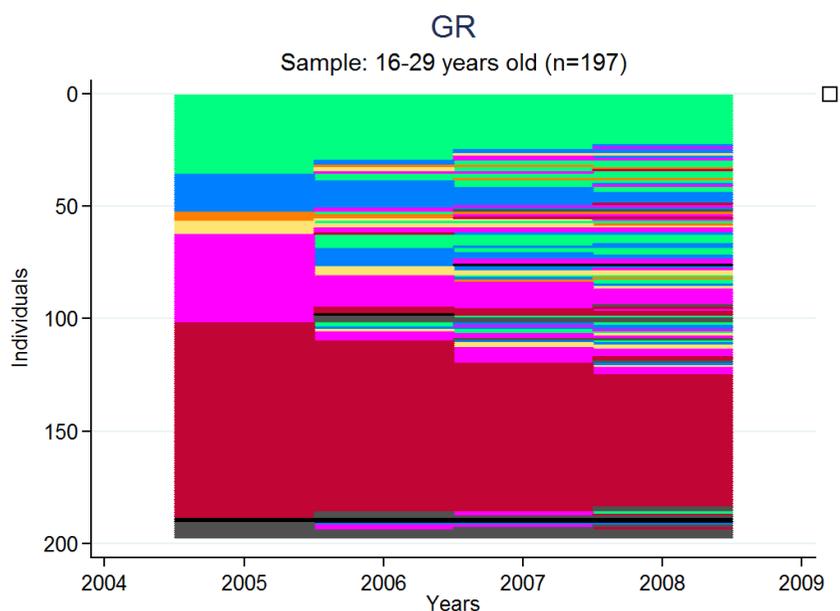
During both periods:

- ✓ Full-time permanent employment ↔ Part-time permanent employment

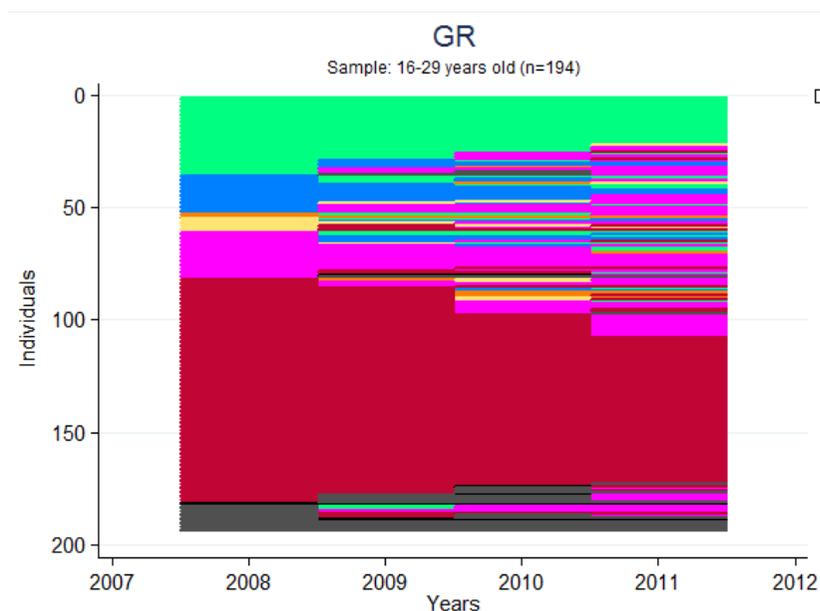


Youth transitions: Greece

Before the economic crisis (2005-2008)



During the economic crisis (2008-2011)



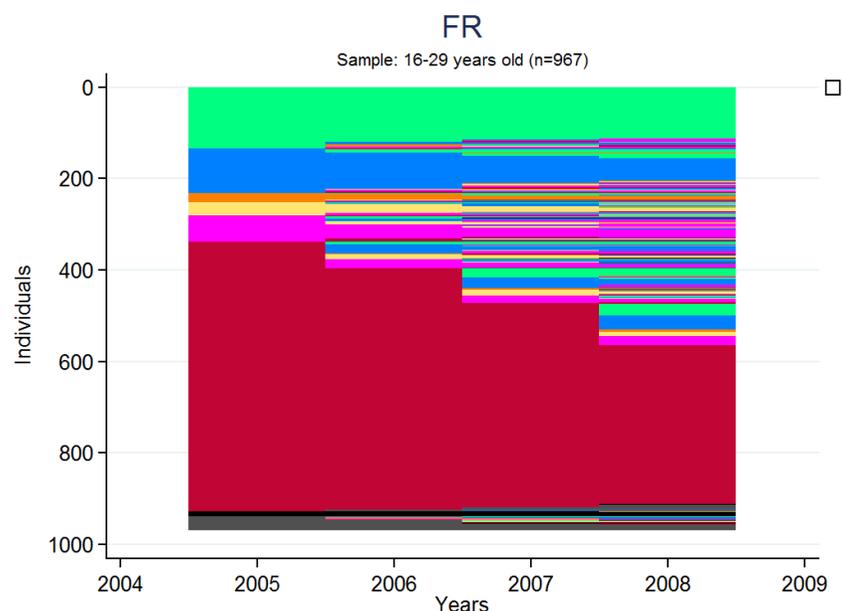
- ✓ During the time period 2008-2011 it is more frequent to transit from education to unemployment and sometimes to inactivity.
- ✓ 2008-2011: Full-time temporary and part-time permanent employment lead more frequently to unemployment.
- ✓ We also observe transitions from full-time permanent employment to full-time temporary employment.
- ✓ Education → Unemployment → Education
- ✓ 2005-2008: Frequent transitions from unemployment to employment.



