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SECTOR: WHAT DIFFERENCE DOES IT MAKE?**

*An inquiry on preferences of voluntary and involuntary movers*

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# Working in the profit versus not-for-profit sector: what difference does it make? An inquiry on preferences of voluntary and involuntary movers

*Leonardo Becchetti, Stefano Castriota, Sara Depedri<sup>1</sup>*

## Abstract

We investigate what is behind the profit/not-for-profit wage differential by comparing judgments on job characteristics of workers who voluntarily or involuntarily moved from the former to the latter. We define voluntary movers as those who applied for a job in a not-for-profit organization and, when successful, resigned from their for profit position, while involuntary movers can either have been laid off by the company or have resigned without already having a job offer in the not-for-profit sector when leaving the firm. We observe that almost half of voluntary movers end up without higher wages, but with higher job satisfaction after the change. A vast majority of them exhibit significantly higher time flexibility, improved relationships with stakeholders, closer consistency with educational skills and higher satisfaction of intrinsic motivations in the new job. Our findings support the profit/no profit compensating differential hypothesis and shed light on mechanisms which are beyond the donative behaviour of intrinsically motivated workers.

**Keywords:** Social enterprises, wage differentials, intrinsic motivations, changing job, dissatisfaction

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## 1. Introduction

One of the main research dimensions on which the literature compares profit and not-for-profit<sup>2</sup> sectors is that of wage differentials. Among different theories trying to explain such differentials, the donative labour hypothesis (Hansmann, 1980; Preston, 1989; Rose-Ackerman, 1996 and Frank, 1996) predicts that not-for-profit wages are relatively lower in exchange of the higher non pecuniary compensations provided. Starting from the assumption of heterogeneity in workers' characteristics, this strand of the literature argues that some workers have higher intrinsic motivations (Handy and Katz, 1998; Mirvis, 1992), are altruistic and more willing to pay for public goods (Leete, 2000) and accept lower wages in exchange for a stronger consistency between the goals of not-for-profit organizations and their moral motivations (Sen, 1985). As a result of this sorting and matching mechanism, the two sectors end up with different wages and heterogeneous sets of (more or less intrinsically motivated) workers (Borzaga and Depedri, 2005).

From the empirical point of view, several contributions investigating the profit/not-for-profit wage differential find evidence consistent with the donative labour hypothesis. Among them, Weisbrod (1983) observes a significant negative non profit wage gap looking at lawyers working in the profit and in the not-for-profit industry. Similar results are found by Preston (1989) for different types of white collar workers (managers, professionals, clerical and sales workers). Evidence from Europe seems to go in the same direction (Mosca et al., 2007, for Italy and Narcy, 2009, for France).

However, in a thorough empirical analysis on US Census data, Leete (2001) demonstrates that, when finer controls at industry and occupation level are introduced in the analysis, the not-for-profit negative wage gap is evident only in a few cases. To account for the puzzle, Leete (2001) comments that "*the pattern of nonprofit wage differentials across disaggregated occupations and industries is suggestive of a number of forces affecting nonprofit wages simultaneously*" (p. 138).

The main problem highlighted by this literature is that the profit/not-for-profit wage differential may be determined by many other factors ranging from job amenities,<sup>3</sup> disamenities<sup>4</sup> and better matching between worker and job characteristics<sup>5</sup> (i.e. productivity differentials between the two sectors, a mismatch between industry specific vacancies and workers' skills, etc.). As a consequence, the empirical literature cannot disentangle the role of different factors contributing to determine the profit/not-for-profit wage differential.<sup>6</sup>

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<sup>2</sup> We prefer to use the term not-for-profit instead of nonprofit since it better illustrates the nature of firms that do not necessarily have a statutory constraint which prevents them from obtaining profit, but are better characterized by their goal not being oriented to profit maximization.

<sup>3</sup> Among them the literature emphasizes job security (Sousa-Poza and Sousa-Poza, 2000; Blanchflower and Oswald, 1999; Bryson, Cappellari and Lucifora, 2005), having an interesting job (Clark, 2005), the level of involvement (Soohe, 2002), social relatedness (Clark, 1997; Borzaga and Depedri, 2005), and the size of enterprises (Schwochau, 1987; Miller, 1990).

<sup>4</sup> Examples are situations in which the effort required exceeds the tolerable level, the job is excessively physically or cognitively demanding, phenomena of burn-out emerge or there are controls and restrictions to autonomy and on-the-job flexibility emerge.

<sup>5</sup> Examples on the importance of the matching between job and worker characteristics are in Mortensen (1978) and Miller (1984) claiming that turn-over of employees emerge in the long run when employees reveal higher or lower abilities than expected in the selection process. A need for matching also emerges when considering intrinsic aspects, such as relationships, since extroverted people tend to be selected into jobs requiring more intensive relationships (Krueger and Schkade, 2007).

<sup>6</sup> Preston (1988) emphasizes that not-for-profit managers are not accountable to shareholders and therefore may be more tempted to waste their cash flows. His hypothesis would imply a wage differential in the opposite direction with respect to the donative labour hypothesis. More in general, the not-for-profit sector is generally much more dependent on government funding and dependence from the public sector may either push wages upward (when the not-for-profit industry is heavily

To understand our reasoning in a dynamic perspective, consider that an existing wage differential between profit and not-for-profit industry in the presence of job vacancies in the profit industry (and absence of productivity differentials) should be bridged by migration of workers from the latter to the former. One explanation by which this may not occur is that higher utility due to job characteristics (or to the favourable matching of job and worker characteristics) in the not-for-profit industry can compensate for the wage difference.<sup>7</sup>

The argument developed in this paper is that we can instead disentangle the specific role of relative amenities and disamenities in the two different sectors by i) inspecting relative preferences and comparative judgments on working conditions of voluntary and involuntary movers from the profit to the not-for-profit industry and ii) identifying (and analyzing the characteristics of) a smaller group of voluntary movers who end up with non higher wages and higher life satisfaction after the move.

To perform our empirical analysis we identify three groups. The first includes individuals who were laid off in the profit sector and found a new job in the not-for-profit sector. We call them "laid off involuntary movers" (LOIMs). The second group includes individuals who resigned from their job in the for profit industry without having already decided to seek a job in the not-for-profit industry. We name them "resigned involuntary movers" (RIMs).<sup>8</sup> The third group is made up of workers who voluntarily left the for profit sector for a job in the not-for-profit industry ("voluntary movers" or VMs).

Within this third group of VMs we further identify a fourth group made up of the subset of voluntary movers who register higher job satisfaction in spite of a non higher wage. We call them "non wage motivated voluntary movers" (NWMVMs) and focus on these workers to investigate whether compensating non pecuniary characteristics and/or higher intrinsic motivations may explain this paradox. The paper is divided into six sections (including introduction and conclusions). The second section illustrates the assumptions underlying our model. The third section describes the dataset, while the fourth and fifth sections provide descriptive and econometric findings respectively. The sixth section concludes the paper.

## 2. The model

Consider an economy populated by workers (indexed with  $i$ ) and jobs (indexed with  $k$ ) where workers' utility function is  $U_i=f(C_i, R_i, JA_k, JD_k, IM_{ik})$  depending on consumption ( $C_i$ ), recreational leisure ( $R_i$ ) amenities and disamenities of their job ( $JA_k$  and  $JD_k$  respectively) and worker's intrinsic motivations ( $IM_{ik}$ ). Intrinsic motivations<sup>9</sup> are, in turn, a function of the closeness of worker's ideals (WI) to

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subsidised) or downward (when governments with increasingly severe budget constraints impose minimum price competitions without quality floors in procurement rules).

