Universidad de Alcalá

Employment Quality: Are There Differences by Types of Contract?

Virginia Hernanz, José María Arranz & Carlos García-Serrano

Social Indicators Research (2017).

doi:10.1007/s11205-017-1586-4

5th European User Conference for EU-Microdata; GESIS. Manheim

Employment Quality Index EQI

- The aim of this article is to present quality index (and its dimensions and sub-dimensions) measured at the individual level (using microdata from the Labour Force Survey, LFS).
- Something that enables us to compare the quality of jobs for specific groups of workers.
- Indeed, our main interest lies in the comparison of jobs among workers distinguished by the type of their labour contract, for Italy and Spain.

The structure of this presentation:

- First, I clarify the concept of job quality to be used

- Second, I present the database and describes our proposal for constructing an EQI using data on the attributes of the jobs occupied by workers.

- Third, I provide the empirical results of the measurement exercise:
  - **Raw figures of the EQI over time** and for different sub-groups of workers classified according to their labour contract,
  - **BUT also the adjusted figures after taking account of the "composition effect"** that affects any type of EQI.

- Finally, I discuses the main conclusions drawn from these analyses.

Previous attempts to mesaure Job quality

To measure job/employment quality is a far from straightforward task.

- In principle, two perspectives (**subjective or objective**) can be used to define and measure the quality of jobs (see Eurofound, 2012, and Muñoz de Bustillo et al., 2011b).
- Proposals following the second approach try to focus exclusively on the characteristics of jobs.

  Green (2006), Muñoz de Bustillo et al. (2011a) and the indices developed by ETUI-REHS and Eurofound are examples of this line of work

Employment Quality a multidimensional concept

A review of specialized literature shows that job quality is considered a **multidimensional concept**, covering four main dimensions:

1. Socio-economic security (decent wages and stability)
2. Working conditions (intrinsic quality of work, and health and safety)
3. Opportunities for improvement (qualification and training)
4. Balance of work and non-working life.

These four dimensions are roughly in line with the categories proposed in Eurofound (2002) and Davoine et al. (2008), following the proposal by European Commission (2001), as well as in Muñoz de Bustillo et al. (2011a) and Eurofound (2012), although grouped in a different way.

LFS Data and Employment Quality Index

The annualize LFS contains a number of questions concerning :

- The educational level of workers
- The type of job
- The Performance of on-the-job training
- working time, the duration of the working week, working in “atypical” hours, etc.

But, it does not include information associated with health and safety or wages.

Therefore, LFS enables us to construct indicators related to the areas of:

- opportunities for improvement
- work–life balance
- and partially working conditions and security.

DIMENSION	SUB-COMPONENT
WC: Working conditions (44.5%)	WC1 (11.1%): Working part-time by reason: not having found a full-time job (0); other reasons (50); not wanting a full-time job (100).
	WC2 (11.1%): Usually working more hours than agreed or contained in the labour contract or the collective agreement: more hours (0); otherwise (100).
	WC3 (11.1%): Wishing to work more or fewer hours than currently: more or fewer hours (0); same number of hours (100).
	WC4 (11.1%): Working in companies with fewer than 50 employees (0); with 50 or more employees (100).
ST: Skills and training (33.3%)	ST1 (11.1%): Having undertaken on-the-job training activities funded (totally or partially) by the company in the four weeks prior to the interview: no (0); yes, but not funded by the company (33); yes and funded by the company (100).
	ST2 (11.1%): Level of qualification required by the job: occupational group 9 (0); groups 4–8 (33); group 3 (67); groups 1–2 (100).
	ST3 (11.1%): Skills mismatch: difference between the skills required by the job and those possessed by the worker: over-qualification/sub-employment (0); otherwise (100).
WLB: Work–life balance (22.2%)	WLB1 (11.1%): Regular weekly working hours in the main job: +48 (0); 43–48 (25); 38–42 (50); 21–37 (75); 1–20 (100).
	WLB2 (11.1%): Average of the following five variables: Number of times in the last four weeks that the working day ended any time between 20:30 and 24:00 Number of times in the last four weeks that the working day ended after 24:00 Number of times in the last four weeks that the individual worked on a Saturday Number of times in the last four weeks that the individual worked on a Sunday: Working in a shift system

Figure 1. Evolution of the scores of the EQI and its dimensions: Spain (2006-2014) and Italy (2006-2013). Source: Spanish and Italian LFS.

