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Relational goods, monitoring and non-pecuniary compensations in the nonprofit sector: the case of the Italian social services

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Relational Goods, Monitoring and Non-Pecuniary Compensations in the Nonprofit Sector: The Case of the Italian Social Services

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August 2006

Forschungsinstitut
zur Zukunft der Arbeit
Institute for the Study
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Relational Goods, Monitoring and Non-Pecuniary Compensations in the Nonprofit Sector: The Case of the Italian Social Services

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ABSTRACT

Relational Goods, Monitoring and Non-Pecuniary Compensations in the Nonprofit Sector: The Case of the Italian Social Services*

This paper investigates the nonprofit wage gap suggesting a theoretical framework where, like in Akerlof (1984), effort correlates not only with wages, but also with non-monetary compensations. These take the form of relational goods and services by-produced in the delivery of particular services. By paying higher non-pecuniary compensations, the nonprofit sector attracts intrinsically similarly skilled, but more motivated workers, able to provide in fact a higher level of effort than their counterparts in the forprofit sector. On an empirical ground, the paper provides a number of econometric tests that confirm the main predictions of the model in Italy's case. It adds to the available empirical literature by introducing in the analysis direct measures of non-pecuniary compensations and job satisfaction.

JEL Classification: I00, J31, L31, L84

Keywords: relational goods, job satisfaction, wage determination, non-profit organisations, efficiency wages

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Introduction

The debate on nonprofit organisations has progressively widened from the issue of their ability to create new employment (see, for a survey, Rose-Ackermann, 1996) to that of their impact on the process of human capital accumulation of long-term unemployed and of the formation of social capital which is necessary to the well-functioning of market economies (Menchik and Weisbrod, 1987; and Musella, 2002). In this paper, we address the issue whether nonprofit institutions are able to optimise the use of the "human capital" input compared to their state and forprofit counterparts operating in similar sectors, via a peculiar structure of incentives.

The provision of personal care facilities is the sector where the greatest part of nonprofit organisations concentrate (Salamon and Anheier, 1996). As noted in section 1, this sector produces a specific type of output able to affect the job relationship. In fact, output has a multidimensional nature, because it generates relational goods within (among colleagues and with managers) and outside (in the producer/customer relationship) the organisation. Such relational goods provide a sort of non-pecuniary incentive to increase the workers' effort.

Section 2 aims to explain the nonprofit wage differential in the long run and develops a theoretical framework where wages are negatively correlated with non-pecuniary compensations. Like in the Akerlof (1984) and the Akerlof and Yellen (1990) gift-exchange approach to efficiency wages, the workers effort positively depends not only on wages, but also on the amount of non-pecuniary

compensations[1]. The higher level of non-pecuniary compensations in the nonprofit sector explains why it can compete with the state and the forprofit sector also paying lower wages: by paying lower wages, in fact, the nonprofit sector attracts similarly skilled, but intrinsically more motivated workers, who provide a higher level of effort than their counterparts in the forprofit sector. Handy and Katz (1998) describe the mechanism through which highly motivated workers self-select themselves in nonprofit organisations where wages are lower. We add that this is possible if the nonprofit organisations provide their motivated workforce with higher non-monetary compensations.

The policy implication is obvious: fiscal incentives should be used to support the production of positive externalities by nonprofit organisations. As noted above, in fact, nonprofit organisations generate a higher degree of relational goods at a lower cost compared to forprofit organisations.

On an empirical ground, the paper provides evidence (section 3) and various econometric tests (section 4) that confirm the main predictions of the model. It adds to the available empirical literature on the nonprofit wage gap by introducing in the analysis direct measures of non-pecuniary compensations based on the ISSAN data bank on Italy's personal care services. In fact, the ISSAN data provides answers to questions on job satisfaction along 15 different dimensions, including the perceived amount of relational goods.

The empirical investigation reaches three main conclusions. First, the nonprofit sector pays lower wages than its state and forprofit counterparts. This is

[1] Preston (1989) also assumes that workers in the nonprofit sector have a utility function whose arguments include the social benefit of their work. However, in the utility function approach it is assumed that the worker's effort is known to the employer. Nonetheless, this assumption is difficult to hold in the social service sector. For this reason, we turn to the efficiency wage approach.

not due to the lower human capital level of its workforce, as in fact the nonprofit organisations employ more skilled workers than other organisations. Rather, the nonprofit organisations employ a skilled workforce by providing them with higher non-pecuniary compensations, as measured by the level of job satisfaction. Second, the negative nonprofit wage gap persists also after controlling for human capital, demographic, regional and occupational variables, which suggests that it is not explained by investment in education as in the mincerian approach. Third, also the positive nonprofit differential in job satisfaction persists after controlling for a set of observed characteristics of workers.

1. Monitoring workers effort in the personal care sector

Much evidence suggests that nonprofit organisations typically operate in the provision of personal care facilities (Salamon and Anheier, 1996; and for Italy Frisanco and Ranci, 1999; Istat, 1997; 2001; CGM, 1997; IREF, 2000). Following a recent literature (Zamagni 1997; 1999; Gori e Vittadini, 1999; Gui 2000), the main peculiarity of work performance in this sector can be found in that it yields a multidimensional output, constituted by the service itself – say helping a disadvantaged person to feed himself – and by the relationship between the operator (as well as the organisation) and the direct beneficiary of the service – say the relationship of affection which is necessary to implement this type of service. In other words, while delivering the main produce – let call it a "relational service" – the service provider generates also "relational goods"[2]. Therefore,

[2] It is important to stress that relational goods cannot be a specific output.

relational services can be defined as those services whose production naturally requires the collaboration of those who deliver them and of those who benefit of them; they satisfy the users demand for greater well-being or for lower uneasiness; and are delivered in a process, which can be often appraised only over time. In turn, relational goods are "immaterial goods", which yield utility only if they are shared with others and hence benefit simultaneously not only the customer, but also the operator. More specifically: a) they can not be exclusively consumed by one individual only; b) their production asks for the participation of all those who enjoy it, but the terms of this participation are not negotiable; c) the fruition of them can not be separated by the need and the preferences of others since the relationship with others is constitutive of the consumption action.

The peculiar nature of personal services causes three joint consequences. First, output cannot be easily identified and hence measured. What is for example the output produced by a therapeutic community? Is the number of children welcomed in a childcare facility a satisfactory measure of its output?

Second, the peculiar link between output and the labour input, which depends on the worker's effort, makes it problematic to identify the productive technique used. Being a product that is delivered through a peculiar producer/customer relationship, the quantity and quality of the output obtained is strongly dependent not only on the hours worked, but also on the content, intensity and "quality" of labour[3]. In turn, this last depend on the human capital endowment and effort of workers. Often the provision of personal services requires that the worker be personally involved and available to find the practical ways to overcome obstacles

[3] This does not mean that the endowment of other inputs, such as physical capital, is not important itself.

and difficulties. A consequence of the problems now outlined is that it can be hard to find a satisfactory measure of labour productivity, which could be opportunely redefined as X/L_e, where L_e indicates the labour effort. However, labour productivity is necessary to measure the efficiency of supplied services or the ability of their prices to signal their relative scarcity.