<sup>7</sup> This statement has been supported by empirical analyses investigating the determinants of job satisfaction. Analyses show that the worker utility depends upon factors other than pay and that for employees in non-profit organizations, these factors are more important than in other organizations, as demonstrated by macro-panel studies by Sousa-Poza and Sousa-Poza (2000), Skalli *et al.* (2007), and Clark (1997). Examples of matching in nonprofit organizations are those where particular importance is placed by both organizations and employees to the social usefulness of the job (e.g., Borzaga and Tortia, 2006) and similarly that policies of fairness match the tendency to cooperation of workers (Benz, 2005; Valentini, 2005; Tortia, 2008).

<sup>8</sup> Workers in this group voluntarily abandoned the job in the for profit sector without the willingness to enter the not-for-profit sector. We therefore define them as involuntary, making reference to the fact that not all of the two decisions needed to produce a move from the profit to the not-for-profit sector were voluntary.

<sup>9</sup> The original definition of intrinsic motivation (Deci, 1975) states that: one is said to be intrinsically motivated to perform an activity when he receives no apparent reward except the activity itself. Prendergast (2007) applies the concept when

corporate goals (CG), that is  $IM_{ij}=g(WI_i,CG_j)$ . The labour demand is standard  $L_d=h(w, MP_L)$  and is a function of wages (w) and the marginal productivity of labour ( $MP_L$ ). Workers face a standard constraint  $w\bar{L} + \bar{M} = pC + wR$  where  $\bar{L}$  is the total number of hours that can be worked in a day and  $\bar{M}$  is non labour income. By solving the constrained maximization problem we get labour supply as a function of prices, wage, job amenities and disamenities and the individual specific weight of intrinsic motivations in the utility function:  $Ls_i = k(P, w, JA_j, JD_j, IM_{ij})$ .

Imagine two types of workers with low or high intrinsic motivation ( $i=L, H$ ) and two types of profit and not-for-profit industries ( $j=n, nn$ ). To justify an initial wage differential in favour of the for profit industry assume that productivity is higher in the for profit industry:  $Y_n=h(AL,K) > Y_{nn}=h(L,K)$  with A being a labour augmenting component which is present in the for profit, but not in the not-for-profit industry. By contrast, assume that working in the not-for-profit sector provides greater job amenities (e.g., time flexibility, relationship with colleagues, and involvement) and lower job disamenities (e.g., control); more formally,  $JA_n < JA_{nn}$  and  $JD_n > JD_{nn}$ . The effect of job amenities and disamenities is assumed to be job specific but identical for both groups of workers (i.e. the two arguments enter the utility function of different individuals in the same way). In absence of intrinsic motivations, labour demand is higher in the for profit than in the not-for-profit industry, workers move to the for profit sector up to a point where marginal productivity of labour is such that the remaining wage difference is compensated by the difference in job disamenities.

If we add that the not-for-profit industry reduces the gap between workers' ideals and corporate goals ( $IM_n < IM_{nn}$ ) we obtain a leftward shift in the supply of labour in the not-for-profit industry and a higher wage differential in equilibrium. In equilibrium, we have that  $(W_n - W_{nn}) = f(A, IM_{ij}, JA_j, JD_j)$ . Consequently, the wage differential between the profit and not-for-profit industry depends on the labour augmenting component, on the intrinsic motivations, and on the job amenities and disamenities. In this model we can observe workers whose level of intrinsic motivations in their specific job ( $IM_{ij}$ ) is such that  $U_i = f(C_i, R_i(w_n), JA_n, JD_n, IM_{in}) < U_j = f(C_j, R_j(w_{nn}), JA_{nn}, JD_{nn}, IM_{jnn})$  even though  $w_n > w_{nn}$ .<sup>10</sup> Imagine that both industries are at full employment and that new job opportunities are opened in the not-for-profit industries. We therefore should see such workers move from the profit to the not profit industry, become happier as a result of the change and be characterised by a high level of satisfaction of intrinsic motivations.

Our empirical analysis will start by analyzing comparative evaluations of past and new jobs for involuntary and voluntary movers from the profit to the not-for-profit industry and will follow with a direct test on the conclusion of this simple theoretical example. The null hypothesis will be that higher satisfaction of intrinsic motivations in the new job raise the possibility that a worker voluntarily moves from the profit to the not-for-profit industry with a non higher wage and higher job satisfaction.

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interpreting the working effort of bureaucrats who have weak monetary incentives but nonetheless perform their jobs because they care about the outcomes.

<sup>10</sup> Such workers may have ended up in the for profit industry for lack of vacancies in the not-for-profit industry.

### 3. The database and the sample

Our empirical analysis relies on a dataset (ICSI 2007) created by a pool of six universities<sup>11</sup> in 2006 with questionnaires submitted to a representative sample of 4,134 employees and 338 managers of 320 Italian cooperatives. The Survey includes information on socio-demographic controls (age, gender, education, etc.), job characteristics (wage, tasks, working hours, overtime) and job satisfaction with respect to a number of possible domains (with colleagues, wage, type of job).

The sample of institutions is extracted from the ISTAT (Italian National Agency for Statistics) 2003 census on social enterprises (for a definition see the section below), recording 6,168 active cooperatives (with at least one employee) at the national level (Carpita, 2009). The initial sample is stratified by cooperative type (type A and type B)<sup>12</sup>, provincial level (the Italian state is composed by 107 provinces), and by size, considering the standard definitions of small, medium and large firms (under 15, between 15 and 50, and over 50 employees). In principle, the final sample should have included 411 organisations. However, of these, 186 organisations (45.3% of the total) agreed to participate in the study, 164 (39.9% of the sample) declined, while 61 organisations (14.8%) did not reply. For firms in the below 15 employee class, all workers were interviewed, while in medium and large size classes a sample of potential respondents was randomly extracted in each firm. 2,883 questionnaires were administered to employees in the 186 organisations that agreed to participate. Due to nonresponses,<sup>13</sup> 2,419 questionnaires were finally compiled by selected respondents.

To compensate for nonresponses and to integrate the survey in order to meet stratification criteria, 134 organisations were added to the initial sample. Such organisations were chosen through personal contacts on the basis of the affinity with the non-participating cooperatives following the three criteria chosen for the stratification of the sample. The same methodology was adopted when extracting the sample of paid employees in each organisation. Therefore, the final sample available for the empirical analysis, which hereafter will be named ICSI 2007, is made up of 320 organisations and 4,134 questionnaires compiled by paid employees.<sup>14</sup> Summary statistics of variables considered in the descriptive and econometric analysis which follows are provided in Table 1. As we can see, there is a prevalence of female and young workers. The average numbers of years in the cooperative is 6 and a large majority of workers are also cooperative members.

#### 3.1 Cooperative features and the not-for-profit industry

In Italy, not-for-profit organisations producing goods and services mainly choose the cooperative legal form of ownership. Italian cooperatives differ from for profit firms because the former do not have the profit maximising goal but rather, statutorily, that of creating benefits *not under the prevailing form of profits* for some of their stakeholders.<sup>15</sup> Within the cooperative family, *social cooperatives*

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<sup>11</sup> Trento, Bergamo, Brescia, Milano Bicocca, Napoli and Reggio Calabria.

<sup>12</sup> For details on characteristics of the two different types of cooperatives see section 3.1.

<sup>13</sup> The rate of nonresponses was extremely low. 85 percent of involved respondents answered on average 90 percent of the 87 questions (56 single choice questions and 31 multiple choice questions) enclosed in the questionnaire.

<sup>14</sup> The distortion of the ICSI sample relative to the ISTAT sample is limited, since it amounts to an increased presence of cooperatives located in Northern Italy relative to the cooperatives located in Southern Italy, and a stronger presence of bigger cooperatives than in the initial sample. For a more precise account of the differences between the ISTAT 2005 sample and the ICSI 2007 sample the reader can consult Carpita (2009, Chapter 1, pp. 1-36).

