

Work history patterns under different arrangements. A case study for the Italian labour market

Fabrizi E.*, Farcomeni A.**, Gatta V.***

Abstract

According to the literature a work arrangement can be defined as “*standard*” or “*non-standard*” depending on duration (full-time versus part-time) and permanence (open-end contract versus fixed-term contract). Structural changes in the Italian labour market acknowledged by the 1997/1998 set of reforms, aiming at removing market rigidities, have led to a transition from an “*old model*” of accessing the labour market (*one job for life*) to a more complex model characterised by high job mobility and high job fragmentation. In this context, it becomes crucial to extend the analysis to the entire work history instead of looking at a single work arrangement. This study is focused on work history of young people accessing for the first time the labour market (“*new entrants*”) in the private sector who do not spend long period in the unemployment state. The aim of the paper is to profile different work history patterns, studying their virtuousness not only under the contractual point of view but also in terms of wage dynamics. The hypothesis is that workers with unstable careers, from a contractual point of view, may be compensated from the economical point of view. This could reflect a sort of ‘fair’ trade-off between high wages and contractual stability. Unfortunately, our results tell a different story. Furthermore we estimate individual characteristics’ impact on the probability of having a specific career. Moreover the results obtained by performing survival analysis, in order to investigate the time needed to get “*contractual stability*”, reveal that at two years after first entrance into the labour market a quarter of the population is still at risk (that is, without any contractual stability).

* Dipartimento di Economia, Facoltà di Scienze Statistiche, Sapienza Università di Roma - elena.fabrizi@uniroma1.it

** Dipartimento di Medicina Sperimentale, Facoltà di Medicina e Chirurgia, Sapienza Università di Roma - alessio.farcomeni@uniroma1.it

*** Dipartimento di Statistica, Probabilità e Statistiche Applicate, Facoltà di Scienze Statistiche, Sapienza Università di Roma - valerio.gatta@uniroma1.it

1. Introduction

In recent years, many studies have become increasingly concerned over the changes occurring in the labour market due to the growth of precarious non-standard employment in most developed countries. In the Italian labour market structural changes acknowledged by the 1997/1998 set of reforms, aiming at removing market rigidities, have led to a transition from an “old model” of accessing the labour market (one job for life) to a more complex model characterized by high job mobility and high job fragmentation.

The empirical literature on the quantitative dimension of this phenomenon and on its effects largely reflects the multidimensional nature of the concepts of non-standard work arrangement, flexibility and precariousness. An associated problem is to find for these terms unambiguous definitions and appropriate indicators.

Our focus is on two aspects of precariousness: the type of labour contract (permanent open-end contract or fixed term contract) and the economic treatment. In our opinion, due to the possible job fragmentation, in order to define the ‘employer status’ and distinguish among ‘good’ and ‘bad’ careers, it is crucial to analyze the entire work history instead of looking at a single work arrangement.

One innovation of the present analysis resides in specifically treating standard and non-standard work history patterns by an ex-post evaluation of the careers. The key questions addressed are the following: How can different work history patterns be defined and characterized? How long does it take to get a stable job? Is it important to look at the economical aspects?

We have profiled different work history patterns, studying their virtuousness also in terms of wage dynamics and estimating individual characteristics’ impact on the probability of having a specific work history. We collect empirical evidences from the Italian labour market, focusing on work history of young people accessing the labour market for the first time.

Moreover, the results obtained by performing survival analysis in order to investigate the time needed to get “contractual stability”, reveal that at two years after first entrance into the labour market a quarter of the population is still at risk (that is, without any contractual stability). Section 2 provides a literature review illustrating how the extent of research define and measure the various forms of non standard work and how and where our analysis innovates. Section 3 describes the dataset and the methodology used. Results are presented in section 4. Final discussion is reported in the last section.

2. Literature review

It is not so easy to find a consensual quantitative measure for the multidimensional nature of the concepts of job precariousness, flexibility and instability in the literature. The expressions: non-standard work, precarious work, and precarious employment are among those most often seen in the scientific literature concerning labour and are sometimes employed interchangeably.

Contemporary literature analyses the transformations occurring into the labour market, in particular from the perspective of flexibility. Related topics include job insecurity, uncertain careers, worsening working conditions and downgraded access to standard social protection. Flexibility refers to wages, working hours, contract duration and social security fees reductions.

The debate on flexibility in the labour market frequently takes into account the possibility for the employers to be able to use non-standard work arrangements. The idea of non-standard work refers to a concept that varies widely between countries and from author to author. A standard work arrangement, according to mainstream approaches, is an employment with a set of characteristics such as: full-time (at least 30 hours per week), permanent (meaning a continuing employment), on-site and waged (see, among the others, Campbell, 1991).

The expression ‘non-standard work’ is frequently used to designate a work that is not full-time and permanent (Tucker 2002) or as an employment whose duration was unsure or limited and whose status was vaguely or poorly defined (Fournier et al., 2003).