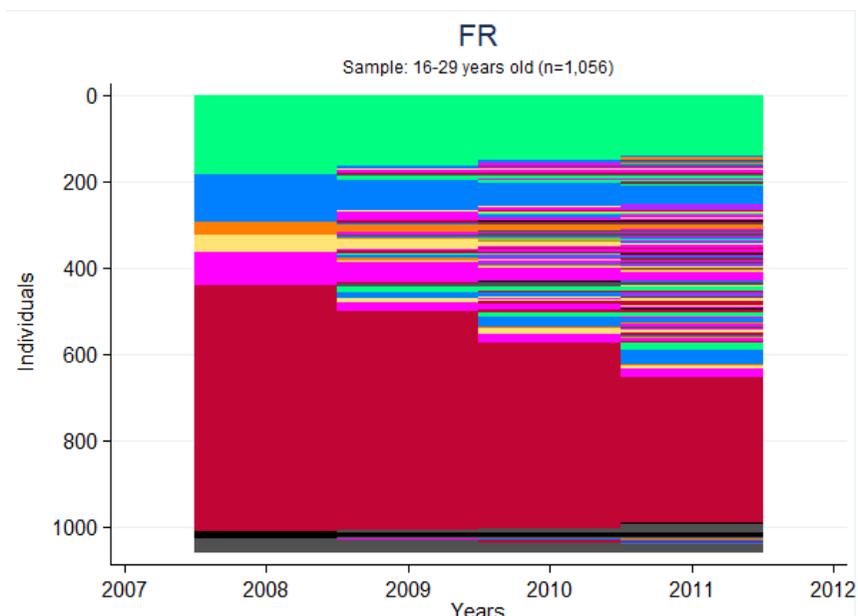
Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

Youth transitions: France

Before the economic crisis (2005-2008)



During the economic crisis (2008-2011)



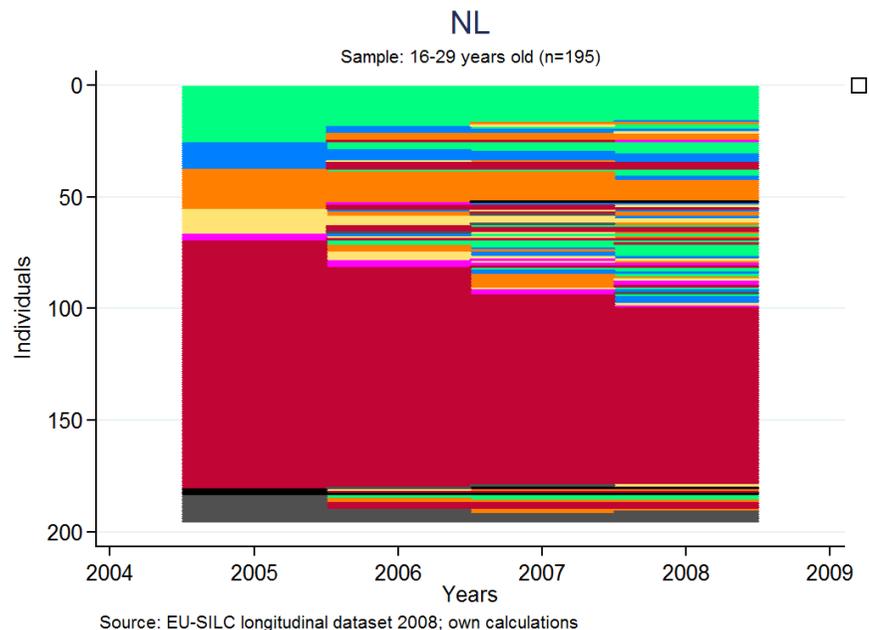
- ✓ After the beginning of the crisis it is more common for young people to be unemployed than it was from 2005 till 2008.
- ✓ In both periods, full-time temporary employment may lead to full-time permanent employment, but from 2008 and onwards we observe also transitions from full-time permanent jobs to part-time permanent jobs.
- ✓ The most common destination from education is full-time temporary jobs, followed by full-time permanent and part-time temporary jobs. During the crisis the second most frequent transition is from education to unemployment.



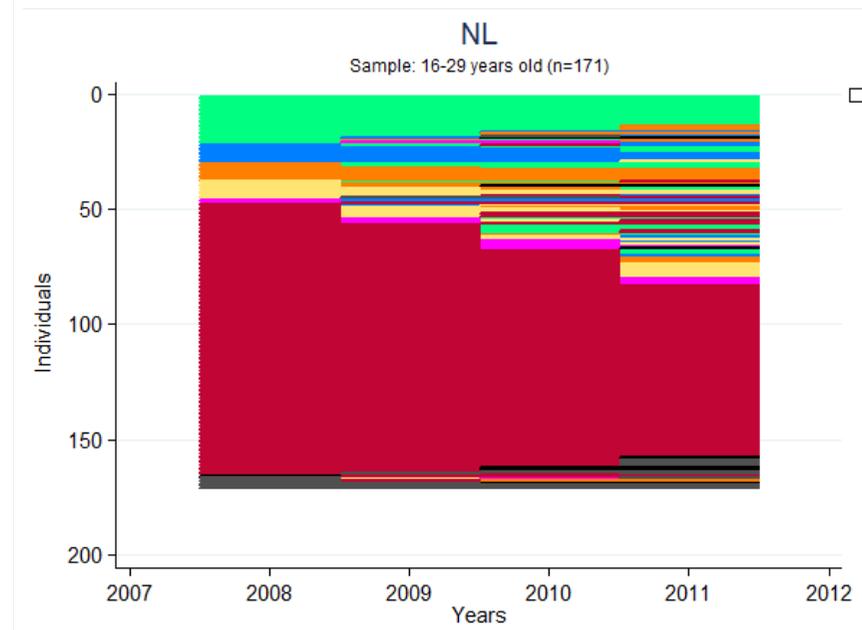
Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