<sup>15</sup> The two traditional forms are *workers cooperatives* (workers are the dominant stakeholders and benefits are attributed to them in the form of safer working conditions and/or access to profits) and *consumers' cooperatives* (consumers are the dominant stakeholders and benefits are attributed to them in the form of lower prices and higher quality of goods).

(*cooperative sociali*) are a recently born new legal form, pursuing the goal of providing a social service to beneficiaries different from their shareholders.<sup>16</sup>

Italian law 381/1991 establishes that the goals of social cooperatives are social work integration of disadvantaged subjects, community wellbeing and promotion of the human being. Social cooperatives can be characterised as either *type A* when they manage healthcare and education services, or *type B* (also called *work integration social enterprises*) when they operate in industry, agriculture, trade or service sectors with the goal of inclusion of “disadvantaged” workers (at least 30 percent of the workforce must be disabled, ex-offenders, ex-drug addicted, etc.).

With regard to the destination of the economic value created, Italian cooperatives are obliged by law to allocate at least 30% of their net surpluses to indivisible reserves of capital (*riserva legale*).<sup>17</sup> After satisfying this obligation they can, though they are not obliged to, distribute only a limited part of their surpluses in the form of either remuneration and re-evaluation of members’ capital shares or in return for members’ contributions (*ristorni*).<sup>18</sup> The usual practice for cooperatives is to reinvest all of the realised net surpluses in indivisible reserves. For these reasons, Italian cooperatives can be considered (almost completely) not-for-profit firms.

This is even more so for social cooperatives (those under our scrutiny) which have additional characteristics that justify their classification among not-for-profit firms. First, they must declare in their statute the public-benefit aim for which they have been created. Second, under law 381/199, they are able to implement multi-stakeholder governance, since more than one group of patrons (e.g. volunteer workers, paid workers, and users) can be entitled to the formal right to elect the board of directors.<sup>19</sup>

#### 4. Descriptive findings

Table 1 provides summary statistics of our sample. It shows that interviewed social cooperative workers are relatively young (37 years old on average), a large part of which are females (74 percent - this sample proportion coincides with that of the universe of social cooperative workers) and members of the cooperative (76 percent). The majority of workers conceive their job as not just a “mere contractual relationship where job performance is exchanged for pay” but rather see in it additional motivations related to personal development, quality of relationships and a shared social purpose with the cooperative.

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<sup>16</sup> Social cooperatives differ from not-for-profits with a prevalent distributive function (e.g., foundations) or those supplying services to a restricted group of beneficiaries (e.g., in associations).

<sup>17</sup> These reserves cannot be appropriated by members even if the firm shuts down its operations. In this case, the residual value of the reserves is to be conferred to a common national fund used to finance the start-up of new cooperatives, following the principle of enlarged mutuality.

<sup>18</sup> In worker cooperatives the *ristorni* are represented by end-of-the-year increases in labour remuneration calculated as a percentage of the wages distributed during the accounting year (up to 30%). In consumer cooperatives the *ristorni* are usually represented by end-of-the-year bonuses valid for the purchase of products sold by the cooperative and calculated as a percentage of the total amount of products bought during the accounting year.

<sup>19</sup> The multi-stakeholder governance is not compulsory as it happens, for example, in French *cooperatives de solidarité sociale*. However, recent data (Depedri, 2008) reveal that most social cooperatives do indeed include among their active stakeholders more than one group of patrons.

**Table 1: Summary statistics of the full sample**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Male	4,082	0.26	0.44	0	1
Age	3,986	37.38	9.02	17	73
Education	3,759	12.93	3.35	0	21
Italian	4,134	0.95	0.22	0	1
Member	4,134	0.76	0.43	0	1
Years in coop	3,905	6.21	4.89	0	36
Permanent	4,134	0.80	0.40	0	1
Full-time	4,063	0.56	0.50	0	1
Medium coop	4,134	0.32	0.46	0	1
Large coop	4,134	0.43	0.50	0	1
Type A	4,134	0.78	0.41	0	1
North-West	4,134	0.40	0.49	0	1
North-East	4,134	0.22	0.41	0	1
Centre	4,134	0.22	0.41	0	1
<b>Description of the job in the cooperative *</b>					
a mere contractual relationship where job performance is exchanged for pay	3,457	2.55	1.91	1	7
the participation in the achievement of a common goal	3,564	5.20	1.57	1	7
a mix between job and growth in personal development	3,554	5.45	1.48	1	7
a set of relationships which go beyond mere job relationships	3,494	4.91	1.75	1	7
a social engagement common to the respondent and the cooperative	3,556	5.31	1.61	1	7

\* 1 to 7 Likert scale ranging from much worse (1) to much better (7) with 4 indicating equal conditions between previous and new job

A first important question is about the magnitude of our three groups of movers in the overall sample. The subsample of social cooperative workers who were previously employed in the for profit industry is made up of 1,442 individuals (that is, 34.69 percent of the total sample). Among them, voluntary movers number 419 (10.08 percent of the total sample) while laid off and resigned movers number 423 (10.18 percent) and 521 (12.73 percent) respectively. Note that the sum of the three groups does not exactly coincide with the total number of workers who moved from one industry to another because a small residual group declares to have moved for other, non-specified reasons. Table 2 shows that demographic characteristics of the four considered groups of movers are not too different, even though the share of males is much higher among voluntary than among involuntary movers.

In the rest of our descriptive and econometric analysis we will often compare values for these three groups of shifters from the profit to not-for-profit industry with another group of workers (defined as 'the rest of the sample'), which is represented by individuals who change from a previous to a current position within the same not-for-profit sector (while workers who come from unemployment or inactivity are obviously excluded from the analysis which follows). Consider that, under reasonable assumptions, when evaluating comparative differences between the two industries it is exactly the same if the benchmark is made up of individuals with previous and new jobs in the not-for-profit industry or individuals with previous and new jobs in the for profit industry.<sup>20</sup>

<sup>20</sup> Assume, in fact, the case in which a given characteristic (i.e. time flexibility) is higher in the not-for-profit than in the for profit industry. Individuals changing from the profit to the profit (or from the not-for-profit to the not-for-profit) will register no significant change in time flexibility. On the other hand, shifters from one industry to the other will register a significant difference and therefore will report a significantly different comparative judgement when compared with each of the two benchmarks.



**Table 2: Summary statistics by subsample**

<b>Variable</b>	<b>NWMVM</b>			<b>VM</b>			<b>LOIM</b>			<b>RIM</b>			<b>Rest</b>		
	<b>Obs</b>	<b>Mean</b>	<b>S.D.</b>	<b>Obs</b>	<b>Mean</b>	<b>S.D.</b>	<b>Obs</b>	<b>Mean</b>	<b>S.D.</b>	<b>Obs</b>	<b>Mean</b>	<b>S.D.</b>	<b>Obs</b>	<b>Mean</b>	<b>S.D.</b>
Male	177	0.41	0.49	416	0.37	0.48	418	0.28	0.45	517	0.33	0.47	2,652	0.22	0.41
Age	172	39.13	8.39	403	38.78	8.95	413	39.30	8.79	502	38.56	8.53	2,592	36.51	9.06
Education	155	13.36	3.18	372	13.11	3.47	387	12.91	3.17	474	13.01	3.30	2,450	12.90	3.38
Italian	179	0.96	0.19	419	0.95	0.21	423	0.94	0.24	521	0.95	0.21	2,692	0.95	0.21
Member	179	0.85	0.35	419	0.83	0.38	423	0.73	0.45	521	0.75	0.43	2,692	0.75	0.43
Years in coop	167	7.07	4.97	398	7.12	5.12	406	6.13	4.68	500	6.09	4.63	2,529	6.09	4.92
Permanent	179	0.91	0.29	419	0.89	0.32	423	0.83	0.38	521	0.83	0.38	2,692	0.78	0.41
Full-time	178	0.70	0.46	413	0.71	0.45	418	0.54	0.50	516	0.58	0.49	2,638	0.54	0.50
Medium coop	179	0.35	0.48	419	0.32	0.47	423	0.30	0.46	521	0.32	0.47	2,692	0.31	0.46
Large coop	179	0.45	0.50	419	0.47	0.50	423	0.41	0.49	521	0.49	0.50	2,692	0.42	0.49
Type A	179	0.71	0.46	419	0.72	0.45	423	0.60	0.49	521	0.70	0.46	2,692	0.84	0.37
North-West	179	0.49	0.50	419	0.43	0.50	423	0.42	0.49	521	0.46	0.50	2,692	0.39	0.49
North-East	179	0.28	0.45	419	0.24	0.43	423	0.20	0.40	521	0.25	0.44	2,692	0.21	0.41
Centre	179	0.16	0.37	419	0.21	0.41	423	0.24	0.43	521	0.19	0.39	2,692	0.22	0.41