International studies suggest that many casual and temporary workers find their employment less favourable than standard employment (European Commission, 2008; OECD, 2002; Dawkins et al. 1997; Meuders and Tytgat, 1989). In these studies it is underlined that in most countries non-standard workers do not benefit from the same statutory rights as permanent workers in terms of remuneration, especially when they are not included into collective agreements.

In these approaches the attempts to properly define the atypical works is useful not only to evaluate, at macro level, the impact of the atypical contracts into the labour market, but also to capture the effects on the employees involved, both in short and in the long run. These arguments raise the issue of precariousness.

Due to the multidimensional nature of the concept of precariousness in the literature it is not easy to find unambiguous definitions and appropriate indicators to measure this concept. It is frequent for economists and statisticians to use the expression “precarious employment” as a synonym for atypical jobs, referring to the distinction between open-ended contracts and fixed-term contracts as a proxy measure of employment precariousness¹.

¹ For a more detailed review of the literature on this issues see chapter 1.

In our approach employment precariousness is a non-standard work which is not deliberately chosen by the worker, is unstable and unprotected, pays poorly and offers little hope for the future. A similar definition is in Blondin et al. (2001).

In this sense job insecurity and the associated financial insecurity are highlighted as disadvantages faced by casual and temporary workers, which could put these workers at risk of precariousness.

Along with these lines, in our opinion it becomes important to analyze the relationships between non-standard work and precarious employment: it is not necessarily true that a non-standard job is associated to the negative aspects of precariousness.

The purpose of this study is to investigate this issue, trying to evaluate the effects of flexibility for a group of employees involved in non-standard work arrangement, comparing their performance with their counterparts with standard labour contracts.

We use look at the entire career instead of studying transitions between single work arrangements. This innovative approach leads us to a slightly different perspective with respect to the one usually taken in the literature: in many cases the analyses are focused only on the first transition from temporary to permanent job (among the others, for the Italian case, see Picchio, 2008; Pozzoli, 2009; OECD, 2008;). Indeed, our analysis uses all the transitions along the observed career. This is done so to include every bounce in and out stable contracts, catching complexities which are usually overlooked by a static point of view.

A similar idea is suggested in Corcoran (1979). The same approach more recently has been pursued by Stewart and Grenhalgh (1984), for the British case; and by Neuman and Zidermann (2003) using data from Israel. Also Leombruni (2005) uses a similar approach. In the latter analysis the author evaluates the difference among work history patterns for the workers who move from work to retirement.

Corcoran (1979) proposed a diagrammatic representation to describe work history patterns of US women, looking at the sequence of spells of work and non-work. In this study, similarly, we look at the sequence of spells of standard and temporary work. By a spell of work we mean a period in which the typology of work arrangement is not changed (in the same spell, it remains permanent or temporary), irrespectively of the number of employers within a single spell. We do so because the analysis is focused on the worker's perspective.

This is a sort of ex-post evaluation of different careers, based on the observation of the individual work history pattern since the entrance into the labour market, over a period of 5 years. According to this approach we evaluate the risk of precariousness looking both at contractual and economical aspects, in order to provide one first set of evidences useful to distinguish between "good" and "bad" careers.

More specifically, we analyze differences among work histories taking into account two main aspects: on one hand, in order to distinguish between protected and unprotected workers, we look at the weight of different employment contracts in the first five years of the career; on the other hand, we put emphasis on the economical aspect in order to evaluate the differences among work history patterns.

3. Data and methodology

This study is focused on work history of young people accessing for the first time the labour market (“new entrants”). The motivation for restricting to this segment of the labour market resides in their particular characteristics: they are the part of the labour force most sensitive to changes allegedly occurring in the labour market. New reforms of the labour market, introduced at the end of '90s, involve only the new hires. These reforms are hence addressed especially to the new entrants (the so called ‘reforms at the margin’). It has been shown in fact that labour force mobility regards mainly the first part of the individual work history pattern (Leombruni and Quaranta, 2005). This particular segment is then suitable for revealing the transformation process of the labour market, highlighted through non-standard works.

We included in our analysis new entrants in the labour market in 1998. This cohort has been followed from 1998 to 2002, in order to classify their work history patterns. The micro-data used in the present analysis form longitudinal dataset, which is a random draw of INPS contributors born in four different dates.

The sample dimension is 1/90th of the entire population of private employees that, in a single year, pay contributions to INPS. The datasets related to contributors to the main INPS funds, the private employees pension fund (Fondo Pensioni Lavoratori Dipendenti, FPLD). It includes all the employees of the private sector (including open-ended and fixed-term contracts, apprentices, trainees, and agency workers), temporary workers of the public administration, and all the workers without an autonomous security fund. This dataset does not include civil servants with a permanent contract, agricultural workers and professionals with an autonomous security fund. The dataset also excludes workers in the black economy. Career transitions are observed monthly.