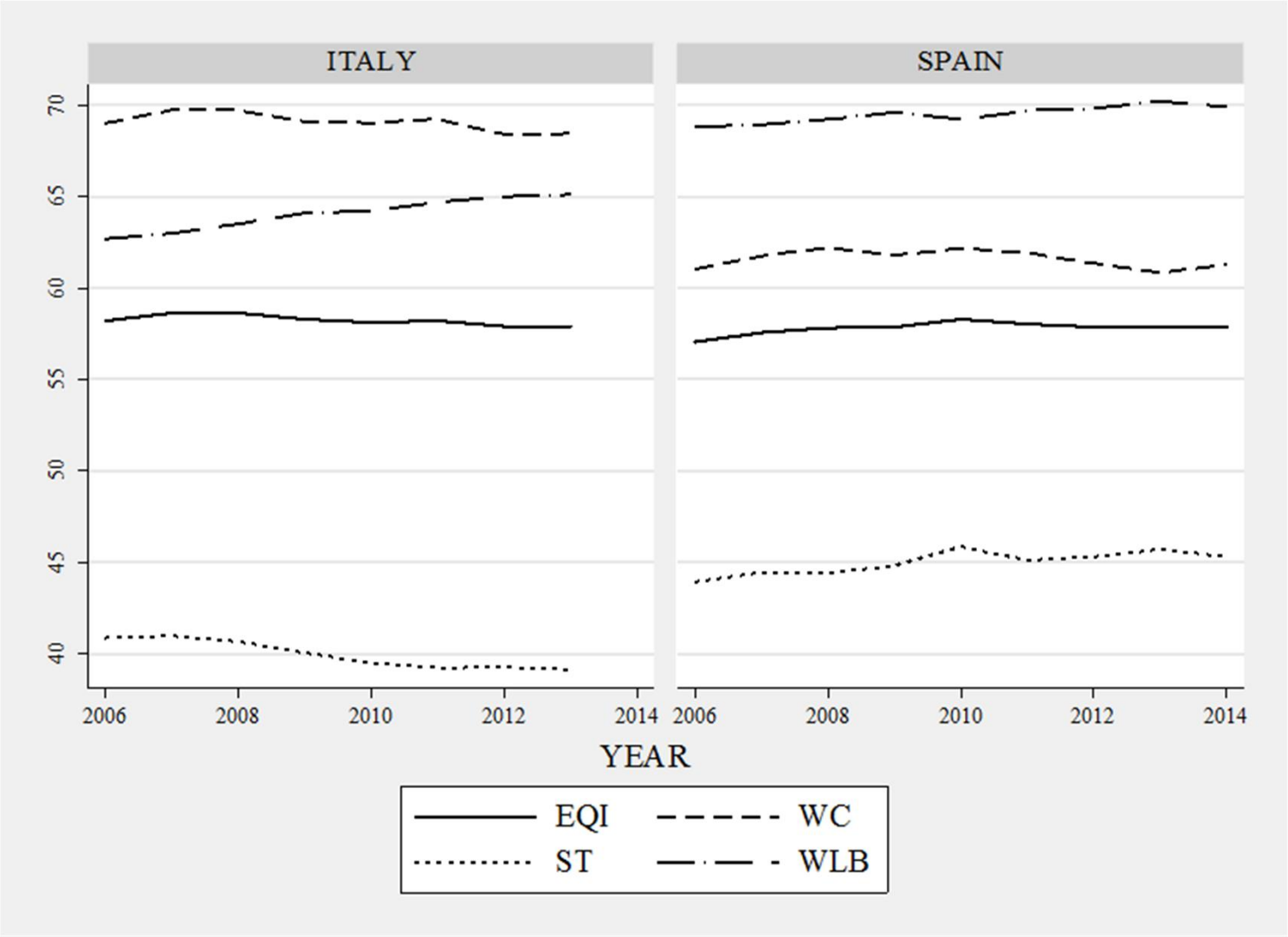