Youth transitions: The Netherlands

Before the economic crisis (2005-2008)



During the economic crisis (2008-2011)



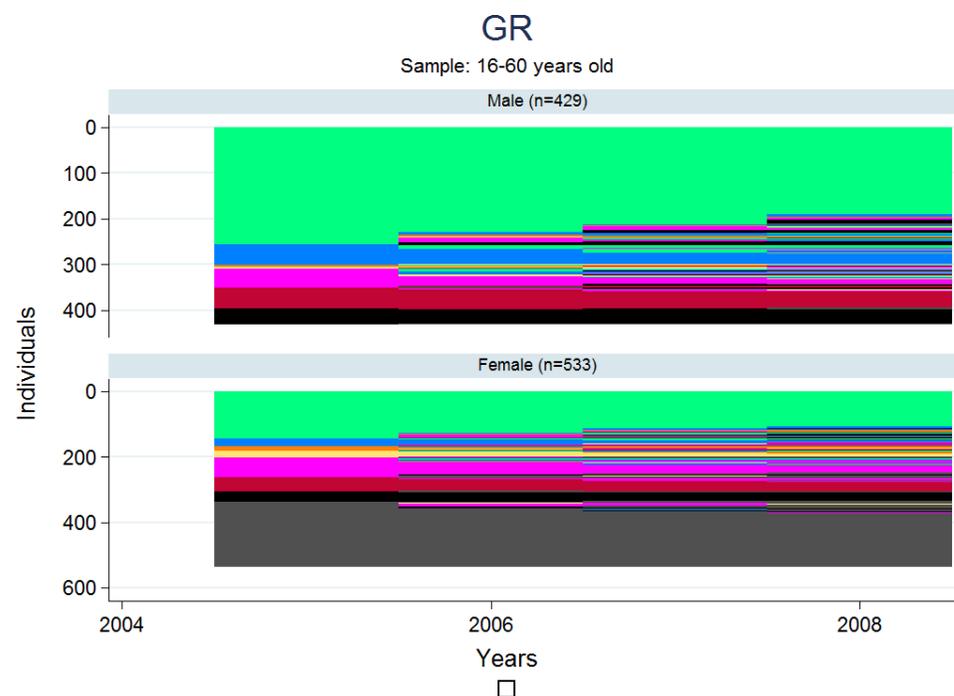
- ✓ Interestingly, we observe how part-time temporary employment has been used after 2008 as a way to integrate students in the LM. In fact, this is the most frequent transition from education.
- ✓ Of course, we can also observe some students becoming unemployed, but also some of them exiting in part-time permanent employment.
- ✓ In both graphs, but mainly from 2005 till 2008, it is clear that there is flexibility in changes between forms of employment. We observe transitions from full-time permanent to part-time permanent and vice versa; and from full-time temporary to full-time permanent.



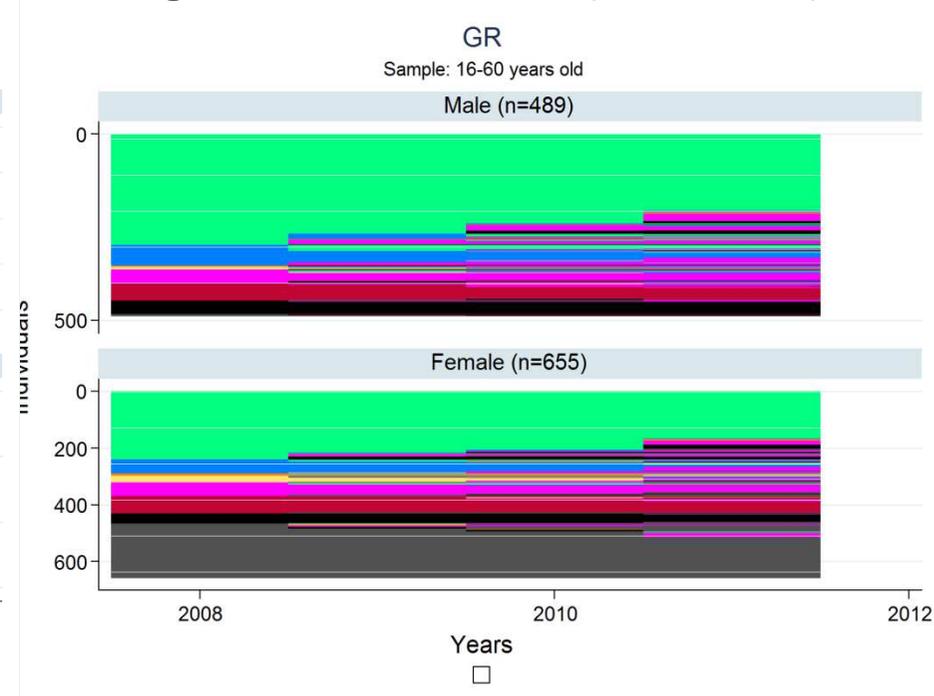
Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