*Legend: LOIMs=laid off involuntary movers; RIMs=resigned involuntary movers; VMs=voluntary movers; NWMVMs=non wage motivated voluntary movers; Rest=rest of the sample*

**Table 3: Summary statistics on characteristics of new (not-for-profit) job versus previous (for profit) job by subsamples of movers**

Variable	NWMVMs			VMs			RIMs			LOIMs		
	Mean	[95% C.I.]		Mean	[95% C.I.]		Mean	[95% C.I.]		Mean	[95% C.I.]	
Worse wage and economic rewards	1.00	1.00	1.00	0.33	0.28	0.37	0.44	0.40	0.49	0.37	0.33	0.42
Better consistency with education	0.69	0.63	0.77	0.71	0.67	0.76	0.63	0.59	0.67	0.60	0.55	0.65
More responsibilities	0.68	0.58	0.72	0.69	0.65	0.74	0.66	0.61	0.70	0.64	0.59	0.69
Improved time flexibility	0.71	0.65	0.78	0.69	0.65	0.74	0.72	0.68	0.76	0.72	0.68	0.76
Improved career perspective	0.43	0.36	0.50	0.50	0.45	0.55	0.44	0.40	0.48	0.43	0.38	0.48
Improved job stability	0.39	0.32	0.46	0.53	0.48	0.58	0.50	0.45	0.54	0.66	0.61	0.71
More involvement in decision-making	0.64	0.57	0.71	0.62	0.57	0.67	0.54	0.50	0.59	0.54	0.49	0.59
Better relationships with colleagues	0.66	0.60	0.73	0.66	0.61	0.70	0.65	0.60	0.69	0.64	0.59	0.68
Better relationships with superiors	0.67	0.60	0.74	0.66	0.61	0.70	0.69	0.65	0.73	0.68	0.64	0.73
Higher possibility of creating new relationships	0.80	0.75	0.86	0.78	0.74	0.82	0.74	0.70	0.78	0.70	0.66	0.75
Higher job satisfaction	1.00	1.00	1.00	0.88	0.85	0.91	0.81	0.78	0.84	0.78	0.74	0.82

*Legend: LOIMs=laid off involuntary movers; RIMs=resigned involuntary movers; VMs=voluntary movers; NWMVMs=non wage motivated voluntary movers*

When we look in Table 3 at the wage differential in the three categories, we find that more than half of them claim to end up with a wage which is not higher than in the previous job.<sup>21</sup> This occurs for 45 percent of voluntary movers, 37 percent of resigned involuntary movers and 40 percent of laid off involuntary movers. If we consider that moving from one job to another entails some transaction costs, then non pecuniary motivations and/or intrinsic motivations must explain why 45 percent of voluntary movers have made this choice.<sup>22</sup>

We therefore investigate in Table 3 the comparative evaluations of previous and current jobs of voluntary and involuntary movers. The question under scrutiny (48 in the questionnaire) is the following:

*With respect to your previous job, how do you think your job condition has changed with respect to: i) consistency with your education; ii) responsibilities; iii) time flexibility; iv) career perspectives; v) job stability; vi) involvement in decision-making; vii) relationships with colleagues; viii) relationships with superiors; ix) possibility of creating new relationships (with stakeholders).*

Answers are given on a 1 to 7 Likert scale ranging from much worse (1) to much better (7) with 4 indicating equal conditions between the previous and new job. A general consideration is that for all groups an improvement on the different modalities is registered for the majority of movers (including involuntary ones). Looking in greater detail at descriptive findings on this question we find that the majority of movers (especially voluntary ones) from profit to no profit industries find more consistency with their education in the job change. More specifically, this result is found for 71 percent of voluntary movers, 63 percent of resigned and 60 percent of laid-off involuntary movers (Table 3).

Differences in terms of responsibility on the job do not seem to be too strong, but, again, voluntary movers register a positive difference between their new and past job in higher proportion than the rest of the sample. The difference between the three categories of movers and the rest of the sample is strong in terms of time flexibility, with the latter being higher in the new not-for-profit occupation. Here laid-off involuntary movers are those reporting the higher share of positive responses (72 percent) against 65 percent of those not moving from the profit to the non profit industry. A strong result emerging from descriptive findings is that 88 percent of voluntary movers increase their job satisfaction with the change. The share of (resigned or laid off) involuntary movers finding higher job satisfaction in the new not-for-profit job is also far above the average (81 and 78 percent respectively).

#### *4.1 Descriptive statistics on non wage motivated voluntary movers*

Beyond these general statistics on the three groups we are particularly interested in the subgroup of non wage motivated voluntary movers (NWMVMs), that is, individuals who moved voluntarily from the profit to the not-for-profit industry finding non higher wages and higher job satisfaction. If we consider that transaction costs of changing jobs must be nonzero, the experienced increase in job satisfaction cannot be generated by pecuniary reasons. This group is not small since it amounts to around

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<sup>21</sup> The data does refer to a self-estimation of workers interviewed and not to a comparison of observed wages. Specifically, workers were asked if their economic treatment is ameliorated or not in moving from the previous job to the employment in the cooperative (see question d47\_1 in the questionnaire).

<sup>22</sup> Unfortunately, it is impossible to know whether they anticipated future expected layoffs, which may bring some pecuniary motivations back into the foreground.

43 percent of all voluntary movers for a total of 179 individuals. To check which non pecuniary compensating differentials may more than offset the nonpositive wage change in terms of work satisfaction we use information from question d47 described in the previous section (see data in Table 3).

The only two domains in which there is no improvement for the majority of NWMVMs are career perspectives (43 percent) and job stability (39 percent),<sup>23</sup> that is, the two motivations which can be more easily linked with pecuniary variables (both of them affect the future expected stream of wages, if not the current wage, see Table 3). All other dimensions register an improvement for the majority of NWMVMs. In the new job there is more consistency with one's own education (70 percent of respondents), higher responsibilities (65 percent), more time flexibility (71 percent), more involvement in decision-making (64 percent), improved relationships with colleagues (66 percent) and with superiors (67 percent), and higher opportunities for creating new relationships with stakeholders (80 percent).