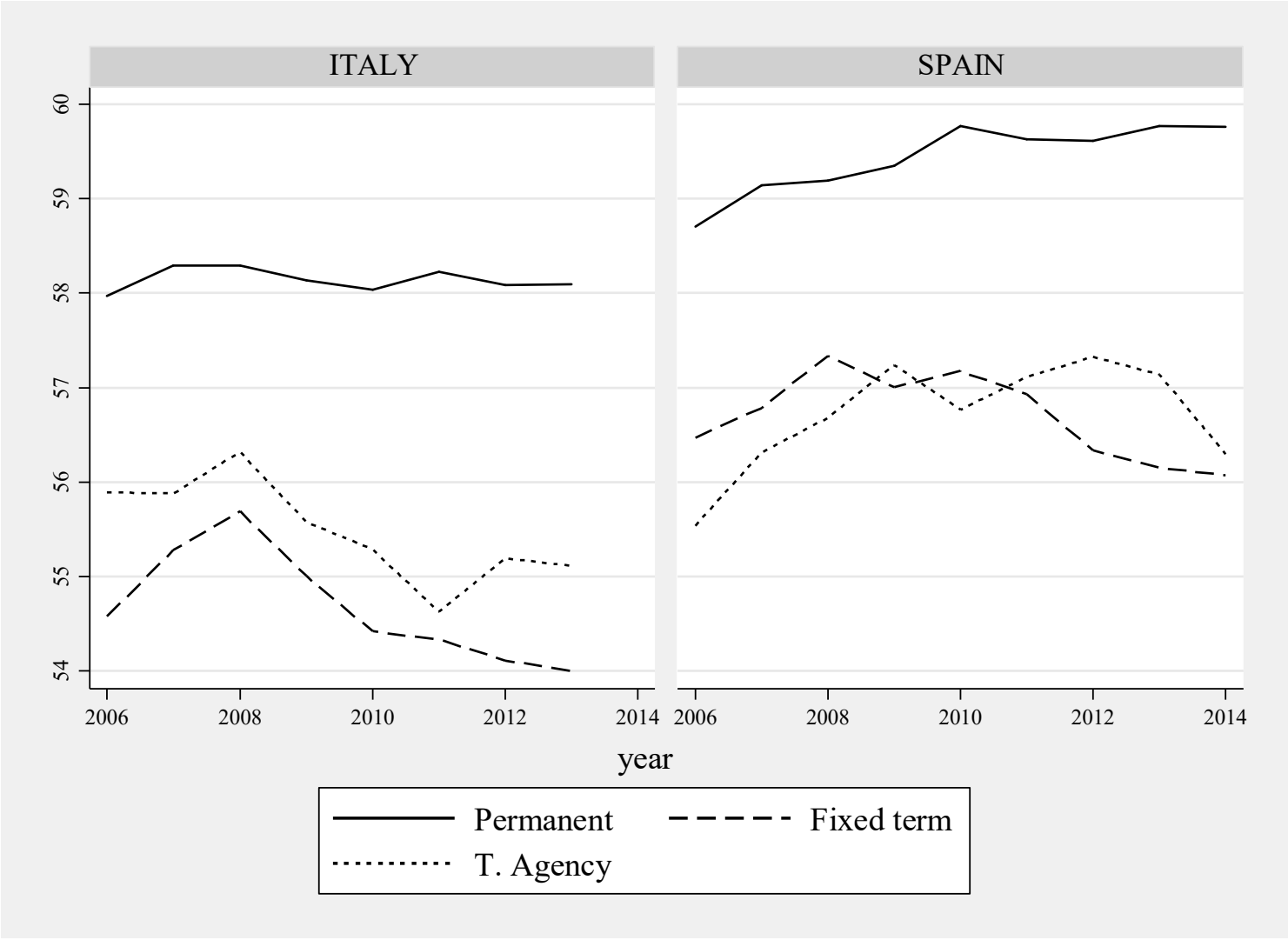