Gender differences: Greece

Before the economic crisis (2005-2008)



During the economic crisis (2008-2011)



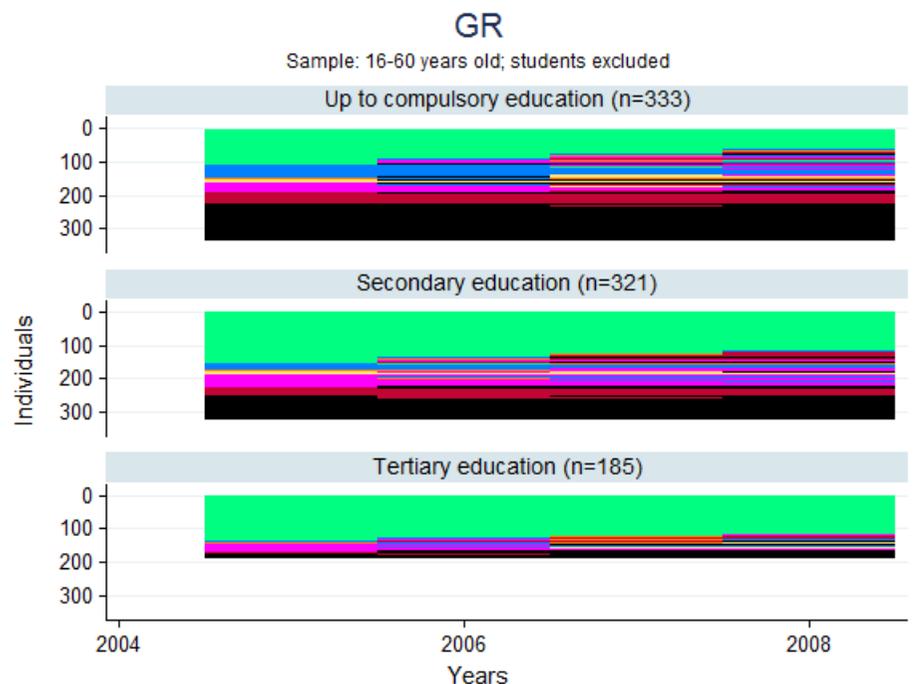
- ✓ Increase in women's LM participation: before the crisis the average duration of the status of inactivity was 1.44 (out of 4 elements of each sequence), while during the crisis decreased (1.14). The duration of full-time permanent employment also increased from 1.09 to 1.38.
- ✓ From 2008 to 2011, unemployment increased mainly among men. The average duration of male unemployment increased from 0.34 to 0.53.
- ✓ Part-time employment is more diffused among women in both time periods.



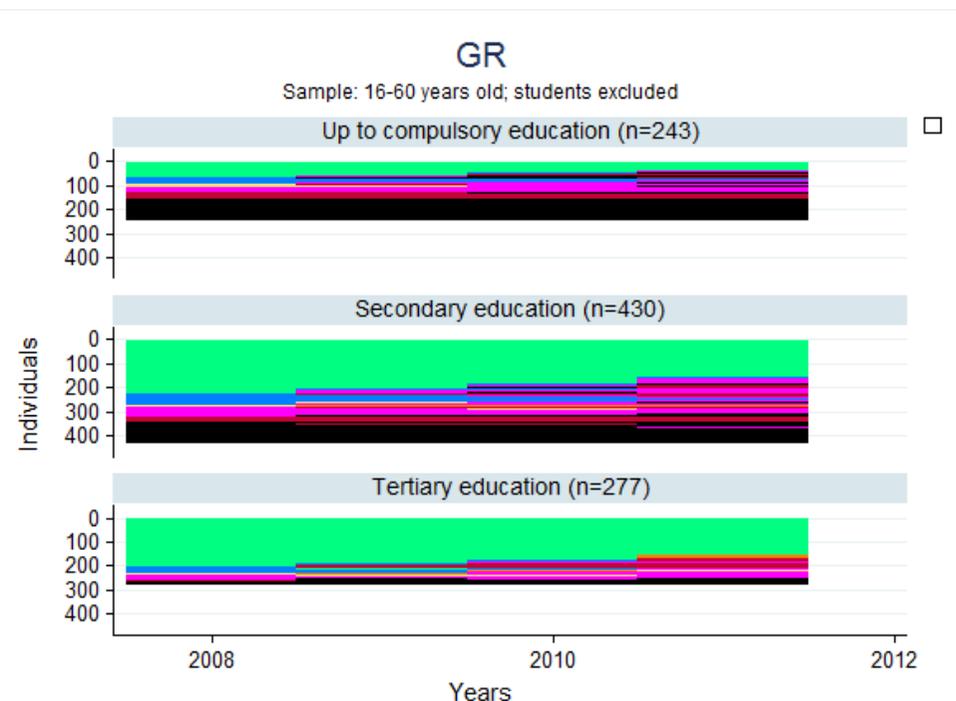
Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

The role of education: Greece

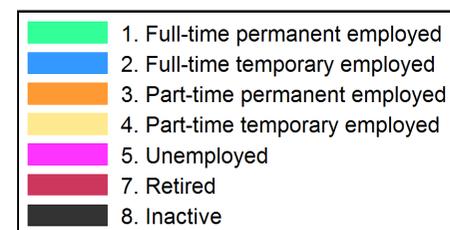
Before the economic crisis (2005-2008)



During the economic crisis (2008-2011)



- ✓ The crisis has affected mostly those with a lower education level: the duration of the unemployment status has doubled after 2008.
- ✓ Individuals with a degree of tertiary education are more likely to be in full-time employment and less likely to be unemployed. The duration of the status of full-time permanent employment was 2.92 (out of 4 elements in each sequence) before the crisis and became 2.82 in the time period 2008-2011.