## 5. Econometric findings

In our econometric analysis we aim to test whether being part of one of the three groups of movers from the profit to the not-for-profit industry affects the comparative evaluation of characteristics of the old and new job. We therefore estimate the following ordered probit specification (see Table 4):

$$\begin{aligned} \Delta Y_i = & \beta_0 + \beta_1 LOIM_i + \beta_2 RIM_i + \beta_3 VM_i + \beta_4 Male_i + \beta_5 Age_i + \beta_6 Education_i + \beta_7 Italian_i \\ & + \beta_8 Member_i + \beta_9 Yearcoop_i + \beta_{10} Permanent_i + \beta_{11} Fulltime_i + \beta_{12} Medium_i + \beta_{13} Large_i + \\ & + \beta_{14} AType_i + \beta_{15} NorthEast_i + \beta_{16} NorthWest_i + \beta_{17} Center_i + \varepsilon_i \end{aligned} \quad (1)$$

where the dependent variable of the comparative evaluation of the new versus the old job ( $\Delta Y$ ) is regressed on a set of controls including a gender dummy (*Male*), respondent's age (*Age*), years of education (*Education*), a dummy for Italian nationality (*Italian*), a dummy which takes a value of one if the respondent is also a member of the cooperative (*Member*), the number of years of work in the cooperative (*Yearcoop*), two dummies for permanent and full-time job status (*Permanent* and *Fulltime* respectively, the benchmark being temporary and part-time), two dummies for medium and large size (*Medium* and *Large*), a dummy which takes a value of one if the respondent works in the A-type cooperative (*AType*) and three macroarea dummies (*NorthEast*, *NorthWest* and *Centre*). Finally, LOIM, RIM and VM are the dummies capturing the three groups of movers (laid off involuntary, resigned involuntary and voluntary, respectively). As specified in section 4, the benchmark in this analysis is the group of individuals whose previous and current job was in the not-for-profit industry.

Among the most important econometric results we find that being a voluntary, resigned involuntary and laid off involuntary mover is associated, respectively, to a 7, 13 and 11 percent higher probability of experiencing a wage reduction (Table 4, column 1). We also find that being a voluntary mover from the profit to the not-for-profit industry raises the probability of declaring higher consistency with education in

<sup>23</sup> This is an important point since it reduces the likelihood that voluntary movers are in reality moving because they anticipate bad perspectives (in terms of probability of remaining employed or career path) in the for profit job they leave.

the new job by 18 percent (Table 4, column 2).<sup>24</sup> The effect is 11 percent for laid off involuntary movers and 9 percent for resigned involuntary movers. Another strong effect is in the relative comparison on work time flexibility. Being a laid off or resigned involuntary mover raises the probability of increasing work time flexibility in the job change by 11 percent (Table 4, column 4). Being a resigned involuntary movers raises the probability of declaring improved relationships in the new job, but this is not the case for laid off involuntary workers (Table 4, column 10). Finally, the voluntary and involuntary mover status is associated with declaration of higher quality of relationships with stakeholders in the new job (Table 4, column 10).

**Table 4a: Determinants of workers' opinion about the new versus the old job**

<b>Regressor</b>	<b>Worse wage</b>	<b>Better consist.</b>	<b>More respons.</b>	<b>Improved flexibility</b>	<b>Improved career perspect.</b>
<b>VM</b>	0.07 (2.27)	0.18 (5.89)	0.06 (1.89)	0.08 (2.57)	0.00 (0.07)
<b>RIM</b>	0.13 (4.81)	0.11 (3.99)	0.05 (1.78)	0.11 (4.25)	0.01 (0.22)
<b>LOIM</b>	0.11 (3.48)	0.09 (2.82)	0.04 (1.40)	0.11 (3.97)	0.00 (0.14)
<b>Male</b>	0.06 (2.53)	0.01 (0.26)	0.02 (1.03)	-0.01 (-0.51)	0.05 (1.94)
<b>Age</b>	0.00 (3.72)	0.00 (3.48)	-0.01 (-7.75)	-0.01 (-4.36)	-0.01 (-7.54)
<b>Education</b>	0.01 (2.22)	0.00 (0.11)	0.00 (-0.35)	0.00 (-0.95)	0.00 (0.60)
<b>Italian</b>	0.15 (3.20)	0.06 (1.16)	-0.03 (-0.62)	0.02 (0.35)	-0.06 (-1.29)
<b>Member</b>	0.00 (0.18)	0.00 (0.06)	0.06 (2.26)	0.01 (0.42)	0.07 (2.65)
<b>Years in Coop</b>	-0.01 (-3.81)	0.01 (4.87)	0.02 (7.08)	0.01 (4.26)	0.01 (4.42)
<b>Permanent</b>	0.02 (0.66)	-0.05 (-1.62)	-0.05 (-1.74)	-0.01 (-0.43)	-0.07 (-2.20)
<b>Full time</b>	-0.11 (-5.42)	0.11 (5.07)	0.09 (4.17)	-0.02 (-1.12)	0.15 (6.84)
<b>Medium Coop</b>	0.06 (2.01)	0.00 (-0.12)	0.00 (0.05)	-0.02 (-0.67)	0.02 (0.78)
<b>Large Coop</b>	0.06 (2.28)	0.03 (1.09)	-0.01 (-0.47)	-0.05 (-1.85)	0.07 (2.45)
<b>Type A</b>	0.00 (0.15)	0.15 (5.51)	0.04 (1.46)	0.01 (0.53)	-0.02 (-0.62)
<b>North-West</b>	0.22 (5.75)	-0.09 (-2.55)	-0.05 (-1.45)	-0.02 (-0.60)	-0.13 (-3.78)
<b>North-East</b>	0.27 (6.33)	-0.12 (-3.10)	-0.03 (-0.73)	0.00 (0.03)	-0.12 (-3.14)
<b>Centre</b>	0.20 (4.67)	-0.08 (-2.10)	-0.06 (-1.61)	0.01 (0.23)	-0.12 (-3.14)
<b>N</b>	2,346	2,315	2,313	2,329	2,305
<b>(Pseudo) R2</b>	0.06	0.06	0.05	0.02	0.05

*Legend:* LOIMs=laid off involuntary movers; RIMs=resigned involuntary movers; VMs=voluntary movers; NWMVMs=non wage motivated voluntary movers

<sup>24</sup> The result here may be explained by an excess supply of workers graduated in non technical subjects, some of which accept a job in the for profit industry so as to not remain unemployed.

**Table 4b: Determinants of workers' opinion about the new versus the old job**

<b>Regressor</b>	<b>Improved job stability</b>	<b>More involm. in decisions</b>	<b>Better relations with colleg.</b>	<b>Better relations with superiors</b>	<b>Better relations with stakehold.</b>	<b>Higher satisfact.</b>
<b>VM</b>	-0.04 (-1.40)	0.02 (0.51)	0.02 (0.61)	-0.02 (-0.50)	0.08 (2.88)	0.10 (3.98)
<b>RIM</b>	-0.04 (-1.19)	-0.01 (-0.33)	0.05 (1.63)	0.05 (2.01)	0.09 (3.60)	0.05 (2.24)
<b>LOIM</b>	0.12 (3.71)	-0.02 (-0.61)	0.02 (0.82)	0.04 (1.24)	0.02 (0.80)	0.04 (1.75)
<b>Male</b>	-0.05 (-1.96)	0.00 (-0.07)	-0.01 (-0.48)	0.00 (0.02)	-0.02 (-0.68)	0.02 (0.92)
<b>Age</b>	-0.01 (-4.70)	-0.01 (-4.56)	0.00 (2.43)	0.00 (1.56)	-0.01 (-4.25)	0.00 (2.90)
<b>Education</b>	0.00 (0.91)	0.00 (0.82)	0.00 (0.79)	0.00 (1.06)	0.00 (1.39)	0.00 (1.09)
<b>Italian</b>	-0.13 (-2.56)	0.00 (-0.05)	0.07 (1.43)	-0.06 (-1.25)	0.04 (0.81)	0.02 (0.53)
<b>Member</b>	0.03 (1.10)	0.07 (2.46)	0.01 (0.25)	-0.02 (-0.89)	0.00 (0.08)	0.01 (0.25)
<b>Years in Coop</b>	0.01 (4.16)	0.02 (7.44)	0.01 (4.36)	0.01 (3.46)	0.01 (4.61)	0.01 (3.68)
<b>Permanent</b>	0.12 (4.00)	-0.02 (-0.70)	-0.01 (-0.44)	0.00 (-0.04)	-0.08 (-3.09)	-0.01 (-0.39)
<b>Full time</b>	0.12 (5.35)	0.13 (5.66)	0.11 (4.92)	0.09 (4.27)	0.08 (3.66)	0.08 (4.20)
<b>Medium Coop</b>	0.03 (1.12)	-0.05 (-1.80)	-0.03 (-1.08)	-0.05 (-1.70)	0.01 (0.36)	0.03 (1.17)
<b>Large Coop</b>	0.06 (2.13)	-0.11 (-3.85)	-0.05 (-1.83)	-0.04 (-1.43)	0.02 (0.66)	0.01 (0.22)
<b>Type A</b>	-0.08 (-2.86)	0.07 (2.55)	0.00 (0.14)	0.00 (0.07)	0.01 (0.44)	0.08 (3.47)
<b>North-West</b>	-0.19 (-5.28)	-0.06 (-1.65)	-0.03 (-0.83)	-0.05 (-1.38)	-0.05 (-1.61)	0.02 (0.88)
<b>North-East</b>	-0.22 (-5.62)	-0.03 (-0.83)	0.00 (0.10)	-0.01 (-0.32)	-0.04 (-1.04)	0.04 (1.29)
<b>Centre</b>	-0.15 (-3.73)	-0.08 (-2.11)	-0.06 (-1.47)	-0.10 (-2.56)	-0.05 (-1.44)	0.00 (0.01)
<b>N</b>	2,321	2,310	2,323	2,353	2,324	2,351
<b>(Pseudo) R2</b>	0.05	0.05	0.02	0.02	0.03	0.04