Figure 2. Evolution of the scores of the EQI by type of contract: Spain (2006-2014) and Italy (2006-2013). Source: Spanish and Italian LFS.



“Net” EQI- The composition effect

- The results of the construction and measurement are affected by alterations in the composition of the characteristics of the employed population so that variations in the results may reflect changes in the attributes of workers rather than actual changes in the quality of jobs.

- So, To try to take into account this “composition effect”, we carry out a multivariate analysis by estimating regressions on the EQI (and its components), controlling for characteristics of workers and jobs.

- This will allow us to examine what happens to the quality of jobs over time for the average worker and how job quality changes for different categories of workers defined by their type of contract.

First model

The information comes from the LFS individual data organized as a pool from 2006 to 2013/2014. We estimate the following model:

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 T_i + \nu_i \quad (1)$$

where Y_i is the variable that measures employment quality;

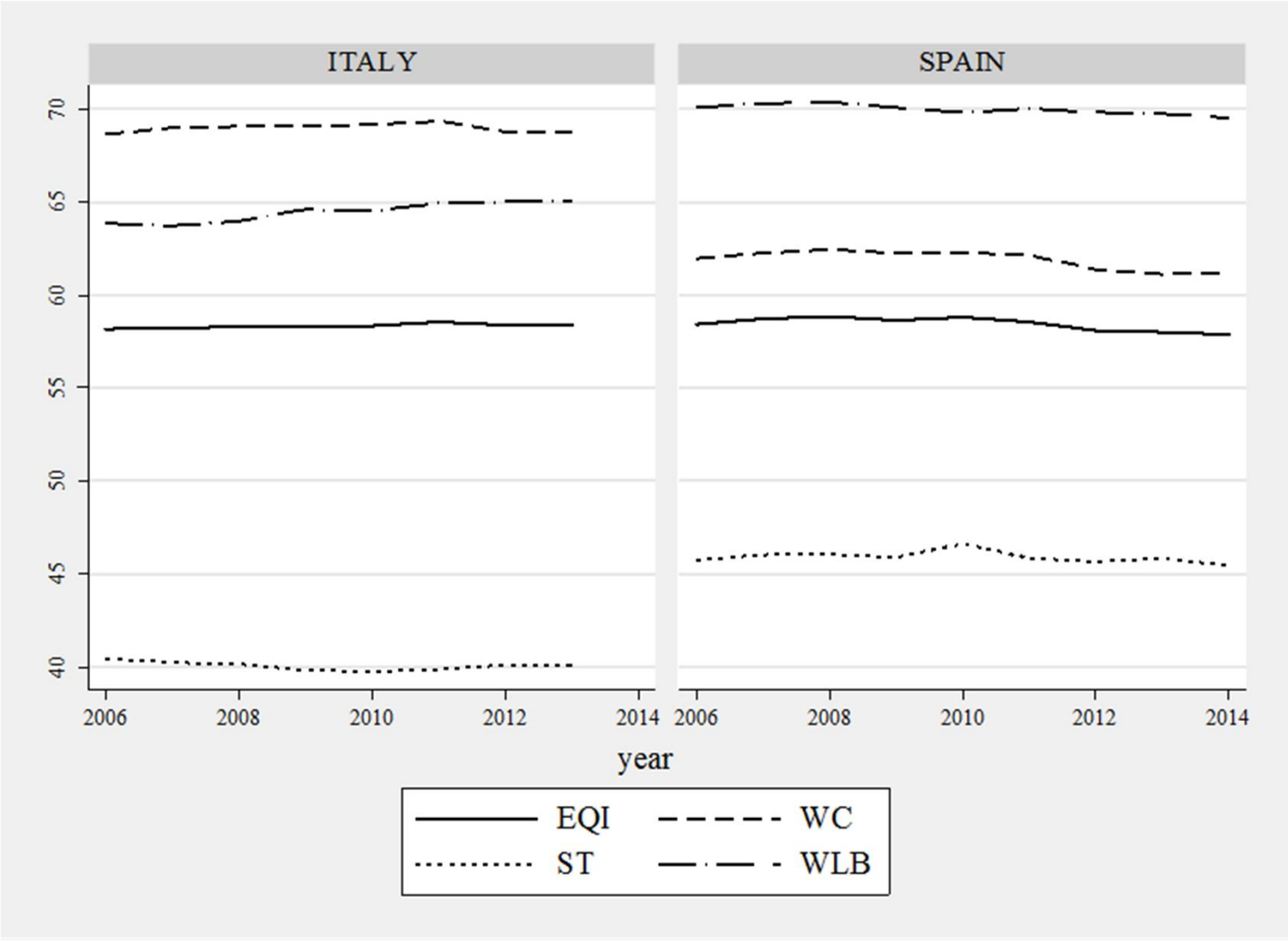
X_i is a vector of exogenous control variables;

Z_i is a variable that captures the type of contract of each person at each moment of observation;

T_i is a set of dichotomous year variables (from 2006 to 2013/2014);

ν_i represents the error.

Figure 3. Evolution of the 'net' scores of the EQI and its dimensions (taking account of the 'composition effect'): Spain (2006-2014) and Italy (2006-2013). Source: Spanish and Italian LFS.



Indicators net of the "composition effect"

The shortcoming of the previous regression lies in the fact that the effect of the contract is assumed to be constant throughout the period of analysis.