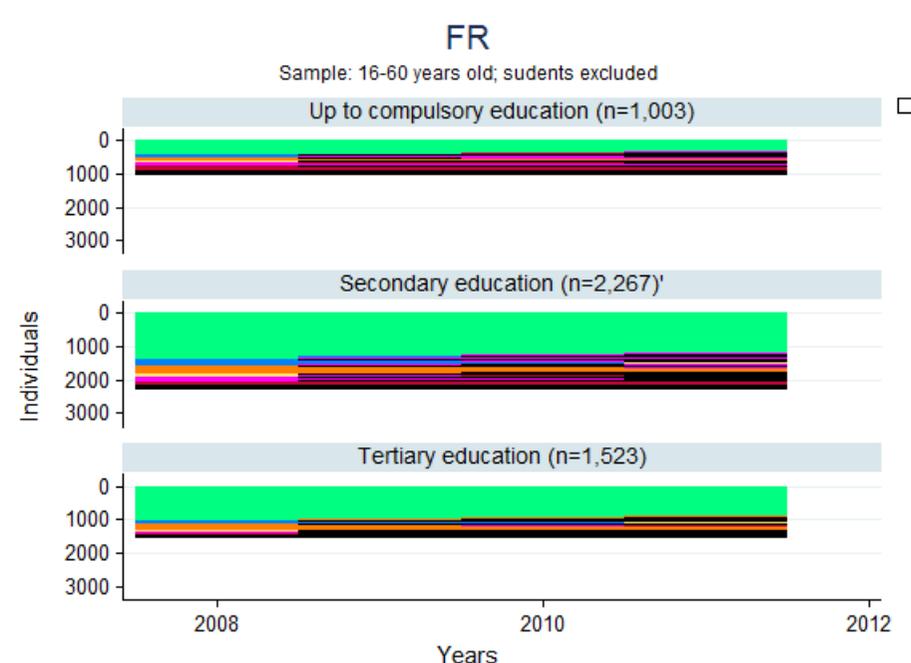
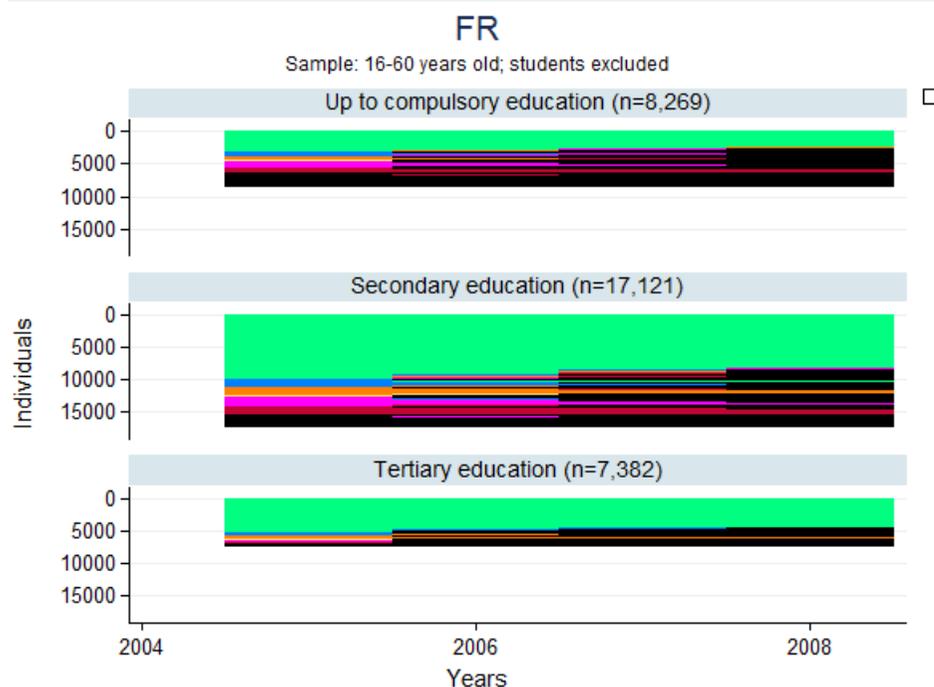


Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

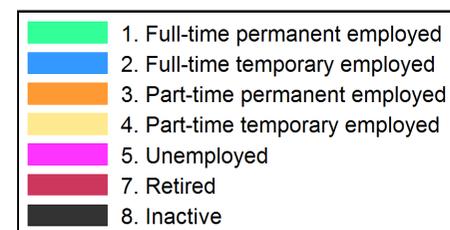
The role of education: France

Before the economic crisis (2005-2008)

During the economic crisis (2008-2011)