Third, it is impossible to monitor and encourage the worker's effort according to traditional procedures, used in the case of typical material goods or measurable services. In fact, in the case of personal services, the traditional process of monitoring and evaluating risks is not applicable or gives "perverse" conclusions. Think, for instance, of the use of quantitative indicators (number of recovered patients) to measure a hospital or a doctor's performance.

All the above discussion suggests that the very existence of relational goods reveals a case of market failure. In fact, as Zamagni notes (1999, pp. 218-23), relational goods are not exchanged according to rules fixed in contracts, but are transferred on the basis of a principle of reciprocity; therefore, material exchange rules can be neither used during their production nor during their consumption, which almost always coincide. The idea that relational goods enter the work relationship can be found also in the Akerlof's (1984) gift exchange hypothesis.

Therefore, when analysing the production of services with a high relational nature, the workers' effort importantly affect the output produced. More precisely, the quantity and quality of output depend on the following factors. First, the degree of job satisfaction: (s)he has to actively, intelligently and voluntarily collaborate to the production of output. Second, the individual result of the work activity often depends on the effort of the working group. Third, a cooperative

attitude towards exchanging adequate and correct information among workers is necessary. Fourth, the identification of output should be the same for workers, between operators and managers, and between operators and customers. To explain this point it can be useful to make an example: in some cases, the output of a medical therapy could not be "to cure", as the patient would expect, but to contain the harmful effects of a pathology; and it is important that, in some way, the two interested parts – or the *n* parts, in case, for example, more experts or also the patient's relatives are involved – share the same goal.

2. Non-pecuniary compensations and workers effort

2.1. A theoretical justification

The previous section has shown that in the provision of personal services, where nonprofit organisations typically operate, output is not measurable due to the existence of relational goods/services and the fact that output typically depends not only on the amount of labour employed, but also on the workers effort, which cannot be monitored. As a consequence, traditional indicators of economic performance, such as labour productivity, fail their scope and the process of wage determination can be thought of as described in the efficiency wage literature, since the best way for firms of guaranteeing high productivity is via a high remuneration. This essentially implies that the quantity (and quality) of the service delivered depends only on the effort and care of the workforce and that the remuneration affects the productivity level, via increasing the worker's effort. The idea that an efficiency wage mechanism operates in the nonprofit sector was first put to the fore in the seminal work by Hansmann (1980) and Weisbrod (1977; and 1983), who claim that the very existence of nonprofit organisations is due to their ability to overcome with their ideological aim the trust problem in markets dominated by the existence of asymmetric information in the producer/customer relationship.

This section argues that the peculiar nature of the production of personal services can contribute to explain a typical feature of nonprofit organisations, namely their tendency to pay lower wages compared to forprofit firms (Weisbrod,

1983; Goddeeris, 1988; Preston, 1989; Frank, 1996; for a more complex picture of the nonprofit wage differential, see Leete, 2001; and Ruhm and Borkoski, 2000) and also to the organisations operating in the state sector.

Such a difference in the wage level is sometimes explained claiming that the forprofit sector (FPS) and the government sector (GS) might use wages as an incentive mechanism and a screening device, according to an adverse selection mechanism: by paying higher wages, firms hire a better qualified workforce that guaranties higher levels of production of goods/services of a higher quality. Conversely, the nonprofit sector (NPS) would attract a low qualified workforce able as such to produce a lower amount of goods/services of low quality.

Challenging this view, Hansmann (1980) suggests that, in fact, nonprofit employers use wages as a negative screening device by offering salaries below those in the FPS. This should deter those highly motivated by monetary concerns from seeking nonprofit employment and attract those for whom love of their work dominates. This idea is formalised in Handy and Katz (1998) assuming that the reservation wage of skilled workers devoted to the firm aims is lower than that of skilled, but indifferent workers. They argue that under this assumption it is convenient for nonprofit organisations to pay lower wages to hire the motivated workers with a higher probability.

The above theoretical arguments have to face two main problems. First, in the terms of Handy and Katz (1998) analysis, one should explain why skilled, but motivated workers have lower reservation wages than skilled, but indifferent workers. In other words, what do nonprofits offer to motivated workers that forprofit firms do not? One possibility, explored in this section is that nonprofit

organisations offer higher non-pecuniary remunerations. Second, how to measure workers motivation and effort across organisations? How to measure the degree of fairness in the organisation? This issue will be dealt with in the next section.

This section also aims to verify whether a non-profit wage gap existing in the short run can possibly hold also in the long run. The point developed here is that Hansmann's (1980) argument holds in the long run only if intrinsically motivated employees are at least as productive as workers motivated only by monetary concerns. In other words, in order to exist in the long run the nonprofit wage gap should be counterbalanced by an opposite gap in the non-monetary remuneration, in terms of greater fairness in the firm. It is shown that the Shapiro and Stiglitz (1984) efficiency wage model is not suitable to explain how this can happen and one should appeal to the *morale* models developed in Akerlof (1984) and Akerlof and Yellen (1990). In fact, following the Shapiro and Stiglitz (1984) variant of the efficiency wage approach, the NPS should either equalise their wages to the level of the FPS or disappear, becoming soon less efficient, as predicted by the opponents of the NPS.

2.2. The model

The model considers a simple economy producing a homogeneous good/service by an infinite number of forprofit and nonprofit firms acting in a perfectly competitive scenario. This implies that the model is chiefly suited to explain a pure infra-sectoral wage differential, though it can be used also to

explain inter-sectoral wage differentials[4]. On the demand side a constant population of identical individuals consumes the service delivered.

Like in Shapiro and Stiglitz (1984), the worker's effort (e) positively depends only on the remuneration (R_i), which is essentially pecuniary in nature (W_i) as described by equation [1][5]

$$e_i = g(R_i) = h(W_i) \qquad [1]$$

where $i = 1,2 = f, n$, or, in other words, the forprofit and the nonprofit firm. It is possible to increase the workers' effort (case of workers of identical characteristics) or to hire workers endowed with a higher level of qualification and/or specialisation (case of observationally distinct workers) using the monetary remuneration as a screening device[6]. The production function is given by

$$Y_i = f(\overline{L}, e) = f[\overline{L}, h(W_i)] \qquad [2]$$

where Y_i is the output produced in sector i, $\overline{L}$ is the (fixed) number of employed workers. Total output depends on the number of employed workers and on the worker's effort function, which is, in turn, influenced by the monetary wage level. Assume first that labour is homogeneous and that the forprofit and the nonprofit firms have identical technologies and produce the same service by using a workforce with the same skill level. It is easy to see that a wage premium in favour of the forprofit sector ($W_f > W_n$) cannot hold in the long run. In fact, forprofit organisations will register increasing productive costs and to remain

[4] As Leete (2001, p. 163) notes, in some cases a wage differential may arise in the same statistical sector, but be due to a different nature of output: "The wage differential need not be related to the nonprofit form of organisation per se, only to the product produced and, in many cases, the public good content of the product produced. Thus, the nonprofit wage differential estimated for these industries may spring more from the lack of refinement in our industry classification scheme than from anything else".