Being based on an administrative source, as seen, these data record only information reported in the official contribution payments forms; a set of crucial variables needed to analyze occupational transitions in an econometric robust way – e.g. educational attainment, family background, some features of the firm (sector, size) – are unfortunately not available. Besides, micro-data consider only statuses of individuals paying contributions to INPS.

Consequently, we are not able to infer why individuals disappear from archives, i.e. if their disappearance is due to unemployment (without being entitled to benefits), to exit from the labour force (for discouragement, retiring, entrance in the black economy), or to enrolment in a job whose pension contributions are not paid to INPS (i.e. into the public sector or self-

employment into professional categories managing a specific pension fund). In addition, an important limitation of this dataset is that it does not cover the most recent years. The data-set is currently updated only until 2003.

However, currently only INPS archives allow tracking longitudinally individual careers for several years. As a consequence, only with these data it is possible to answer in a rigorous way to the crucial question about the average length of temporary jobs.

Referring to private employees, we focused on the sub-sample of 2,632 workers recorded for the first time in the private employees' pension fund (FPLD) in 1998 as fixed-term or open-ended employees, and aged 15-30, without a long spell into unemployment. Descriptive statistics are reported in Table 1.

Note that in this analysis we look at the luckiest segment of the labour market, excluding employees who experiment long periods as unemployed (we include people who are employed for more than 80% of the actual working time, over the period of five years). Along the lines of the literature, in doing so we are excluding a well separated category of workers. Actually, workers who spend a long (cumulative) time in unemployment state form a distinct category characterized by different performances in the labour market when compared to people continually at work, independently from the employment arrangement, as shown by the results obtained in the previous chapter of the thesis.

In addition, the transition to a future contractual stability is influenced by the current status of unemployed. Among the others, Gagliarducci (2005) and Berton et al. (2008) show that the hazard of getting a permanent job decreases with the length of previous unemployment spells. Moreover it is argued by Picchio (2008) that the probability of transition to a stable job increases when the current state is of a temporary job instead of unemployment. In addition, in this part of the analysis, different types of work histories are defined and the inclusion of the unemployment state would make the definition very complex. This further line of research will be grounds for additional works in the future. It is important to point out the problem due to the limited amount of available information².

Our methods consists in building an ex-ante definition of different typologies of scenarios regarding the careers, taking into account for each worker, the possible sequence of standard and non-standard work arrangements along the first 5 years of the individual career. In this way we have distinguished among work histories with only standard arrangements and work histories with both standard and non-standard arrangements. The latter category³ has been split in upgrading, downgrading or mixed work history patterns depending on the sequence of the two types of work arrangement.

² Our choice to exclude workers with long period in the state of unemployment is also supported by the fact that if a worker disappears from our dataset (based on Italian Social Security Administration archives, as explained in depth in this section) it could be due to the transition: to unemployment; to the shadow economy or to another sector not covered by Inps (among the others the public sector or the agriculture).

³ We use the terms category, pattern and career as synonymous.

In summary, we define four categories:

1. 'Standard' i.e. career with standard arrangement (open ended contract)
2. 'Upgrading Non Standard' i.e. career with a sequence⁴ of non-standard jobs characterized by a single transition to a sequence of standard jobs
3. 'Downgrading Non Standard' i.e. career with a sequence of standard jobs characterized by a single transition to a sequence of non-standard jobs
4. 'Mixed Non Standard' i.e. career with continuous transitions between the two types of contracts.

It is important to underline that we analyze the number of transitions from one job to another along the career, but only if this shift implies a change in the type of arrangement (from open ended to fixed term contract and vice versa). According to this approach the term mobility refers to 'status mobility'.

In Figure 1.1 we report the classification adopted.