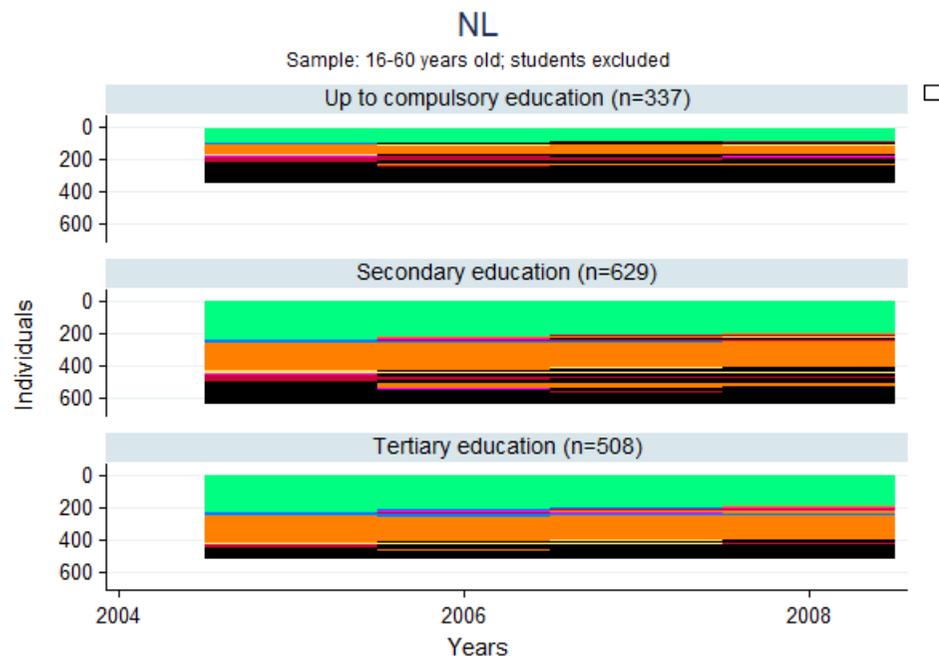
- ✓ The crisis affected all individuals in similar ways regardless of the education level attained: the use of part-time permanent employment has increased and the duration of inactivity has significantly decreased in the time period 2008-2011.
- ✓ Generally, in both time-periods low-educated people tend to be more often unemployed or inactive and the highly-educated people tend to be more often full-time permanent employees.



Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

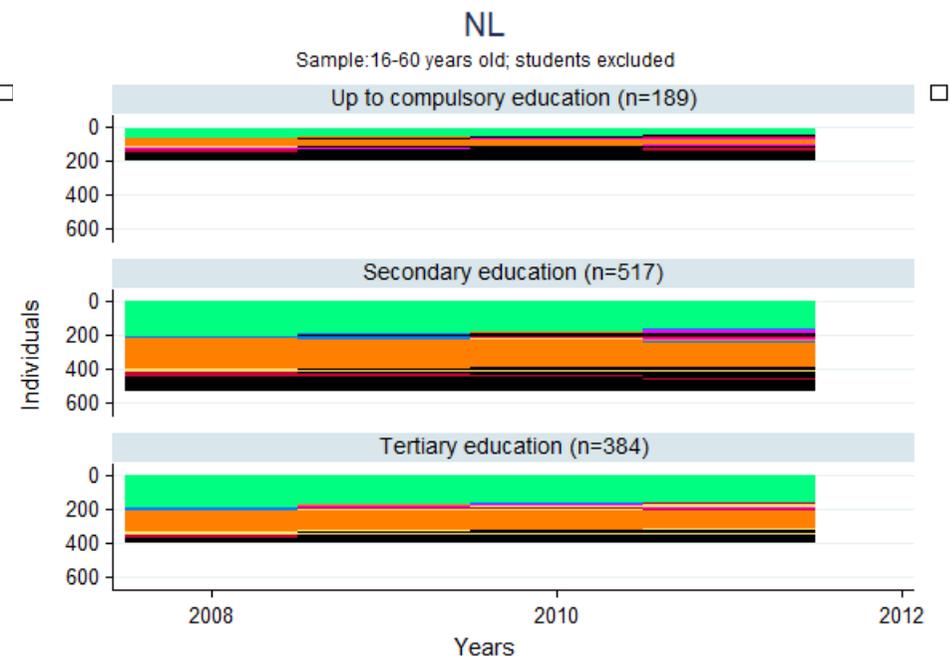
The role of education: The Netherlands

Before the economic crisis (2005-2008)



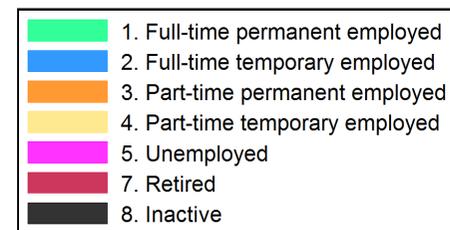
Source: EU-SILC longitudinal dataset 2008; own calculations

During the economic crisis (2008-2011)



Source: EU-SILC longitudinal dataset 2011; own calculations

- ✓ During the 2008-2011 period, the duration of full-time permanent employment status has increased regardless of the education attainment of individuals.
- ✓ The higher the level of education attained, the higher the duration of full-time permanent employment status.
- ✓ We do not observe big differences in unemployment between the two periods. However, inactivity decreased in the period 2008-2011.