[5] In this paper, we hold the level of physical capital constant across workers and organisations.

[6] Notice that the Hansmann's hypothesis that the NPS uses lower wages as a negative screening device does not hold in the Shapiro and Stiglitz framework, since workers are only attracted by monetary factors.

competitive, *ceteris paribus*, they must reduce the price for the service of labour. The equilibrium condition reached in the long run would be given when there is the same level of monetary remuneration in the two sectors ($R_f = R_n$).

A different result is achieved assuming that labour can be either skilled or unskilled. In particular, the sector offering a higher level of monetary remuneration, namely the FPS, possesses a better technology able to distinguish between the workers' abilities and will attract workers with a higher level of productivity. The consequence will be that in the long run the NPS will attract only workers with lower skill and also productivity levels. This sector will register then a progressive increase in costs and will vanish, since it will not be as efficient as her forprofit counterpart[7]. Table 1 summarises the main conclusions achieved until now.

[Table 1 about here]

However, the above analysis fails to consider that the very nature of nonprofit institutions is based on the existence of non-monetary compensations and on the role played by job satisfaction on their morale, as proved also by the conspicuous share of voluntary work in the NPS (Weisbrod, 1977; 1983; and Hansmann, 1980). Following this line of reasoning, in what follows, like in Akerlof (1984) and Akerlof and Yellen (1990), new elements, additional to the monetary remuneration influence the workers effort and productivity trough the workers morale. In Akerlof and Yellen, non-monetary compensations essentially include the degree of cohesion between the worker and the working group, as well as between the worker and the management.

[7] It is easy to foresee that if effort, which is assumed to be different for skilled and unskilled workers, is difficult to monitor the wage level is equalised.

However, this type of feeling is typical also of forprofit firms. In the case of nonprofit organisations, ideological factors, such as sharing the firm aims or enjoying the relational goods by-produced in the organisation can also be part of the workers compensation. Analytically, a non non-monetary component (NMR_i) enters the effort function[8]:

$$e_i = g(R_i) = h(W_i + NMR_i) \qquad [3]$$

The total production function then becomes:

$$Y_i = f\left[\bar{L}, h(W_i + NMR_i)\right]. \qquad [4]$$

Equation [4] suggests that the organisation can increase its production level not only by raising the monetary remuneration (as in the previous exercise), but also by taking into account the positive effect of the non-pecuniary component of the remuneration on the worker's satisfaction (trough the morale).

Assume now that the forprofit and nonprofit sector employ heterogeneous workers. The differences in the workforce are not related to skills, but to the intrinsic value that each worker perceives of the higher level of the non-monetary component of the remuneration that the nonprofit sector ensures ($NMR_f < NMR_n$). The existence of a wage differential in favour of the FPS ($W_f > W_n$) is therefore a necessary condition for this sector to compete with its nonprofit counterpart. In this framework, the nonprofit wage gap can be considered a mechanism of compensating (monetary) wage differentials. The

[8] The suggested approach is similar to that of Preston (1989). She argues that as nonprofit institutions have a non-distribution constraint, managers may have a certain level of discretion on where profits are channelled in the organisation. She assumes that the utility function of workers incorporates not only wages but also the social benefit generated by the firm. Therefore, all workers who place a positive utility on contributing to social welfare are willing to trade-off wages for social benefits on a given indifference curve. Based on this trade-off one can define a labour donation function for every individual worker. However, the model analysed here is based on the efficiency wage approach, which is justified by the nature of output in sectors where nonprofit organisations are more numerous.

remuneration level received by workers joining the FPS can be inferior, greater or equal to that perceived by their non-profit colleagues depending on the impact of the non-monetary component of the remuneration ($R_f \gtreqless R_n$). This implies that:

$$W_f + NMR_f \gtreqless W_n + NMR_n \qquad [5]$$

where the sign of [5] depends on the relative gap between the monetary and non-monetary remuneration in the two sectors. We expect that the wage premium in favour of the FPS is overcome in the NPS to maintain the same efficiency level by enforcing a fair organisational environment able to attract highly qualified workers that attribute a higher weight to the non-monetary remuneration. Following this result, the existence of a nonprofit sector in the long run is ensured by the fact that similarly skilled, but ideologically heterogeneous employees choose to join a sector only on the basis of the non-monetary component of the remuneration, i.e. comparing NMR_f and NMR_n. This framework provides a justification of the fundamental assumption on which the self-sorting mechanism studied in Handy and Katz (1998) is based, namely that skilled devoted workers have a lower reservation wage compared to skilled indifferent workers. This could also be re-stated saying that wages and *NMR* are negatively related in some individuals, who are available to trade-off wages for *NMR*. Table 2 summarises the main conclusions achieved until now.

[Table 2 about here]

Finally, this line of reasoning confirms a conclusion of section one. The nonprofit wage gap does not imply lower efficiency levels, but conversely the existence of labour donations whose social externalities the market is unable to

price. The important policy implication is that the government should support nonprofit institutions to produce such externalities by using fiscal incentives.

3. Testing the model

The remainder of this paper aims to provide evidence of wage differentials and of the role played by non-pecuniary compensations across organisations. Moreover, the paper studies the determinants of the nonprofit wage gap in the context of mincerian earnings equations to econometrically test whether the nonprofit wage gap is explained by human capital factors. This section expands on the available empirical literature on the nonprofit wage gap (Preston, 1989; Leete, 2000; and 2001) along two dimensions. First, it covers Italy's personal service sector and provides direct measures of non-pecuniary compensations. Second, it provides direct measures of job satisfaction to measure the greater degree of fairness existing in nonprofit organisations. Leete (2000) pointed out the possible role of wage equity (iniquity), as measured by the degree of wage concentration (dispersion), within the organisation/sector in maintaining intrinsic motivation and organizational identification, relating this to wage setting practices in the nonprofit sector. However, there are at least two caveats to using wage dispersion as a measure of fairness. First, wage equity is only one marginal aspect of fairness in the morale models. Secondly, the assumption that a low degree of wage dispersion is an incentive for workers motivation and effort is hard to reconcile not only with a neoclassical approach (Lazear, 1991), but also with an efficiency wage approach *à la* Shapiro and Stiglitz (1984) as proven in the

previous section. Before showing the results of the analysis, the following section describes the used data.