⁴ one or more

Figure 1.1

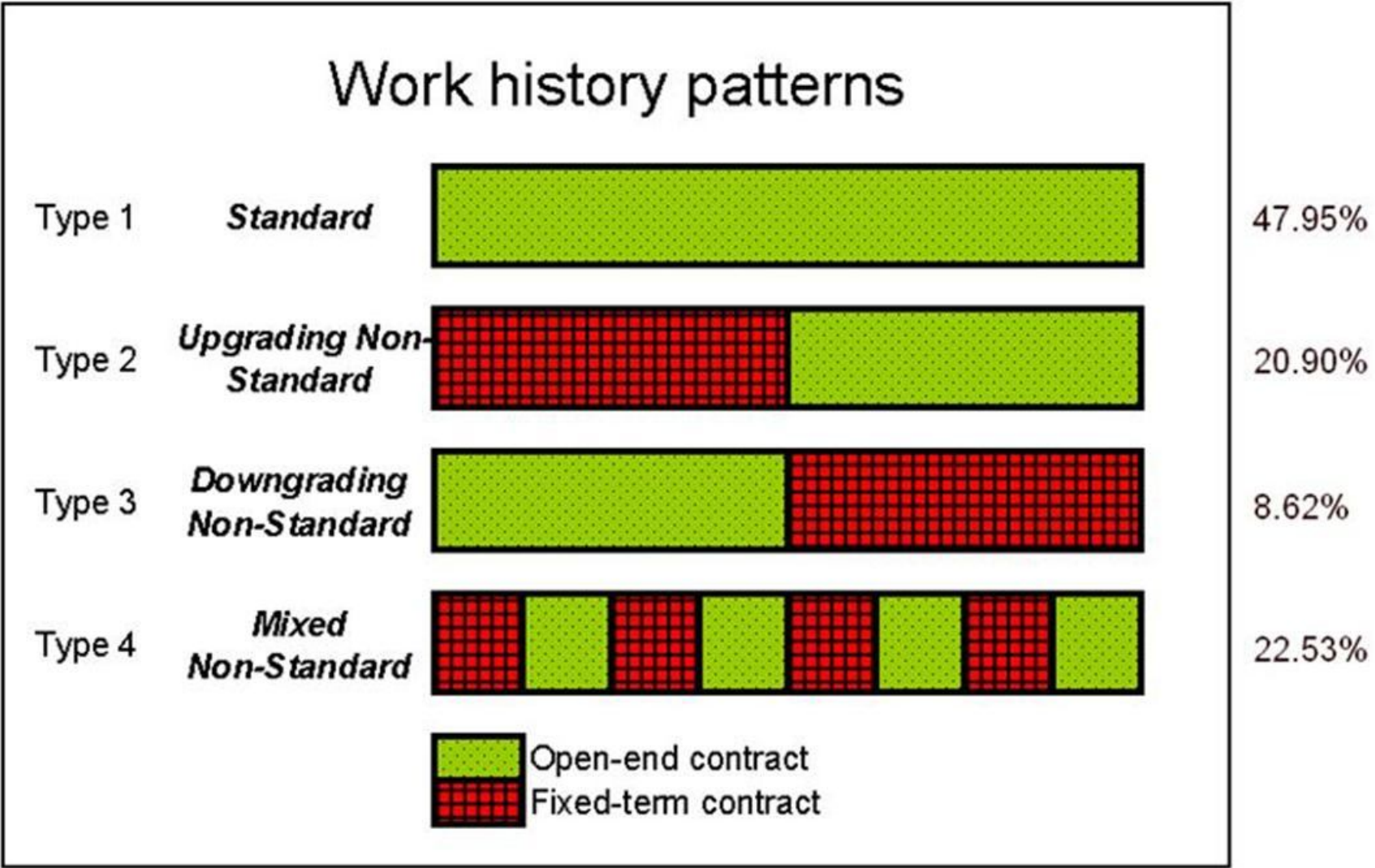


Table 1.1 Composition of the sample of individuals entered for the first time in the workforce as private employees in 1998

	Standard	work history pattern			%Marginal
		Upgrading non-standard	Downgrading non-standard	Mixed non-standard	
<i>gender</i>					
F	579	256	87	266	45.14
M	683	294	140	327	54.86
<i>age</i>					
16-23	959	309	181	380	69.49
24-30	303	241	46	213	30.51
<i>qualification</i>					
blue collar	782	192	174	347	56.80
white collar	480	358	53	246	43.20
<i>Total</i>	1262	550	227	593	2632
	47.95	20.90	8.62	22.53	100.00

source: own computation on Inps data

It is important to underline that the standard work history is the modal category, including about half of the sample. At the opposite, less than the 9% of the workers are included in the downgrading non-standard category. (see Table1).

In order to determine the influence of the individual characteristics on the probability of falling in each one of our four work history patterns we have performed a multinomial logistic regression with random effects. In this way we have taken into account the individual heterogeneity within each group. The covariates used in the model, limited by the amount of available information, are: gender, age, worker status, territorial mobility (a dummy variable that takes value 1 if the first place of work is not equal the place of birth, and 0 otherwise), job mobility (a dummy variable that takes value 1 if the Region of work changes along the career, and 0 otherwise).

Furthermore the upgrading non-standard work history pattern has been explored in depth in order to evaluate the median waiting time for the transition from the ‘non-standard state’ (characterized by only non-standard work arrangements) to the ‘standard’ one (characterized by only standard work arrangements). The time needed to get “contractual stability” has been analyzed applying a survival analysis, using the Kaplan-Meier estimator⁵.

The last part of the analysis focuses on the profiling of different work history patterns, studying their virtuousness also in terms of wage dynamics: we implement a dynamic regression model, including random effects to control for unobserved heterogeneity, applied to our panel dataset.

The dependent variable is the yearly earnings. Since the first entrance into the labour market can occur in every month, we drop the first year from the model. The covariates used in the model are: the four work history patterns, gender, age, work duration, geographic area (North-East, North-West, Centre, South and Islands), the number of spells of work in each year, job mobility (as defined before) and an auxiliary variable, one for each year considered, in order to take into account the natural promotion according to the length of one's service.

Part-time employees have been excluded from this part of the analysis because their wages are structurally lower than the full time's ones⁶.