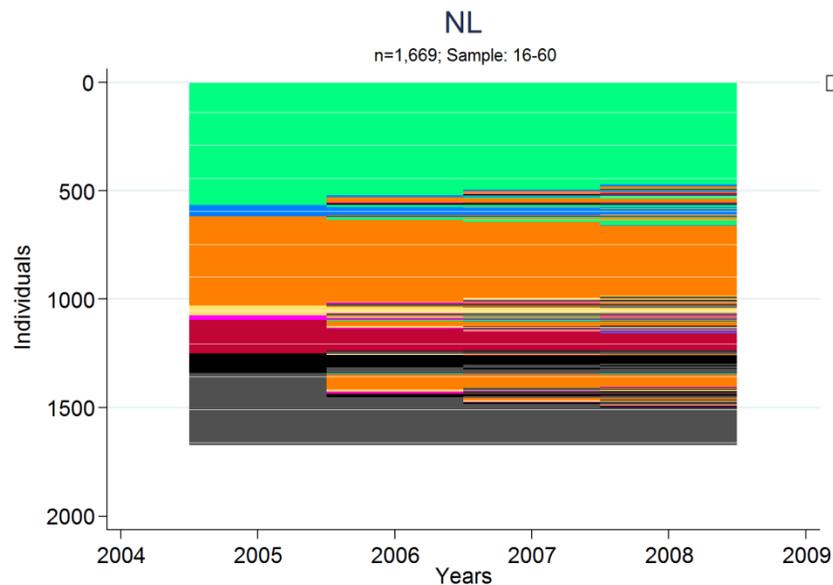
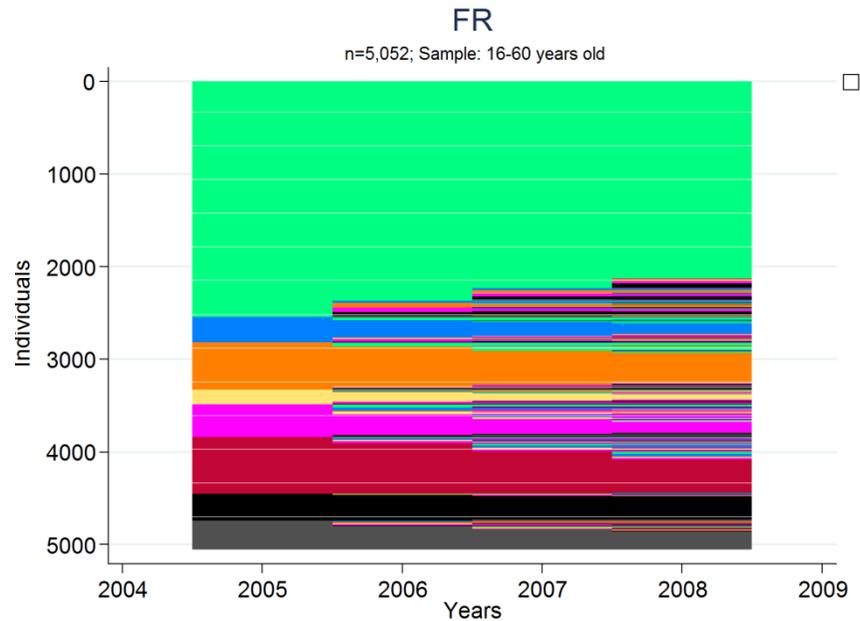
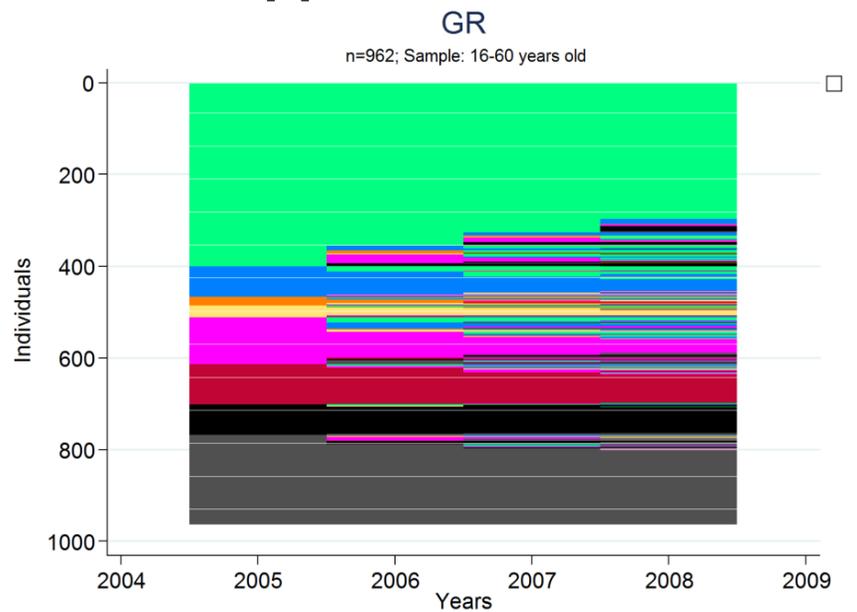
Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations

Conclusions

- ❖ GR, FR, NL: full-time temporary employment leads to full-time permanent employment. FR: part-time permanent employment leads to full-time permanent employment
- ❖ However, during the crisis we detect transitions from standard employment forms to atypical employment, mostly in the Netherlands, whereas in Greece there are numerous transitions from employment/education to unemployment.
- ❖ NL: flexibility between the different forms of employment. Use of part-time jobs to integrate students and inactive population in the labour market.
- ❖ The effects of the crisis are stronger for the Greek labour market. After 2008, we detect more transitions to unemployment. The effects of the crisis are even stronger when speaking of young individuals and the lower educated people.
- ❖ Comparing GR, FR and NL before the crisis, still national labour markets are very different, with the Netherlands having a more flexible labour market trying to integrate the majority of the population and Greece having a more rigid labour market which often leads people towards unemployment.