3.1. *Data description*

The empirical analysis is based on the Survey on Employment in the Social Care and Educational Services conducted by the *Istituto di Studi sullo Sviluppo delle Aziende Nonprofit* (ISSAN) on state, forprofit and nonprofit organisations operating in the supply of a limited number of personal care facilities: Assistance and guardianship, Nursing/rehabilitation, Educational, Cultural, Recreational, School and school-to-work guidance, Job-search assistance and others (see for further details Borzaga, 2000). Less than 3-year-old organisations or organisations employing less than three paid workers and with discontinuous activity were excluded from the universe. The survey was carried out in the first semester of 1998 in fifteen Italian provinces[9], mainly concentrated in the North, where nonprofit organisations are more numerous. 724 voluntary workers, 2066 (out of 9226) paid workers, 228 organisations divided in 268 units and 266 managers returned the filled questionnaires. About 61.7% of paid workers in the sample are employed in the NPS, of which 33% are in the lay nonprofits, 29.3% are in the GS and 9.0% in the FPS.

One of the main advantages of this data set is that it provides direct and detailed information on the degree of work motivation and satisfaction, which the model outlined in the previous sections considers a crucial factor of the workers

[9] From the North to the South, they include: Trento, Gorizia, Pordenone, Trieste, Udine, Venezia, Cuneo, Torino, Brescia, Firenze, Napoli, Salerno, Catanzaro, Reggio Calabria and Messina.

effort. In fact, one of the main aims of the survey was to provide information on differences in wages and work conditions as well as in competitive advantages across organisation types.

3.2. The evidence on wages and non-monetary compensation

Table 3 reports average net monthly wages, w_m[10], log of net hourly wages, $Ln(w_h)$, and the degree of wage dispersion, as measured by the standard error, relative to full-time and part-time workers by organisation type. The hourly wage has been obtained dividing the declared monthly wage by the number of hours due in one month according to the work contract[11]. The motley universe of nonprofit organisations includes social cooperatives as well as religious and lay institutions. Social cooperatives mainly concentrate in the provision of social services and, similar to religious nonprofits, but contrary to lay nonprofits they are not allowed to sell out their services to customers. Furthermore, lay and religious organisations differ for the aims they pursue. These differences within the NPS could clearly affect also the mechanism of wage determination. Therefore, the following analysis groups social cooperatives and religious nonprofits (NPS1), distinguishing them from the lay nonprofits (NPS2).

Table 3 suggests that on average governmental organisations pay higher monthly wages compared to private firms. The unconditional wage premium of state over profit-seeking firms amounts to 9.6% when considering all workers and

[10] Interviewees are asked: "Could you please indicate the average net monthly wage you received in the last months (exclusive of extra-work pay, arrays and so on)?"

[11] Albeit available, the declared actual hours worked are not considered in this study.

to 12.4% when considering the full-time only. The comparable figures for the nonprofits are 16.2% and 13.1% respectively. Profit-seeking firms pay their part-time employees higher wages than both governmental (13.9%) and nonprofits (over 16.6%).

[Table 3 about here]

The comparison between forprofit and nonprofit organisations highlights a positive wage premium (6%) in favour of the former when all the workers are included into the analysis. This result is much lower than the 18% reported in Preston (1989). The nonprofit wage gap almost vanishes when considering the full-time (0.6%). Similar to Leete (2001), also in the Italian case the nonprofit/forprofit wage gap in hourly wages is not statistically significant for all workers. This essentially depends on the share of part-time workers in nonprofit organisations (25.3%), which is almost double that in forprofit firms (14.2%) and in governmental institutions (14%)[12].

Notice that the unconditional nonprofit/forprofit monthly wage gap goes up to 10.6% when the analysis excludes the lay organisations. In fact, these last pay higher monthly wages (2.4%) than their forprofit counterparts and than the rest of nonprofits (13.3%).

Preston (1989) and Leete (2001) find large differences in the wage gap across sectors in the USA, though while the former concludes that sectoral differences explain only a minor part of the nonprofit wage gap, the latter argues that the nonprofit wage gap is in fact mostly sectoral in nature and often depends on the different quality of the product of the nonprofits and the forprofits (also) within

[12] Leete (2001, tab. 2) also reports that the share of part-time is double in the nonprofit (16.5%), compared to the forprofit (9.8%) sector.

sectors. To check whether the wage gap in our data is only inter- or also infra-sectoral, table 4 shows wage levels across organisations and sectors. In fact, the three types of organisation coexist in two sectors only, namely Assistance and guardianship and Nursing/rehabilitation, which suggests that the sectoral component is important. However, within these two sectors the wage distribution by organisation is similar, which suggests that the wage gap has also an infra-sectoral dimension. This is prima face evidence that in our data the nonprofit wage gap is partly inter-sectoral (possibly spurious) and partly infra-sectoral (possibly genuine). However, considering that most part of sample observations concentrate in the abovementioned sectors (table 5), the infra-sectoral component of the wage gap is important.

[Table 4 about here]

The simplest explanation of the infra-sectoral nonprofit wage gap would be if the NPS employed less skilled workers. However, inspection of table 5 suggests that this is not the case. Workers in the NPS attained a higher educational level (12 years) than their counterparts in the government (11.5) and forprofit (10.8) sector. This conclusion is even stronger when disentangling educational qualifications, since workers who have completed at least high secondary school is much higher in the NPS (59.9%) than in the government (44.7%) or in the FPS (40.6%). The years of work experience and tenure are slightly lower in the nonprofit than in the forprofit and the government sector, which chiefly mirrors the greater job stability and the less recent foundation of governmental institutions.

What else would then explain the nonprofit wage differential within industries? The theoretical framework laid down in the previous sections suggests that low wages in the nonprofit sector could be used as a negative screening device to attract skilled devoted workers. Accordingly, one would expect that the level of job satisfaction of workers in the nonprofits be significantly higher than that of their counterparts in the other sectors. Figure 1 provides clear evidence in favour of this theoretical prediction, using one of the most valuable features of the ISSAN data, the direct information on job satisfaction. In fact, previous studies (Leete, 2000) used wage dispersion as a proxy of the degree of fairness and hence satisfaction within organisations. However, low wage dispersion could also represent a disincentive for the workers' effort (Lazeer, 1991).

The histograms in the figure provide direct information on the declared satisfaction level as measured along 15 different dimensions. This qualitative information should be taken with caution, as NPS workers could tend to answer positively for ideological reasons: in fact, charitable feelings are in the nature of the NPS. However, this is exactly what we are in search for: the presence of ideological differences across organisations to prove that they can affect the workers effort.

The figures suggest that workers in the NPS (4.8) are on average more satisfied with their job than workers in the FPS (4.5) and in the GS (4.3). Job satisfaction is a multifaceted feeling, generated by the relational goods and services by-produced with the main output. They arise as a consequence of the interaction generated: a) among workers within the organisation and b) with customers. The answers to question 2 (personal and professional growth

perspectives), 3 (decisional and functional autonomy), 9 (working hours), 13 (employee-employer relationship), 14 (inter-employee relationship) and 15 (relationship between paid and voluntary workers) regard type one of relational goods/services; the answers to question 4 (recognition of completed tasks), 5 (variety and creativity), 7 (usefulness of the contribution to the service) regard type two of relational goods/services. In both cases, workers in the NPS have a higher level of job satisfaction than their counterparts in the government and FPS, with the exception of question 7, where differences are negligible. Noticeable is also the low level of satisfaction for monetary compensation and career advancement in all organisation types[13].