To take account of this, we carry out the estimation of this model (the type of contract are interacted with year dummies):

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 T_i + \beta_4 Z_i T_i + \nu_i \qquad (2)$$

where $Z_i T_i$ captures the interaction between the different categories of workers by type of contract and the set of dichotomous year variables.

Figure 4. Evolution of the 'net' scores of the EQI (taking account of the 'composition effect') by type of contract: Spain (2006-2014) and Italy (2006-2013). Source: Spanish and Italian LFS.

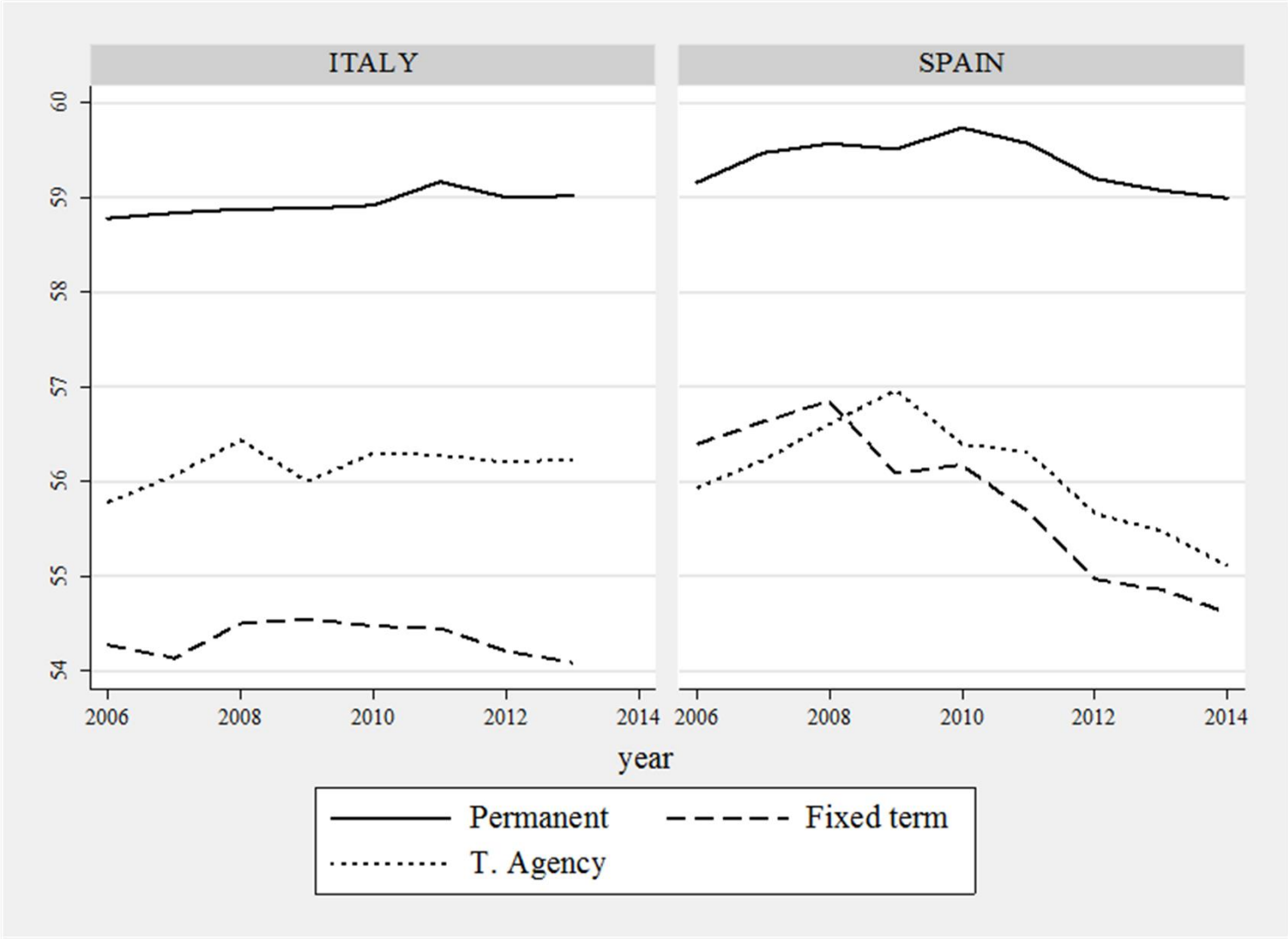


Figure 5. Evolution of the 'net' scores of the dimension "working conditions" (taking account of the 'composition effect') by type of contract: Spain (2006-2014) and Italy (2006-2013). Source: Spanish and Italian LFS.