⁵ A formal definition of the Kaplan-Meier estimator can be found in Collect (2003)

⁶ Due to data constraint we are not able to compute ULA to standardize part-time employees.

4. Results

The results obtained with the multinomial logistic regression, reported in Table 1.2, show that individual characteristics play a role on the probability of belonging to a specific work history pattern, after controlling for limited unobserved heterogeneity.

The reference category is the standard work history pattern.

With regards to the gender variable, the only significant coefficient reveals that males have more probability to fall in the upgrading non-standard work history pattern with respect to the standard category. This result confirms the findings obtained by Evangelista and Fabrizi (2008) in a similar study: females have better performances, at least at the beginning of the career, if compared with males.

Despite our findings, if we look at the literature it is not easy to find unambiguous indication. The innovative approach that has been adopted in this analysis leads us to a slightly different perspective as the one usually taken in the literature (see below). This could be related to three main factors: in many cases the analyses are focused on the first individual transition from temporary to permanent job. Indeed, our analysis is able to capture all the transitions along the five years career. In this way we are able to include every bounce in and out stable contracts. Moreover, we refer only to the youngest (less than 30 years) entering for the first time into the labour market. We refer to people with the best performance, because in our analysis we exclude both people experimenting long spells in unemployment state and the quasi-subordinate.

For instance, Berton et al. (2008), in a study on the new entrants into the labour market in 1998, show that the 31.64% of the females get a standard entry contract at the beginning of their career, against 27.95% for the males. The results obtained by Barbieri and Sestito (2008) seem to lead to a different interpretation. They estimate the probability of having a temporary contract, conditionally upon being an employee, and their results indicate that the probability of being a temporary is higher for females, students, for the low skill occupations and during the school to work transition, while it diminishes with age and educational attainments. In OECD (2008) factors influencing the work status of youth (15-29) after leaving initial education for a pooled sample of 21 European countries are reported. The evidences by gender do not seem to corroborate our findings: at European level male seems to get more chances of success in permanent contract, compared with the female counterparts. Pozzoli (2009) estimates the school to work transition probabilities and shows that female graduates have a higher hazard of getting a fixed-term contract but a lower hazard of getting an open-ended employment compared with the male counterparts.

Moreover, we adopt the dummy coding for variable age (which takes value 1 if age is less than 24) in order to have a (crude) proxy of the educational level: people entering for the first time into the labour market at less than 24 years old, with a high probability, have a lower education. The evidence suggests that young people have more chances to have a contractual stability over

the entire period, instead of getting upgrading or mixed careers. In other words, the youngest probably characterized by low educational level, are very likely to belong to the best category under the contractual profile. Although this result seems to be controversial, a possible explanation refers to the high prevalence of low-skilled workers with standard work history pattern.

This interpretation seems to be confirmed by the estimate of the coefficient related to the worker status. Blue collars have more probability to fall into the reference category if compared with the upgrading non-standard category. It should be noted that the upgrading non-standard category includes mainly workers with on the job training contracts (CFL) and temporary agency contracts. These typologies of work arrangement are characterized by workers with medium-high skills and are the categories with higher likelihood to transit to open ended contracts. In Berton (2007) for the aged 25-29 the CFL represent the modal contract category among the new entrants into the labour market in 1998 with a fixed term contract.

Territorial mobility does not seem to favour the access to a standard career. People who decide to leave the place of birth to go to work in another region could have less probability to become part, at least at the beginning of the career, of the new social structure, meeting more difficulties in finding an immediate contractual stability.

This result seems to be supported by the literature. Rees and Gray (1982) and Pistaferri (1999), show that the informal search channels play a role: the youth working status (the analysis refers to the incidence on the exit from the unemployment state) may depend on the influence parents have on the labour market.

Job mobility is significant when mixed non-standard and the standard category are compared, showing that the (contractual) turbulence that characterizes the mixed category reflects the dynamism of these workers in terms of job mobility.

Not surprisingly, the sign of the coefficients of the intercepts parallel the frequency distribution of the work history patterns in the sample.

In synthesis, upgrading and mixed non-standard work history patterns seem to include similar workers whose characteristics are likely to be: male, with more than 24 years at the entrance level and white collar.

Table 1.2 Multinomial logistic regression with random effects

Variables	UPGRADING NON-STANDARD		DOWNGRADING NON-STANDARD		MIXED NON-STANDARD	
	Value		Value		Value	
	Std.Error	p-value	Std.Error	p-value	Std.Error	p-value
Gender (M)	0.200	0.076	0.130	0.381	0.032	0.765
	0.113		0.148		0.108	
Age (<24)	-0.707	0.000	0.189	0.291	-0.404	0.001
	0.117		0.179		0.115	
Worker status (white collar)	1.006	0.000	-0.630	0.000	0.173	0.123
	0.117		0.162		0.112	
Territorial mobility	0.508	0.052	1.141	0.000	0.788	0.001
	0.261		0.306		0.224	
Job mobility	-0.178	0.206	0.013	0.942	0.472	0.000
	0.141		0.176		0.119	
(Intercept)	-0.971	0.000	-1.812	0.000	-0.730	0.000
	0.155		0.211		0.144	
Random effects:						
$\bar{\sigma}$	0.00147		1.5745		0.00724	