[Figure 1 about here]

Overall, the evidence provided in this section is in line with the theoretical framework outlined in the previous sections. Nonprofit firms tend to select and hire a skilled workforce by paying low wages, but providing high levels of non-pecuniary compensation, here proxied by the declared level of job satisfaction. Considering the effect of job satisfaction on the workers effort, this suggests that *ceteris paribus* nonprofit firms are not less efficient than their governmental or profit-seeking counterparts.

[13] The discontent for wage compensations mirrors the low level of average wage and low returns to education in the provision of social services documented in the next section.

4. The econometric analysis

The first econometric test, reported in Table 6, is aimed at verifying whether the within sector unconditional nonprofit wage gap documented in the previous section holds also after controlling for the typical determinants of wages, namely human capital, regional, demographic and occupational controls. The analysis is carried out within the mincerian approach (see, for a survey, Card, 1999). Only the two sectors – Assistance and guardianship and Nursing/rehabilitation – where governmental and private organisations coexist are considered. Overall, the nonprofit wage differential is very stable, almost insensitive to different controls, including human capital. This suggests that other factors but those considered in the human capital investment decisions are important to explain the nonprofit wage gap. This indirectly lends support to the theoretical assumption that non-pecuniary compensations are affecting the decision to work in nonprofits. This observation applies to both the considered sectors, though in the Nursing/rehabilitation services the gap is statistically not significant.

An alternative explanation discussed in Preston (1989, p. 449) would be selectivity bias: if any unobserved characteristics (e.g. lack of ambition) is positively correlated with nonprofit employment, but negatively correlated with the monetary compensation, selectivity bias may account for a portion of the nonprofit wage gap. The tests carried out in Preston reject this hypothesis, which is also against theoretical expectations. In the model of the previous section, in fact, a negative correlation between lack of ambition and pecuniary compensation is expected to depend on the positive correlation with the non-pecuniary

component of the remuneration. This is also confirmed by the high human capital attainment of the workforce in the NPS, which is usually considered a proxy of skill. Unfortunately, due to data limitation we cannot test this hypothesis.

The wage differential in favour of governmental and against forprofit workers is more sensitive to the inclusion of controls: it goes down by one third when considering only human capital variables and becomes insignificant when including other controls, suggesting that such a differential is almost entirely due to observed factors. However, this result does not hold in the case of the Assistance and guardianship services, where forprofits do pay lower wages than governmental organisations, even after controlling for other determinants of wages.

[Table 6 about here]

The evidence provided in the previous section showed that wages are lower in nonprofits, though these employ a more skilled workforce. However, also differences in the 'basket' of other characteristics, such as demographic, regional, sectoral and occupational differences (explained component), as well as different remuneration methods (unexplained component) might explain the wage gap within the context of mincerian earning functions in the three sectors. Various tests have been carried out to assess the relative importance of differences in means and differences in coefficients.

Table 7 gives the returns to education across organisation types and sectors using as dependent variable the natural log of hourly wages. The aim is to see whether the returns to education are actually lower in the NPS than in other organisation types. The figures show that in personal care facilities, the private

return to a year of education is low (2.9), also compared to the Italian low standards (6.6 for men and 7.7 for women, according to Brunello, Comi e Lucifora, 1999), mirroring the low labour productivity in the sector. The returns to education are stable when adding new control variables to the basic earnings function, based only on absolute and squared potential work experience and tenure, which suggests that in all cases they are genuine returns to this productive factor. They also follow a similar behaviour across organisation types, suggesting that there are little differences in the way human capital is valued across organisations. The higher estimated returns to education in the nursing/rehabilitation sector suggests that the higher wages reported in Table 4 are actually also a consequence of the higher compensation for schooling (productivity) there.

[Table 7 about here]

Table 8 provides the results of augmented earnings functions by organisation. The human capital factor is represented by educational qualifications, rather than by years of schooling, to test for non-linearity and for differences across educational attainment levels of the workforce (the so-called sheepskin effect). Overall, the Adj-R^2 is higher in the FPS and in the government sector, suggesting that observed characteristics explain better wages in these sectors than in the NPS, though this could also mirror the lower degree of sectoral and occupational heterogeneity in this sector. The returns to education are higher for the University degree in the FPS and in the GS, but lower for other post compulsory education degrees compared to the NPS. Omitted results[14] of an Oaxaca decomposition

[14] The results are omitted for lack of space, but are available from the authors on request.

analysis of the wage gap between workers in the NPS and workers in the FPS and GS suggest that the explained component of the wage gap, due to differences in the 'basket' of characteristics explain on average less than 40 percent of the gap. This suggests, in turn, that most part of the wage gap stems from differences in compensation mechanisms, which suggests that other consideration from the human capital ones should be taken into account. More specifically, differences in the way of compensating potential work experience reduce the differential, whereas the higher remuneration of forprofit organisations in the sector of Assistance and guardianship increase the gap.

[Table 8 about here]

A final test is carried out estimating the determinants of the average level of declared satisfaction scored by individuals in their answers to all the relevant questions. The aim is to check whether the differential in satisfaction is explained by observed characteristics or rather it depends on other factors, such as the different compensation schemes adopted in the nonprofit compared to other sectors. One should look at differences in the coefficients of the independent variables and at the significance level of organisational dummies, as we already noted that differences in sample characteristics are small across organisations.

Few observed characteristics affect the average level of job satisfaction as confirmed by the low Adj-R^2. The significant variables are similar across organisations. Not surprisingly, higher wages have a positive and a higher number of hours worked have a negative effect on the level of job satisfaction. A high level of human capital tends to slightly lower the level of job satisfaction, especially in the GS, which mirrors perhaps the low returns to education in the

personal care facilities as compared to other sectors in the economy. For the rest, work experience, holding a managerial or professional position, being a teacher or a union member increase job satisfaction; whereas being divorced reduces the level of job satisfaction. For our purposes, what matters is that the differences in coefficients are negligible across organisations. Moreover, these small differences do not cancel out the significance level of the differential in job satisfaction across organisations in the estimate in column one. The coefficient of the dummies relative to the organisation type confirm the existence of a significant negative relationship between wage levels and job satisfaction across organisations, which is one of the main predictions of the theoretical model discussed in the previous sections.