*Legend:* LOIMs=laid off involuntary movers; RIMs=resigned involuntary movers; VMs=voluntary movers; NWMVMs=non wage motivated voluntary movers

A final important finding is that being part of the three groups of movers significantly affects the probability of being happier in the job change (Table 4, column 11). The effect is 9 percent for voluntary movers, 5 percent for resigned involuntary movers and 4 percent for laid-off involuntary movers. The fact that the effect is not confined to voluntary movers is relevant and less expected.

### 5.1 Econometric findings on non wage motivated voluntary movers

In order to identify characteristics of non wage motivated voluntary movers (the subgroup of voluntary movers who increased job satisfaction without moving to higher wages in the change) we estimate the following probit model (see Table 6):

$$\begin{aligned}
 NWMVM_i = & \beta_0 + \beta_1 Male_i + \beta_2 Age_i + \beta_3 Education_i + \beta_4 Italian_i + \beta_5 Member_i + \beta_6 Yearcoop_i + \\
 & + \beta_7 Permanent_i + \beta_8 Fulltime_i + \beta_9 Medium_i + \beta_{10} Large_i + \beta_{11} AType_i + \beta_{12} NorthEast_i + \\
 & + \beta_{13} Center_i + \beta_{14} PCIM_i + \varepsilon_i
 \end{aligned} \quad (2)$$

where the dependent variable takes a value of one if the individual is a non wage motivated voluntary mover (NWMVM) who experienced higher life satisfaction and zero otherwise. Since we want to verify whether higher intrinsic motivations are positively correlated with the NWMVM status among movers from the profit to the not-for-profit sector, we exclude from the regression all other movers (that is, individuals with previous and current jobs in the not-for-profit industry). Equation regressors, specified as in (2), are similar to those in (1) with the addition of the PCIM variable which is a principal component of the variables measuring intrinsic motivations as specified below (see Table 5a and 5b). The inclusion of the intrinsic motivation variables stems from the consideration that differences in intrinsic motivations may be an important explanation of profit/not-for-profit compensating wage differentials under the assumption that not-for-profit firms for the specific nature of their activities may satisfy them better.

**Table 5a: Principal component analysis (PCA)**

Component	Eigenvalue	Difference	Proportion	Cumulative
<b>Comp. 1</b>	2.73	1.41	0.39	0.39
<b>Comp. 2</b>	1.32	0.55	0.19	0.58
<b>Comp. 3</b>	0.77	0.14	0.11	0.69
<b>Comp. 4</b>	0.63	0.04	0.09	0.78
<b>Comp. 5</b>	0.59	0.1	0.08	0.86
<b>Comp. 6</b>	0.49	0.03	0.07	0.93
<b>Comp. 7</b>	0.46	.	0.07	1

**Table 5b: Principal components**

Variable	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5	Comp. 6	Comp. 7	Unexplained
<b>D8.1</b>	-0.37	0.16	0.66	0.55	0.3	0	0.07	0
<b>D8.2</b>	0.37	-0.2	0.72	-0.35	-0.36	0.21	-0.14	0
<b>D8.3</b>	0.45	-0.14	0	0.52	-0.32	-0.64	-0.04	0
<b>D8.4</b>	0.44	-0.22	-0.17	0.49	0.19	0.66	-0.16	0
<b>D8.5</b>	0.44	-0.14	0.12	-0.24	0.71	-0.24	0.38	0
<b>D55.2</b>	0.26	0.66	0.02	-0.09	0.24	-0.12	-0.65	0
<b>D55.3</b>	0.27	0.65	0	0.07	-0.27	0.21	0.62	0

Source: Becchetti, Castriota and Tortia (2010).

A measure of intrinsic motivation in our Survey can be derived by analysing responses to question 8 where respondents are asked to provide their degree of consensus (on a 1 to 7 Likert scale). The question under scrutiny is the following:

*Do you think that your job relationship with the cooperative is: (i) a mere contractual relationship where job is exchanged for pay (d8.1); (ii) a contribution which helps the cooperative to reach its goals (d8.2); (iii) a mix between job and growth in personal development (d8.3);(iv) a set of relationships which go beyond the mere job relationships (d8.4); (v) a social engagement common to the respondent and the cooperative (d8.5).*

Our assumption is that high consent to the first item (d8.1) is negatively correlated, while consent with the other definitions (d8.2 to d8.5) is positively correlated with intrinsic motivations. A deeper scrutiny of the five statements evidences that d8.3 concerns self-regarding while d8.2, but especially d8.5, other-regarding intrinsic motivations. This is because agreement with statements d8.2 to d8.5 implies that workers find in their job a source of satisfaction (development, identification with cooperative goals, community and relational elements in the job, social engagement) which goes beyond mere remuneration.

We find additional proxies of workers' intrinsic motivation by looking at the following question (52): asking whether,:

*Before finding the current job in the cooperative, were you looking for: (i) a job promoting your self-fulfilment (d52.3); (ii) a job allowing you to be helpful to other people (d52.2).*

A positive consent to these two statements clearly identifies that intrinsic motivations matter and remuneration is not the only element affecting job satisfaction of the respondent. We decided to use the first principal component of the items in the seven intrinsic motivation questions because we considered that the items were strictly correlated<sup>25</sup> and each of them captures only a specific facet of self or other-regarding intrinsic motivations (lack of non monetary motivations, presence of intrinsic motivations related to development, identification with cooperative goals, community and relational elements in the job, social engagement, non monetary motivations measured before entering the cooperative). As a consequence, it is advisable to transform the larger number of correlated variables into a smaller number of uncorrelated ones revealing the internal structure of the data in a way which best explains its variability.

We therefore apply principal component analysis to the vector of the seven considered proxies. Table 5a documents the relevance of the first component which captures almost 40 percent of the variability. Said component is negatively correlated with the first items and positively correlated with all the others, with correlation coefficients which never fall below 25 percent (see Table 5b). The Kaiser-Meyer-Olkin measure of sampling adequacy (.76) excludes that the selected variables have too little in common to warrant a factor analysis.