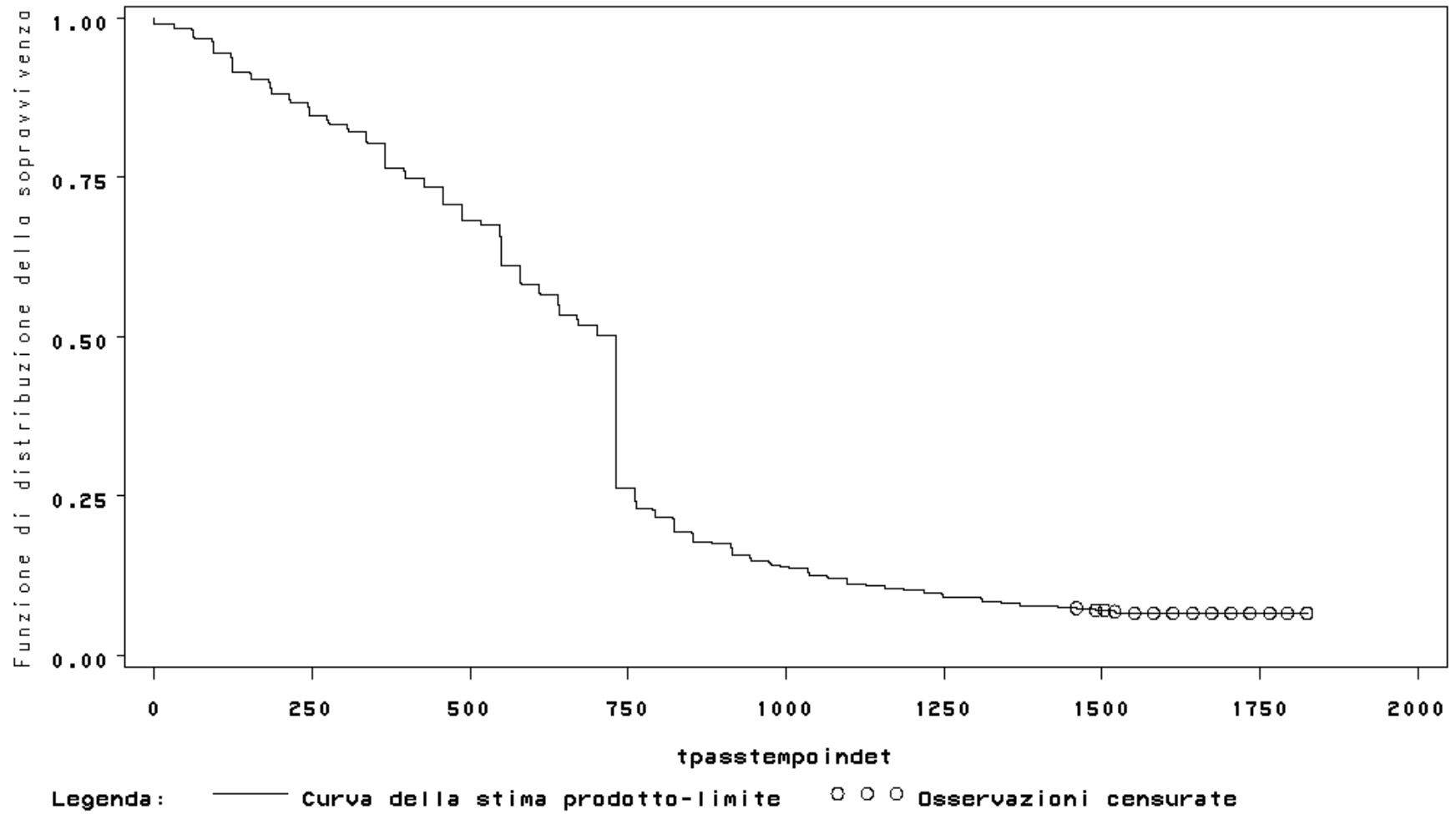
Reference category: Standard work history

The second step concerns an in-depth analysis of the upgrading non-standard career. In order to evaluate the time needed to get contractual stability a survival analysis has been performed. It is useful to underline that in this analysis the event refers to a single transition to a stable work without other shifts of working state over the observed period.

The result (Figure 1.2) suggests that half of the population experiments the event within two years, while exactly at two years, another quarter moves to the area of contractual stability. This could be influenced by the regulation of the Italian labour market (for instance CFL has a legal duration of 24 months).

In addition the analysis reveals that at two years after first entrance into the labour market a quarter of the population is still waiting to experiment the event. These evidences are also supported by a similar study (Farcomeni et al., 2008, reported, summarized in the appendix) in which the time needed for stabilization has been estimated: in this study, it has been evaluated that for about 10% of the population there is a risk to be trapped in a contractual instability until the end of the career. Therefore, the upgrading non-standard category may be characterized by an early stabilization (within two years from the first contract).