[Table 9 about here]

Concluding remarks

This paper argues that a nonprofit wage gap can rule only in the short run when the remuneration structure is merely based on the monetary component as in the efficiency wage approach pioneered in Shapiro and Stiglitz (1984). However, by their very nature nonprofit organisations concentrate in markets with asymmetric information both within the firm, due to the difficulty to measure output and monitor the workers effort, and in the producer/customer relationship. This suggests that non-pecuniary compensations, taking the form of relational goods by-produced in the supply of relational services, play an important role in the process of wage determination, increasing the firm's output by stimulating the workers effort through the morale (like in Akerlof, 1984; and Akerlof and Yellen, 1990) and generating a negative adverse selection mechanism (Hansmann, 1980; Handy and Katz, 1998). Providing higher non-pecuniary compensations, nonprofit organisations attract skilled workers with high intrinsic motivation.

Moreover, the paper tests and verifies these theoretical predictions using the ISSAN data on the social service sector. The empirical analysis confirms the theoretical predictions. Nonprofit organisations employ a larger share not only of voluntary, but also of part-time workers and pay lower average wages. However, they provide workers with a significantly higher degree of job satisfaction. Both the wage gap and the differential in job satisfaction remain statistically significant also after controlling for various individual and job characteristics.

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Appendix

Table 1. The nonprofit wage gap with monetary compensation only

Short run	*Long run* *Homogeneous workforce*	*Long run* *Heterogeneous workforce*
$W_f > W_n$	$Y_f = Y_n$ $L_f + L_n = \overline{L}$ $\Pi_f = \Pi_n$	$Y_f = Y_n$ $L_f + L_n = \overline{L}$ $\Pi_f > \Pi_n$
	The nonprofit wage gap disappears in the long run and the two sectors coexist.	In the long run, an enduring nonprofit wages gap leads the NPS to disappear.

Note: Y: output, *L*: labour force, *W*: wages, *f*: forprofit, *n*: nonprofit; *Π*: labour productivity.

Table 2. The nonprofit wage gap with non-monetary compensation

	Long run *Homogeneous workforce*	*Long run* *Heterogeneous workforce*
$W_f > W_n$	$Y_f = Y_n$ $L_f + L_n = \overline{L}$ $NMR_f = NMR_n$ $W_f > W_n$ $\Pi_f = \Pi_n$	$Y_f = Y_n$ $L_f + L_n = \overline{L}$ $(NMR_f < NMR_n) > (W_f > W_n)$ $\Pi_f \geq \Pi_n$
	No wages difference in the long run. The two sectors coexist.	Wages difference also in the long run. The two sectors coexist.

Note: Y: output, *L*: labour force, *W*: wages, *f*: forprofit, *n*: nonprofit; *Π*: labour productivity.

Table 3. Wage levels and degree of wage dispersion across organisation types

Organisations		*Full- time*		*Part-time*		*All workers*	
		w_m	Ln (w_h)	w_m	Ln (w_h)	w_m	Ln (w_h)
Governmental	Mean	1734055	9,30	1089292	9,31	1643562	9.30
	N	490	490	80	80	570	570
	St. dev.	387476	0,20	422309	0,46	451703	0,25
Forprofits	Mean	1542874	9,17	1241040	9,47	1499755	9.21
	N	150	150	25	25	175	175
	St. dev.	218853	0,16	361467	0,56	265060	0,28
Nonprofit:	Mean	1533827	9,16	1064424	9,29	1415011	9,20
	N	897	897	304	304	1201	1201
	St. dev.	301013	025	359268	0,43	376744	0,31
Social Cooperatives	Mean	1484469	9,12	985946	9,27	1339539	9.16
	N	405	405	166	166	571	571
	St. dev.	305273	0,27	250857	0,43	368244	0,33
Lay nonprofits	Mean	1644248	9,24	1204776	9,36	1535490	9,27
	N	298	298	98	98	396	396
	St. dev.	309261	0,24	476354	0,47	404593	0,31
Religious nonprofits	Mean	1467255	9,14	1046250	9,21	1395288	9,15
	N	194	194	40	40	234	234
	St. dev.	223618	0,18	310058	0,21	287643	0,19
Total	Mean	1598544	9,21	1080084	9,31	1489577	9,23
	N	1537	1537	409	409	1946	1946
	St. dev.	337499	0,24	373980	0,44	404890	0,29

Note: Wages are expressed in Italian Liras (€ 1 = It. £ 1936.27).
Source: Our elaboration.

Table 4. Wage levels by sector and organisation type

Sectors	*Organisations*				
	Governmental	Forprofit	Nonprofit	NPS1	NPS2
Assistance and guardianship	1575960	1429165	1372440	1361145	1400900
Nursing/rehabilitation	1832655	1782105	1641560	1619560	1658111
Educational	1683505	/	1343526	1304490	1502556
Cultural	/	/	/	/	203335
Recreational	1734115	/	1475455	1570000	1310000
School and school-to-work guidance	1866670	/	/	/	1743615
Job-search assistance	/	/	/	1336200	1417630
Other services	/	900000	/	1128335	1803420

Note: NPS1 social cooperatives and religious nonprofits, NPS2 lay nonprofits.
Source: Our elaboration.

Table 5. Workers characteristics by sector and organisation type

Variables	*Organisations*				
	Governmental	Forprofit	Nonprofit	NPS1	NPS2
Age (years)	38.6	36.5	36.2	35.3	38.0
Education (years):	11.5	10.8	12.0	11.6	12.9
No title (%)	0.2	/	/	0.5	/
Primary school (%)	4.2	12.0	4.8	5.3	3.8
Low secondary school (%)	18.6	27.4	21.1	24.7	13.9
Vocational secondary school (%)	32.3	20.0	13.7	15.0	10.9
High secondary school (%)	34.0	26.9	40.5	38.5	44.7
University degree (%)	4.0	9.7	8.7	7.5	11.4
Postgraduate (%)	6.7	4.0	10.7	8.4	15.4
Work experience (years)	21.1	19.8	18.2	17.7	19.1
Tenure (years)	9.6	6.8	6.7	5.8	8.7
Age of organisation (years)	88.0	13.4	22.1	20.3	25.7
Women (%)	84.4	88.0	72.1	73.9	68.4
Civil status:					
Single (%)	24.6	32.0	36.1	37.3	33.8
Married (%)	65.4	53.7	58.6	54.3	56.8
Divorced (%)	7.9	9.1	7.2	6.8	7.8
Widow (%)	2.1	5.1	1.6	1.6	1.5
Macro-regions:					
North-West (%)	41.8	68.6	32.5	39.3	18.7
North-East (%)	48.8	9.7	38.1	34.7	44.9
Centre (%)	1.2	5.7	7.8	7.7	8.1
South (%)	8.2	16.0	21.6	18.4	28.3
Part-time (%)	14.0	14.3	25.3	25.6	24.8
Sector:					
Assistance and guardianship (%)	52.1	77.1	45.9	49.1	39.5
Nursing/Rehabilitation (%)	8.6	21.7	7.9	5.1	13.7
Educational (%)	34.2	/	22.9	27.5	13.7
Cultural (%)	/	/	/	/	0.8
Recreational (%)	4.6	/	1.8	1.7	2.0
School/school-to-work guidance (%)	0.5	/	/	/	9.9
Job-search assistance (%)	/	/	12.2	15.9	4.8
Other services (%)	/	1.1	5.7	0.7	15.7
Occupation:					
Home assistant (%)	14.9	1.7	12.4	14.2	8.8
Social assistant (%)	1.9	6.9	2.1	1.5	3.3
Social assistant operator (OSA) (%)	17.9	22.4	12.0	13.4	9.1
Educator (%)	33.6	5.2	28.8	28.0	30.3
Generic nurse (%)	1.6	4.0	0.8	0.9	0.5
Professional nurse (%)	4.0	9.8	3.5	4.1	2.3
Medical doctor (%)	1.6	/	/	/	/
Therapist/Psychologist (%)	1.4	9.2	5.1	2.7	9.8
Sociologist (%)	0.2	/	0.2	0.1	0.3
Other (%)	10.9	27	12.8	12.9	12.4