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<sup>25</sup> Many pairwise correlations are between .3 and .4 and the highest one (between d8.2 and d8.4) is .49. The correlation matrix is omitted for reasons of space and available upon request.



**Table 6: Characteristics of movers from the profit to the not-for-profit industry**

Regressor	IV regression					
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
<b>Male</b>	0.33 (2.10)	0.24 (1.02)	0.31 (0.58)	0.20 (2.09)	0.12 (0.91)	0.29 (1.07)
<b>Age</b>	0.004 (0.71)	-0.04 (-3.10)	-0.06 (-1.81)	0.00 (-0.31)	-0.03 (-3.31)	-0.03 (-2.05)
<b>Education</b>	0.01 (0.34)	0.00 (-0.02)	0.03 (0.46)	0.00 (0.41)	0.00 (0.00)	0.02 (0.52)
<b>Italian</b>	0.73 (2.13)	0.63 (1.35)		0.37 (1.86)	0.33 (1.14)	
<b>Member</b>	0.14 (0.83)	0.20 (0.81)	1.04 (1.49)	0.01 (0.07)	0.01 (0.07)	0.43 (1.08)
<b>Years in Coop</b>	-0.04 (-1.97)	0.01 (0.50)	-0.02 (-0.32)	-0.02 (-1.87)	0.01 (0.61)	0.00 (-0.14)
<b>Permanent</b>	-0.15 (-0.71)	0.06 (0.19)	0.00 (-0.01)	-0.03 (-0.28)	0.09 (0.47)	-0.04 (-0.11)
<b>Full time</b>	-0.31 (-2.08)	0.14 (0.65)	0.87 (1.71)	-0.23 (-2.66)	0.06 (0.46)	0.30 (0.90)
<b>Medium Coop</b>	0.39 (1.97)	0.32 (1.10)	0.73 (1.00)	0.23 (1.93)	0.19 (1.15)	0.58 (1.31)
<b>Large Coop</b>	0.19 (0.98)	0.29 (0.95)	0.37 (0.57)	0.14 (1.20)	0.22 (1.22)	0.51 (1.25)
<b>Type A</b>	0.07 (0.42)	0.23 (0.93)	-0.20 (-0.33)	-0.10 (-0.87)	0.04 (0.24)	-0.20 (-0.57)
<b>North-West</b>	0.99 (3.74)	0.41 (0.99)	0.62 (0.65)	0.61 (3.93)	0.19 (0.76)	0.31 (0.65)
<b>North-East</b>	1.25 (4.36)	0.61 (1.37)	0.09 (0.09)	0.73 (4.22)	0.28 (1.08)	0.07 (0.15)
<b>Centre</b>	0.77 (2.73)	0.26 (0.57)	0.62 (0.63)	0.49 (2.96)	0.14 (0.53)	0.40 (0.80)
<b>Comp. 1</b>	0.09 (2.11)	0.42 (6.54)	0.63 (3.88)	0.33 (3.21)	0.40 (2.52)	0.60 (2.26)
<b>Constant</b>	-2.20 (-3.71)	1.09 (1.24)	1.55 (0.88)	-0.91 (-2.19)	0.96 (1.69)	0.68 (0.72)
<b>N</b>	899	527	141	899	527	141
<b>(Pseudo) R2</b>	0.04	0.11	0.21			
<b>Wald test of exogeneity <math>\chi^2</math></b>				5.03	0.75	0.36
<b>(p-value)</b>				(0.02)	(0.38)	(0.55)
<b>Log pseudolikelihood</b>				-2,315	-1,314	-342

*Legend: the dependent variable is a dummy taking a value of one if the respondent is a non wage motivated voluntary mover (NWMVM). Regressions are as follows: i) probit regression on the sample of all movers from the profit to the not-for-profit industry; ii) probit regression on the sample of sample of movers from the profit to the not-for-profit industry with non higher wages in the new job; iii) probit regression on the sample of voluntary movers who ended up with non higher wages; iv) IV probit correspondent of the first estimate; v) IV probit correspondent of the second estimate; vi) IV probit correspondent of the third estimate.*

Estimate findings show that male gender and location in North-East, North-West or Centre positively affect the likelihood of being a NWMVM (Table 6, column 1).<sup>26</sup> The

<sup>26</sup> A rationale for the geographical effect here may be that wages are higher than in the South (Becchetti and Castriota, 2010) and therefore there is more room for an acceptable reduction for the worker or that workers in the Northern regions have a higher level of social capital.

effect of the inclusion of the first principal component of intrinsic motivation in the regression for the determinants of the NWMVM choice is positive and significant. This implies that the change from the for profit to the not-for-profit industry is positively correlated with intrinsic motivations or that the latter increase the likelihood of being part of the NWMVM group. The result can also be interpreted as showing that NWMVMs have significantly higher intrinsic motivations than other movers.<sup>27</sup> If we assume that the not-for-profit sector is more able to satisfy the kind of intrinsic motivations indicated in section 5.1, these findings contribute to explain why, when moving to a non higher wage job, this specific group of workers ends up being happier than before: irrespective of the voluntary or involuntary cause of job change, higher intrinsic motivations are more likely to lead to a situation in which non higher wages may be associated with higher job satisfaction.

A problem in this estimate, however, is that the dependent variable is also zero for individuals who ended up with higher wages in the change. To tighten the estimate we limit the control sample to only (voluntary and involuntary) changers who ended up with non higher wages (Table 6, column 2). As a further robustness check we restrict the sample to only voluntary movers who ended up with non higher wages (excluding individuals from the other two groups of involuntary movers ending up with non higher wages, see Table 6, column 3). Again the variable of intrinsic motivations is strongly significant even though the number of observations is now limited to 189 individuals.

To rule out any possibility of reverse causality nexus we instrument (in all of the three previous estimates) the intrinsic motivation principal component with a dummy taking a value of one if the individual has never been a volunteer in the years before getting the new job. The decision to volunteer is expected to be strictly related to intrinsic motivations (individuals decide to work without monetary compensation as volunteers if they are intrinsically motivated) under the assumption that intrinsic motivations in the activity volunteered in the past are correlated with intrinsic motivations found in the current job. We propose two arguments for the validity of the instrument. First, there is no reverse causality between the dependent variable and the instrument since it is not possible that the higher satisfaction of moving from a profit to a no profit occupation with non higher wages causes the decision to volunteer in the life period which precedes the new job. Second, it is also difficult to imagine omitted variables, different from intrinsic motivations, which are correlated with both being part of the NWMVM group and having never volunteered in the past. Note that our IV estimate is exactly specified, which implies that the validity of our instrument can be only specified on logical grounds (Table 6, columns 4-6).

Results from the first stage of the IV estimate show that our instrument is highly relevant since it has a strong impact on the instrumented variable in the first stage equation. To evaluate the significance of the instrument even in the presence of weakness we perform the Anderson–Rubin (1949) Wald test. The test is robust to the presence of weak instruments when the sample size is large and its null hypothesis assumes that the coefficient of the endogenous regressor in the structural equation is equal to zero. Test results lead us to reject the null that the coefficient on the intrinsic motivation indicator is zero at 1 percent. We finally observe that the instrumented variable is significant in second stage estimates for all of the three specifications. Note as well that in two out of three estimates, the null of exogeneity of the intrinsic

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<sup>27</sup> Consider that the value zero of the dependent variable includes voluntary movers who do not end up with non higher wages and higher life satisfaction and the other two groups of (laid off or resigned) non voluntary movers.

motivation component is not rejected, suggesting that the OLS estimate can also be considered valid, at least conditionally to the chosen set of instruments. Our conclusion is that intrinsic motivations play a crucial role in explaining why movers from the profit to the non profit industry may end up with lower wages and higher job satisfaction.