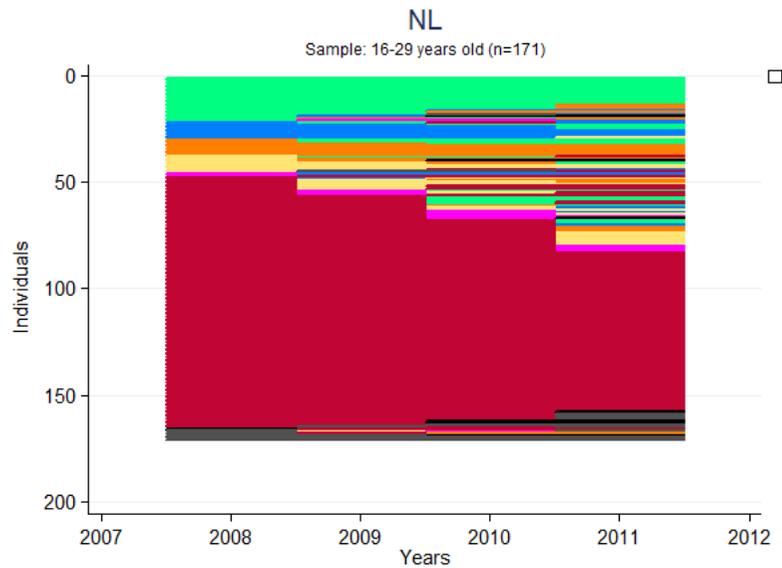
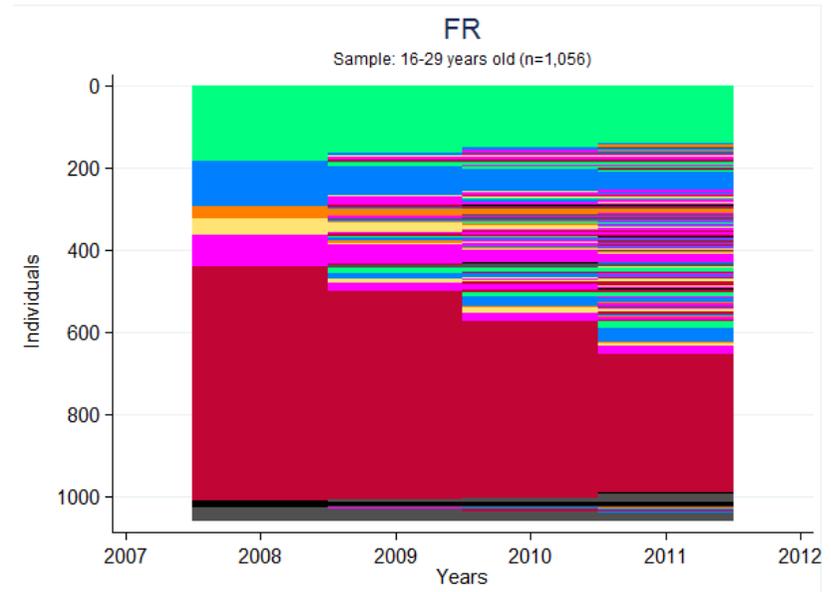
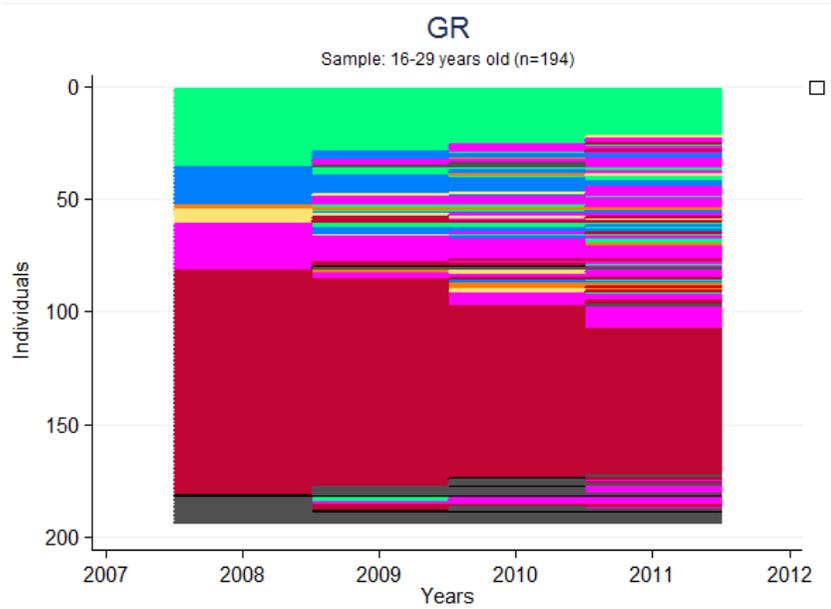
What happened before the economic crisis?



Source: EU-SILC longitudinal dataset 2008; own calculations

Source: EU-SILC longitudinal dataset 2008 and 2011; own calculation

Youth transitions: 2008-2011



Source: EU-SILC longitudinal dataset 2008 and 2011; own calculations