Note: NPS1 social cooperatives and religious nonprofits, NPS2 lay nonprofits. Social assistants are without qualification.
Source: Our elaboration.

Table 6. Nonprofit wage differential by sector

Control variables		*Sectors*		
		All sector	Assistance and guardianship	Nursing / Rehabilitation
1. Human-capital	Forprofit	-0.064 ***	-0.094 ***	-0.022
	NPS1	-0.122 ***	-0.092 ***	-0.085
	NPS2	-0.066 ***	-0.100 ***	-0.133
2. Human-capital, regional and demographic controls	Forprofit	-0.034	-0.096 ***	0.026
	NPS1	-0.125 ***	-0.098 ***	-0.058
	NPS2	-0.077 ***	-0.126 ***	-0.076
3. Human-capital, regional, demographic and occupational controls	Forprofit	-0.048 *	-0.112 ***	-0.011
	NPS1	-0.120 ***	-0.098 ***	-0.094
	NPS2	-0.083 ***	-0.117 ***	-0.108

*Note: The dependent variable is the log of hourly wages. NPS1 social cooperatives and religious nonprofits, NPS2 lay nonprofits. *, **, *** denote significance levels of 10, l 5 and 1 per cent respectively.*
Source: Our elaboration.

Table 7. The returns to education across organisations and sectors

Control variables	*Organisations*	*Sectors*		
		All sector	Assistance and guardianship	Nursing / Rehabilitation
1. Human-capital (absolute and squared work experience and tenure)	All	0.029 ***	0.022 ***	0.044 ***
	Government	0.030 ***	0.021 ***	0.093 ***
	Forprofit	0.040 ***	0.014 ***	0.014
	NPS1	0.023 ***	0.016 ***	0.023
	NPS2	0.034 ***	0.037 ***	0.017
2. Human-capital, regional, demographic and organisations controls	All	0.026 ***	0.017 ***	0.038 ***
	Government	0.033 ***	0.015 ***	0.087 ***
	Forprofit	0.021 ***	0.009	0.000
	NPS1	0.020 ***	0.017 ***	0.025
	NPS2	0.026 ***	0.023 ***	0.016
3. Human-capital, regional, demographic, Organisations and occupational controls	All	0.020 ***	0.013 ***	0.033 ***
	Government	0.021 ***	0.011 **	0.091***
	Forprofit	0.015 **	0.007	-0.000
	NPS1	0.015 ***	0.012 ***	0.011
	NPS2	0.020 ***	0.021 ***	0.021

*Note: The dependent variable is the log of hourly wages. NPS1 social cooperatives and religious nonprofits, NPS2 lay nonprofits. *, **, *** denote significance levels of 10, l 5 and 1 per cent respectively.*
Source: Our elaboration

Table 8. Wage earnings equations by organisation

Variables	All	State	FPS	NPS	NPS1	NPS2
(Constant)	8,965***	8,980***	9,372***	8,794***	8,851***	8,851***
Men	,010	-,030	-,055	,037**	,035	,043
University degree and above	,237***	,285***	,340***	,234***	,193***	,218***
Bachelor degree	,160***	,068	,114*	,206***	,190***	,175**
High secondary school	,100***	,075***	,024	,125***	,089***	,148***
Professional qualification	,049***	,048*	,030	,046***	,027	,092
Work Experience	,014***	,006*	-,008	,019***	,015***	,019***
Squared work experience	,000***	,000	,000	,000***	,000***	,000***
Tenure	,003***	,002	,002***	,003*	,003**	,003
North-East	,065***	,130***	,287*	,045	,013	,043
North-West	,009	,100**	,155**	-,005	-,010	-,030
Centre (Florence)	-,012	,362***	,144	-,026	-,010	-,062
Singles	-,019	-,007	-,077**	-,015	-,020	-,035
Divorced/widowed	-,003	,023	,037	-,011	,012	-,056
Part-time workers	,099***	,080***	,167***	,110***	,117***	,127***
Coordinator	,028	,076	-,066	,017	,049	-,021
Assistance and guardianship	-,039***	-,032	-,373***	-,038**	-,011	-,090***
Home and social care	-,016	-,054*	-,107**	,005	,011	-,006
Generic/ professional nurse	,146***	,111***	,067	,180***	,208***	,092
Social assistance operator	-,030	-,073***	-,079**	,002	,021	-,034
Teacher /Educator	,014	,081***	,191***	-,020	-,040	,031
Therapist	,209***	,300***	,027	,193***	,338***	,085
Work and training contracts	-,198***	-,420***	-,136	,016	,063	,055
Temporary worker	,051**	,015	,055	,057*	,082**	,040
Occasional worker	,139***	-,005	,109	,149***	,116***	,141**
Union contract	,047***	,077***	,041	,033*	,012	,055
Often going on strike	,037	,037	,087	-,023	-,056	,050
FPS	-,048**					
NPS1	-,120***					
NPS2	-,083***					
Adj-R^2	0,24	0,37	0,58	0,20	0,18	0,22
Number of observations	1946	570	175	1201	805	396