Figure 1.2 Survival analysis for upgrading non-standard



So far the analysis has been focused on the contractual dimension. As said in the introduction, an open ended contract guarantees to the employee the benefits of a social security protection, not only while working, but also at retirement. Nevertheless it could be that the contractual dimension, alone, is not enough to characterize different work history patterns. In order to distinguish between “good” and “bad” careers a starting point may be given by a study of the economical dimension. According to this approach we put the emphasis on wages.

The hypothesis is that workers with an unstable careers, from a contractual point of view, may be compensated from the economical point of view. This could reflect a sort of ‘fair’ trade-off between high wages and contractual stability. Unfortunately, our results tell a different story.

In order to study the virtuousness of the four work history patterns, in terms of wage dynamics, we model a dynamic regression applied to the panel data, including random effects to control for unobserved heterogeneity⁷.

The dependent variable is the level of the yearly earnings deflated using the base year 2007. The different work history patterns and the individual characteristics are included as covariates. The results are reported in Table 1.3.

Our findings show that workers who belong to the upgrading category have higher level of wage, if compared with the colleagues with a stable career (more than 2000 euros per year). In order to explain this result it is important to highlight two points. On one hand, as shown before, 75% of the workers who entered in the labour market with an unstable contract get a contractual stability in the first two years. On the other hand, the standard work history pattern can be characterized by the presence of low profile jobs, which offer low wages compensated by contractual stability. This supposition appears to be corroborated by the evidence obtained in the first part of the analysis where younger and un-skilled workers are more likely to belong to the standard category.

Now we turn to the downgrading non-standard category. Despite the negative sign of the coefficient could indicate that the transition from stable to unstable contract is not voluntary, the estimated parameter is not statistically significant. This confirms that the ex-ante sorting of the different careers, build up on contractual aspect, is not straightforward.

A similar result is obtained when mixed and standard work history patterns are compared. The coefficient now is positive but not statistically significant. Our analysis do not provide evidences on the presence of a "wage premium" to compensate a lower labour protection.

Looking at the other covariates included in the model, the results are in line with our expectations. An increase of the lenght of the job spell has a positive effect on the level of earnings (10 euros per day). Not surprisingly women, younger and people who work in the centre-south Italy have worse performance in terms of wage. Furthermore, a rise in the number of contracts per year produces lower earnings. Territorial mobility does not seem to cause significantly effects on the wages.

⁷ Wooldridge, J. M. (2002)

Table 1.3: Dynamic Regression with random effects

	Value	Std.Error	p-value
(Intercept)	-9358,2	1797,6	0,000
work duration	10,1	1,7	0,000
Gender (M)	2872,5	453,6	0,000
Year 2000	2543,4	256,9	0,000
Year 2001	4253,1	252,4	0,000
Year 2002	5068,6	253,4	0,000
job mobility	1021,4	859,5	0,235
North-East	-144,1	529,1	0,785
Centre	-2157,9	533,8	0,000
South and Islands	-4497,3	613,3	0,000
number of spells	-667,5	182,8	0,000
age	1002,1	70,6	0,000
Mixed non-standard	458,5	606,4	0,450
Upgrading non-standard	2103,1	513,0	0,000
Downgrading non-standard	-1462,7	1113,3	0,189
Random effects:	σ	5799,0	

5. Discussion

In this analysis we focussed on young people entering for the first time into the labour market in 1998, followed by the first five years of their career. People who experiment a significant period in unemployment state are excluded from the analysis. The aim of this study was to characterize the differences among the employees in terms of advantages and disadvantages, using both a contractual and an economical perspective. Instead of concentrating on a single work arrangement we introduce a longitudinal point of view, which follows the individual career.

The main innovation is in treating standard and non-standard work history patterns with an ex-ante classification and an ex-post evaluation of the careers. Looking at the sequence of different employment contracts (during the career) we defined four categories: Standard, Upgrading Non Standard, Downgrading Non Standard and Mixed Non Standard.

We estimated individual characteristics' impact on the probability of having a specific work history pattern. We found that female, young, blue collars are more likely to belong to the best category under the contractual profile. The non-standard work history patterns are associated with lower wages.

We also investigated the time needed to get 'contractual stability', and found that at two years after first entrance into the labour market a quarter of the population is still at risk (that is, without any contractual stability).

The results obtained when analyzing the wage dimension, show that the only non standard career compensated from the economical point of view belong to workers who get an early stabilization (about two years of instability and then stability).

Contractual instability along the career does not get a compensatory wage premium.

In conclusion, our evidence is that the penalization of non-standard contracts resides both in contractual and economical aspects, pointing evidence for the Italian case towards a tight bond between non-standard contracts and precariousness.