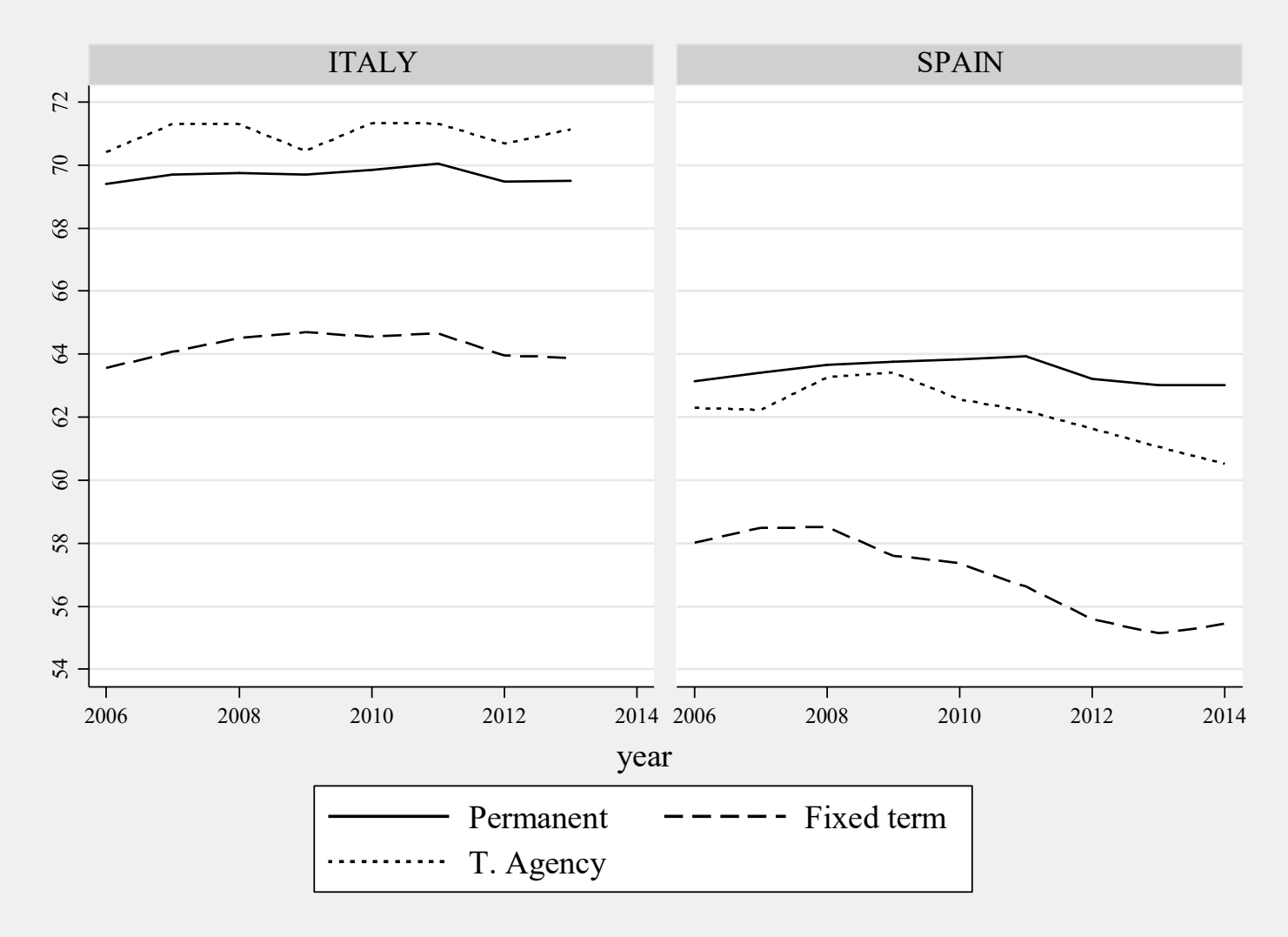


Figure 6. Evolution of the 'net' scores of the dimension "skills and training" (taking account of the 'composition effect') by type of contract: Spain (2006-2014) and Italy (2006-2013). Source: Spanish and Italian LFS.