## **6. Conclusions**

The literature on wage differentials measures the effect of pecuniary and non pecuniary job characteristics on workers' utility by looking at wage determinants and wage differentials through the lenses of labour market theories. In this perspective, in non segmented labour markets and in the presence of job vacancies in the profit industry, individuals may accept lower wages in equilibrium without moving from the low to the high wage sectors if non pecuniary compensating differentials offset the negative difference in remunerations. The presence of intrinsic motivations may deepen the wage differential if not-for-profit jobs satisfy them relatively more than for profit jobs. Our findings confirm that the compensating differential hypothesis is part of the explanation of the profit/not-for-profit wage differentials since we identify a group of voluntary movers who change, resulting in a non higher wage and experience higher job satisfaction after the change.

The inquiry of the characteristics and relative preferences of this group of workers helps us identify what compensates for them. We find that the latter is relatively more intrinsically motivated than the rest of movers and the majority of them identify a series of non pecuniary compensations (an improvement in time flexibility, more consistency with ones' own education, better relationships with stakeholders) when comparing the new versus the old job.

## References

- Anderson, T. W., and Rubin, H. (1949), "Estimation of the Parameters of a Single Equation in a Complete System of Stochastic Equations: The Method of Path Coefficients", *Annals of Mathematical Statistics*, 5: 161-215.
- Becchetti L. Castriota S. (2010), "Wage differentials in social enterprises: education premium and the role of PPP geographical disparities", *Econometrica* working paper.
- Becchetti L., Castriota S. and Tortia E. (2009), "Productivity, wages and intrinsic motivation in social enterprises", AICCON working paper n. 66.
- Benz, M. (2005), "Not for the profit, but for the satisfaction? Evidence on worker well-being in non-profit firms", *Kyklos*, 58(2): 155-176.
- Borzaga, C. and Depedri, S. (2005) 'Interpersonal relations and job satisfaction: some empirical results in social and community care services', in B. Gui and R. Sugden (eds) *Economics and Social Interaction: accounting for interpersonal relations*, Cambridge: Cambridge University Press, pp. 132-53.
- Borzaga, C. and Tortia, E. (2006), "Worker motivations, job satisfaction, and loyalty in public and non-profit social services", *Non-profit and Voluntary Sector Quarterly*, 35(2): 225-48.
- Blanchflower, D.G. & A. J. Oswald (1999) 'Well-being, insecurity and the decline of American job satisfaction', mimeo, <http://www2.warwick.ac.uk/fac/soc/economics/staff/faculty/oswald/blanchflower.pdf>.
- Bryson, A., L. Cappellari, & C. Lucifora (2005) 'Why So Unhappy? The Effects of Unionisation on Job Satisfaction', *IZA Working Paper*, No. 1419, Bonn, Germany.
- Carpita, M. (2009) (Eds.), *La Qualità del lavoro nelle cooperative sociali. Misure e modelli statistici*, Milan, Franco Angeli.
- Clark, A. (1997) 'Job Satisfaction and Gender: Why Are Women So Happy at Work?', *Labour Economics*, 4(4): 341-372.
- Clark, A. (2005) 'What Makes a Good Job? Evidence from OECD Countries', in S. Bazen, C. Lucifora, & W. Salverda (2005) *Job quality and Employer Behaviour*, Palgrave MacMillan, New York, pp.1-24.
- Deci, E.L. (1975), *Intrinsic Motivation*, New York: Plenum Press.
- Depedri S. (2008) "La dimensione multi-stakeholder delle cooperative sociali" in *Impresa sociale*, Issan ed., 77(4): 72-103
- Frank, R.H. "What Price the High Moral Ground?", *Southern Economic Journal*, 63: 1-17.
- Handy, F. and Katz, E. (1998) 'The wage differential between nonprofit institutions and corporations: getting more by paying less?', *Journal of Comparative Economics*, 26(2): 246-61.
- Hansmann, H.B. (1980), "The Role of Nonprofit Enterprise", *Yale Law Journal*, 89:835-901.
- Krueger A.B., Schkade D.A. (2007) "Sorting in the Labor Market: Do Gregarious Workers Flock to Interactive Jobs?", Discussion paper IZA, n.2730, Bonn.
- Leete, L. (2000), "Wage Equity and Employee Motivation in Nonprofit and For-Profit Organizations", *Journal of Economic Behavior and Organization*, 43(4): 423-446.
- Leete, L. (2001), "Whither the Nonprofit Wage Differential? Estimates from the 1990 Census", *Journal of Labor Economics*, 19(1): 136-170.
- Miller, R. A. (1984) "Job Matching and Occupational Choice", *The Journal of Political Economy*, 92(6): 1086-1120
- Miller, P. W. (1990) 'Trade Unions and Job Satisfaction'. *Australian Economic Papers*, 29(55): 226-248.

- Mirvis, P.H. and Hackett, E.J. (1983), "Work and Workforce Characteristics in the Nonprofit Sector", *Monthly Labor Review*, 106(4): 3-12.
- Mirvis P.H. (1992) 'The quality of employment in the nonprofit sector: an update on employee attitudes in nonprofits versus business and government', *Nonprofit Management and Leadership*, 3(1): 23-41.
- Mortensen, Dale T. (1978) "Specific Capital, Bargaining and Labor Turnover", *The Bell Journal of Economics*, 9: 572-586.
- Mosca, M., Musella, M. and Pastore, F. (2007), "Relational Goods, Monitoring and Non-Pecuniary Compensations in the Nonprofit Sector: The case of the Italian Social Services", *Annals of Public and Cooperative Economics*, 78(1): 57-86.
- Narcy, M. (2009), "Would Nonprofit Workers Accept to Earn Less? Evidence from France", forthcoming in *Applied Economics*.
- Prendergast, C. (2007), "The Motivation and Bias of Bureaucrats", *American Economic Review*, 97(1): 180-196.
- Preston, A.E. (1988), "The Effects of Property Rights on Labor Costs of Nonprofit Firms: An Application to the Day Care Industry", *Journal of Industrial Economics*, 36: 337-50.
- Preston, A.E. (1989), "The Nonprofit Worker in a For-Profit World", *Journal of Labor Economics*, 7: 438-63.
- Rose-Ackerman, S. (1996), "Altruism, Nonprofits, and Economic Theory", *Journal of Economic Literature*, 34: 701-728.
- Schwochau, S. (1987) 'Union Effects on Job Attitudes', *Industrial and Labor Relation Review*, 40(2): 209-224.
- Sen, A. (1985) 'Goals, Commitment and Identity', *Journal of Law, Economics and Organization*, 1(1): 341-355.
- Skalli, A., I. Theodossiou, & E. Vasileiou (2007) 'Jobs as Lancaster Goods: Facets of Job Satisfaction and Overall Job Satisfaction', Centre for European Market Research, *Discussion Paper 2007-02*, Aberdeen University, UK.
- Soohne K. (2002), Participative Management and Job Satisfaction: Lessons for Management Leadership,, *Public Administration Review*, 62(2): 231-41
- Sousa-Poza, A. and A. A. Sousa-Poza (2000) 'Well-being at Work: A Crossnational Analysis of the Levels and Determinants of Job Satisfaction', *Journal of Socio-Economics*, 29(6): 351-372.
- Tortia, E. C. (2008) 'Worker Well-being and Perceived Fairness: Survey-based Findings from Italy', *Journal of Socio-Economics*, 37(5): 2080-2094.
- Valentini, E. (2005) 'Psychological Factors in Job Satisfaction', Università delle Marche, Dipartimento di Economia Working Paper, No. 225.
- Weisbrod, B.A. (1983), "Nonprofit and Proprietary Sector Behavior: Wage Differentials among Lawyers", *Journal of Labor Economics*, 1: 246-63.