References

- Agresti, A. (2002) 'Categorical Data Analysis' (Second Edition) John Wiley & Sons, Inc., University of Florida, Gainesville, Florida, USA.
- Barbieri, G. and Sestito, P. (2008) 'Temporary workers in Italy: who are they and where they end up?' in *Labour, Review of Labour Economics and Industrial Relations*, Vol. 22. N.1, (Mar) 127-166.
- Berton, F. Devicienti, F. and Pacelli, L. (2008) 'Temporary jobs: Port of entry, Trap, or just Unobserved Heterogeneity?' *Laboratorio R. Revelli WP 79*, Moncalieri.
- Blondin, S. Lemieux, G. and Fournier, L. (2001) 'Emploi atypique et précarité chez les jeunes: une main d'oeuvre à bas prix, compétente et jetable'. *Gouvernement du Québec*. Québec, Canada.
- Booth, A. L., Francesconi, M. Frank, J. (2000) 'Temporary Jobs: Stepping Stones or Dead Ends?' Working Paper N. 8 – *Laboratorio R. Revelli (To)*.
- Campbell, I. (1991) 'Atypical Employment in Australia: Towards a Research Agenda', *Australian Social Policy Conference*, Sydney.
- Contini, B. and Trivellato, U. (editors) (2005) 'Eppur si muove. Dinamiche e persistenze nel mercato del lavoro italiano', *Bologna, Il Mulino*.
- Corcoran, M. E. (1979) 'Work experience, labour force withdrawals and women's wage: empirical results using the 1976 panel of income dynamics' in *Lloyd, C. B. Andrews, E. S. and Gilroy, C. L. (editors), Women in the labour market*. Columbia University press, New York.
- Dawkins, P. Simpson, M. and Madden, G. (1997) 'Casual Employment in Australia: Incidence and Determinants', *Australian Economic Papers*, December 1997.
- European Commission (2008) 'Employment in Europe', *Directorate-General for Employment, Social Affairs and Equal Opportunities*.
- Farcomeni, A. Nardi, A. Fabrizi, E. (2008) 'Bayesian cure-models with a logistic reparameterization, with application to Italian labor market analysis' In 'Atti della XLIV Riunione Scientifica della SIS', *Società Italiana di Statistica*.
- Fournier, G. Bourassa, B. and Béji, K. (2003) 'Travail atypique récurrent et expérience de précarité: un regard exploratoire'. In *Fournier, G. Bourassa, B. and Béji, K (editors), 'La précarité du travail: une réalité aux multiples visages'* 41-77. *Les Presses de l'Université Laval*. Québec, Canada.

- Gagliarducci, S. (2005) 'The dynamics of repeated temporary jobs'. In EUI Working Papers.
- Leombruni, R. (2005) 'Percorsi verso la pensione. Storie lavorative dei lavoratori anziani in Italia' in B. Contini e U. Trivellato (editors), in 'Eppur si muove. Dinamiche e persistenze nel mercato del lavoro italiano', Bologna, Il Mulino.
- Leombruni, R. and Quaranta, R. (2005) 'Eppure si muoveva già: Una breve storia della mobilità dei lavoratori in Italia' in B. Contini e U. Trivellato (editors), in 'Eppur si muove. Dinamiche e persistenze nel mercato del lavoro italiano', Bologna, Il Mulino.
- Meuders, D. and Tytgat, B. (1989) 'The Emergence of Atypical Employment in the European Community' in Rodgers G and J (editors) 'Precarious Jobs in Labour Market Regulation: The Growth of Atypical Employment in Western Europe', International Institute for Labour Studies, Brussels.
- Neuman, S. and Zidermann, A. (2003) 'Work histories of Israely. Men and women, 1983-1995'. Discussion paper N 6-2003. The Pinhas Sapir Center for Development. Tel-Aviv University.
- OECD (2002) Employment Outlook, 2002 Edition, OECD, Paris.
- OECD (2008) Employment Outlook, 2008 Edition, OECD, Paris.
- Picchio, M. (2008) 'Temporary contracts and transitions to stable jobs in Italy' in Labour, Review of Labour Economics and Industrial Relations, vol. 22 (Special Issue) 147-174.
- Pistaferrri, L. (1999) 'Informal networks in the Italian labour market', Giornale degli Economisti e Annali di Economia, 58, pp. 355-375.
- Pozzoli, D. (2009) 'The transition to work for Italian University Graduates' in Labour, Review of Labour Economics and Industrial Relations, vol. 23, n. 1, Mar., 131-169.
- Rees, A. and Gray, W. (1982) 'Family Effects in Youth Employment' in Freeman, R. B. and Wise, D. A., pp. 453-64
- Stewart, M. B. and Grenhalgh C. A. (1984) 'Work history patterns and the occupacionale attainment of women' in Economic Journal. N.94, September.
- Tucker, D. (2002). 'Precarious' Non-Standard Employment. A Review of Literature'. Labour Market Policy Group, Department of Labour: Wellington.
- Wooldridge, J. M. (2002) 'Econometric Analysis of Cross Section and Panel Data'. Cambridge, MIT Press.