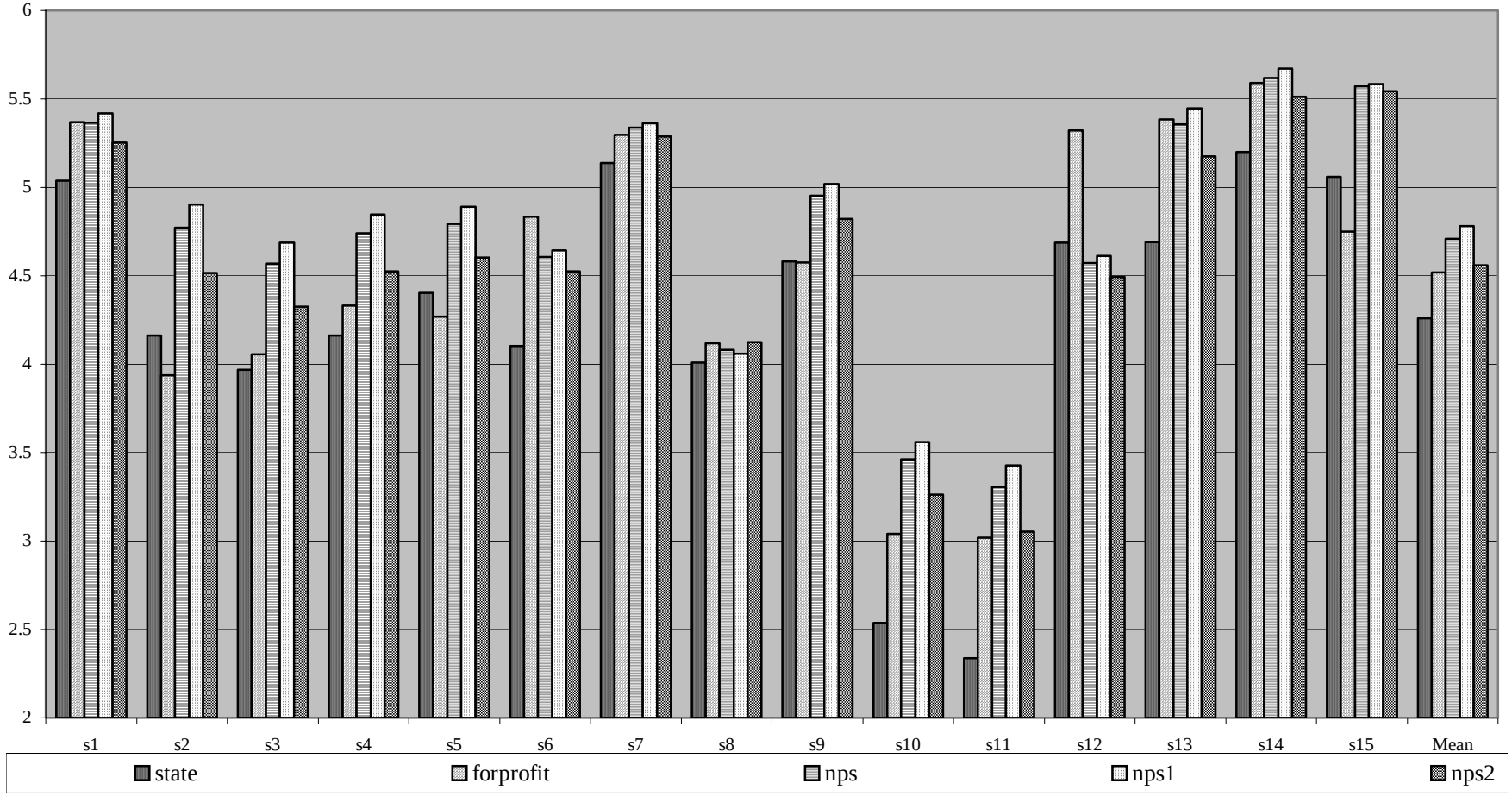
*Note: *, **, *** denote significance levels of 10, l 5 and 1 per cent respectively.*
Source: Our elaborations.

Table 9. Determinants of job satisfaction

	All	Government	Forprofit	Nps1	Nps2
(Costante)	4.260 ***	4.652 ***	4.908 ***	4.218 ***	5.119 ***
Monthly net wages	0.000 ***	0.000 *	0.000	0.000 *	0.000
Actual hours worked	-0.010 ***	-0.014 *	-0.012	-0.009 *	-0.012
University degree (4/5 years) and post-degree diplomas	-0.169	-0.492 *	-0.099	0.117	0.034
Bachelor degree (3 years)	-0.086	-0.312	0.189	0.012	-0.058
High secondary school	-0.151 **	-0.344 **	-0.387	0.083	-0.112
Vocational secondary school	-0.078	-0.246 *	-0.160	0.012	-0.147
Work experience	-0.020 **	-0.082 ***	-0.006	-0.001	0.009
Squared work experience	0.001 ***	0.002 ***	0.000	0.000	0.000
Tenure	-0.006	0.001	-0.018	0.003	-0.015 **
Men	-0.001	-0.037	0.562 *	0.033	0.010
North-East	0.034	0.553 ***	-0.103	-0.063	-0.245
North-West	-0.044	0.267	0.277	-0.064	-0.175
Central regions	-0.220 *	0.841 **	0.082	-0.438 ***	-0.124
Unmarried people	0.058	-0.182	0.094	0.069	0.140
Divorced/widowed	-0.290 ***	-0.333 **	-0.386	-0.165	-0.164
Part-time contracts	-0.033	-0.221	-0.201	0.115	-0.244
Manager	0.398 ***	0.348	0.722 *	0.289 **	0.414 ***
Assistance and guardianship services	0.099 *	-0.055	0.256	0.169 **	0.052
CARE2	0.111	0.289 *	0.401	0.091	-0.227
Nursing / Rehabilitation	0.050	0.051	0.346	0.179	-0.424
Social Assistance operator	-0.104	-0.171	0.184	0.011	-0.042
Educator, teacher	0.155 **	0.246 *	0.036	0.111	-0.106
Social Therapist	-0.044	0.432	0.564	-0.109	-0.516 **
Training and work contracts	-0.070	0.537	-0.610	-0.071	-0.969
Temporary contract	0.077	0.279 **	-0.076	-0.333 ***	0.355
Professional occasional worker	0.386 ***	0.749 ***	-0.038	0.474 ***	0.207
Contract based on union agreements	0.193 ***	0.266 **	-0.238	0.303 ***	0.166
Often going on strikes	-0.221 *	-0.076	-2.372 **	-0.746 **	-0.565
Private organisations	0.281 ***				
NPO1	0.539 ***				
NPO2	0.299 ***				
Adj-R^2	0.08	0.15	0.00	0.07	0.03
Number of observations	1946	570	175	805	396

*Note: *, **, *** denote significance levels of 10, l 5 and 1 per cent respectively.*
Source: Our elaborations.

Figure 1. Job satisfaction across organisations



Note: The range of variation of the answer was from 1 to 7. s1: overall job satisfaction; s2: satisfaction with personal and professional growth perspectives; s3: satisfaction with decisional and functional autonomy; s4: satisfaction with recognition of completed tasks; s5: satisfaction with job variety and creativity; s6: satisfaction with work conditions; s7: satisfaction with the usefulness of the contribution to the service; s8: satisfaction with wages received; s9: satisfaction with working hours); s10: satisfaction with achieved career advancements; s11: satisfaction with future career advancement opportunities; s12: satisfaction with job stability; s13: satisfaction with employee-employer relationships; s14: satisfaction with inter-employee relationships; s15: satisfaction with the relationship between paid and voluntary workers
Source: Own elaboration.