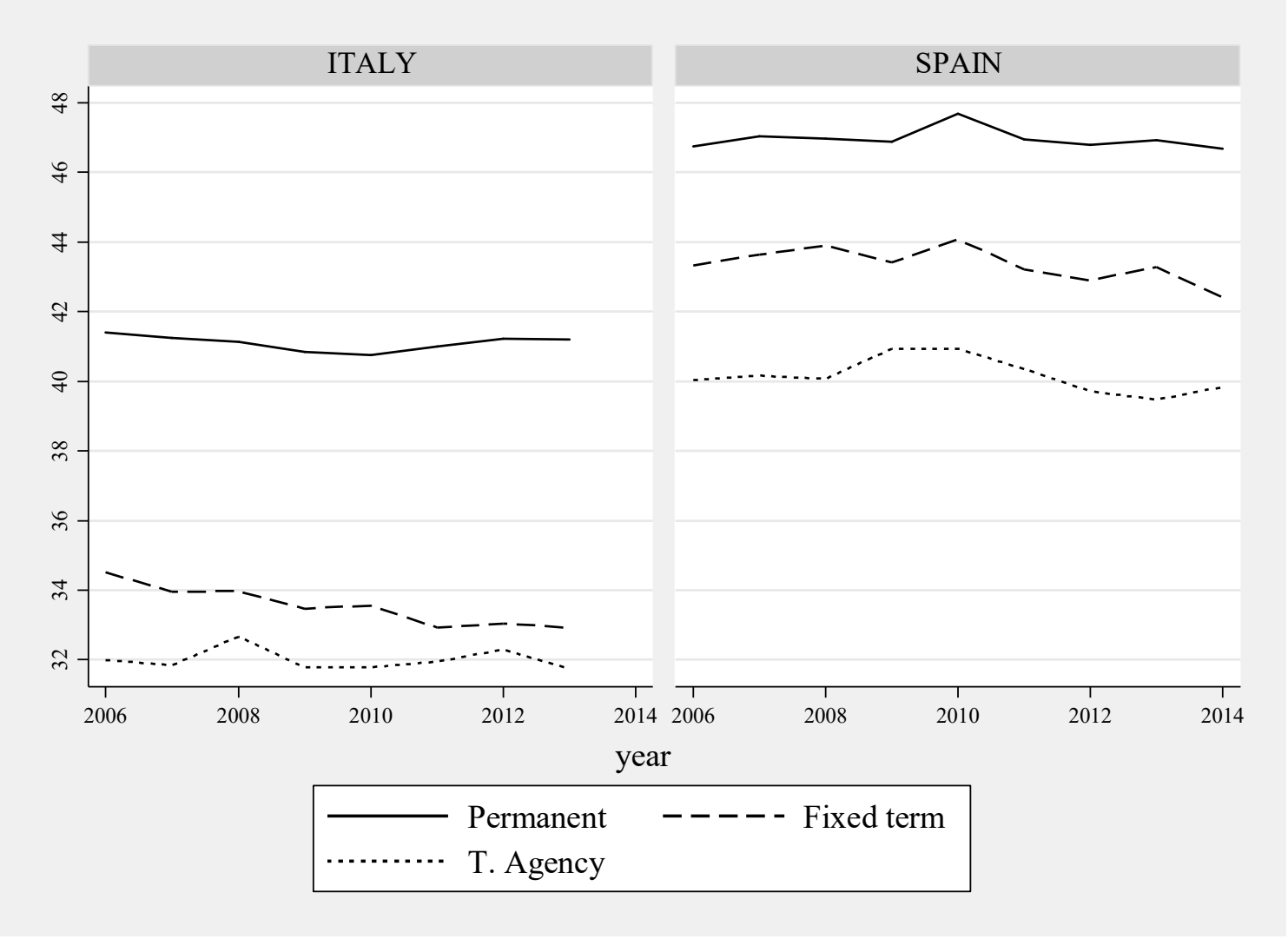
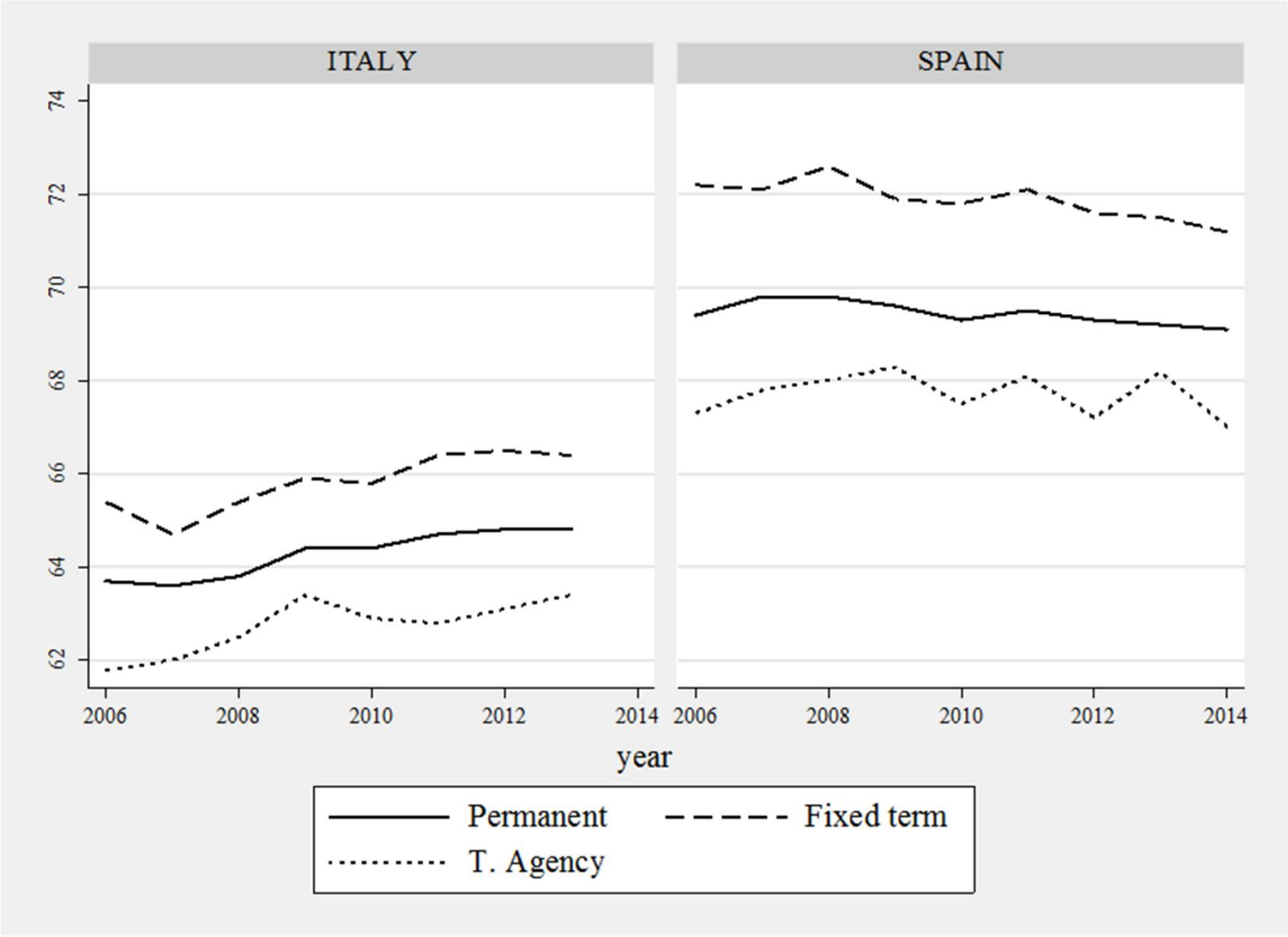


Figure 7. Evolution of the 'net' scores of the dimension "work-life balance" (taking account of the 'composition effect') by type of contract: Spain (2006-2014) and Italy (2006-2013). Source: Spanish and Italian LFS.



Conclusions

- Our findings show that employment quality remained fairly stable during the period of analysis (2006–2014), with a slight increase at the beginning (2006–2008 for Italy; 2006–2010 for Spain) and a minor decrease later on.

- Moreover, a sort of ranking in employment quality has been found between groups of workers, with those holding an open-ended contract faring the best and those with temporary contracts hired directly by companies faring the worst.

- We have found that the recession initiated in 2008 had a negative impact on employment quality. This impact was bound to worsen the quality of jobs occupied by temporary workers. This is highly salient in the case of Spain but not in Italy.

- Some components explain this behaviour: the WC dimension, in particular the sub-components related to involuntary part-time work and the adjustment of desired and actual hours.

- Finally, the comparison of the measurement of 'gross' and 'net' indicators suggests that a fair proportion of the movements detected are due to changes in the composition of the workforce and jobs.