Puyvelde, Stijn Van; Jegers, Marc

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Heterogeneity and self-selection into nonprofit management

Stijn Van Puyvelde[*] and Marc Jegers[**]

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[*] *Corresponding author*. Vrije Universiteit Brussel, Department of Applied Economics, Pleinlaan 2, 1050 Brussels, Belgium
(Email: svpuyvel@vub.ac.be; vanpuyvelde@bwl.uni-mannheim.de).
[**] Vrije Universiteit Brussel, Department of Applied Economics, Pleinlaan 2, 1050 Brussels, Belgium (Email : mjegers@vub.ac.be).

Abstract

This paper presents a microeconomic model of self-selection into nonprofit management. First, we extend previous models by assuming that individuals are heterogeneous in multiple dimensions besides intrinsic motivation, including managerial ability, self-image concerns, and laziness at work. Second, we consider the public sector as an alternative to nonprofit sector employment, and assume that nonprofit, for-profit, and public sectors differ in the perceived level of red tape, and the potential levels of fixed pay and variable pay. We show that self-selection into nonprofit management is a complex process that depends on multiple factors, and formulate conditions that need to be fulfilled in order to have self-selection of heterogeneous individuals into nonprofit management. From this finding we derive a number of important avenues for future research.

Keywords: self-selection, managers, nonprofit, intrinsic motivation, wage differentials

JEL Codes: J31, L31

1. Introduction

Self-selection in the labor market refers to situations where utility-maximizing individuals self-select themselves into certain job positions (Heckman and Sedlacek, 1985; Goddeeris, 1988). In this paper, we focus on self-selection into managerial positions in the nonprofit sector. In contrast to for-profit firms, nonprofit organizations are subject to the nondistribution constraint, which prohibits the distribution of residual earnings to those in control of the organization, such as board members and donors (Hansmann, 1980). In markets characterized by asymmetric information, the nondistribution constraint acts as a signal of trustworthiness. For uninformed consumers, it indicates that the quality of service will not be compromised by the organization's pursuit of profit (Hansmann, 1980). For uninformed potential managers, it is a signal that they can work for a cause they care about without being exploited for the organization's financial gain (Rose-Ackerman, 1996; Ben-Ner et al., 2011).

According to the theoretical literature on self-selection into nonprofit sector employment, nonprofit organizations are assumed to attract managers who (1) have a strong commitment to the organization's mission (Handy and Katz, 1998), (2) want to produce high quality services (Hansmann, 1980), and (3) care relatively little about financial gain but relatively highly about putting their own ideals into practice (Rose-Ackerman, 1987: 812). Not surprisingly, intrinsic motivation plays a core role in these self-selection models. The main idea is that by offering lower wages, nonprofit organizations can generate positive self-selection among potential managers because of the utility implications of intrinsic motivation (see Handy and Katz (1998: 252-259) for a formal model). Besides the focus on intrinsic motivation, other aspects also have been analyzed in the literature, including (1) the public sector as an alternative to nonprofit sector employment, (2) the existence of heterogeneity for multiple work-related dimensions besides intrinsic motivation, and (3) the use of financial incentives to align the interests of managers with those of the owners. First, given that individuals may also self-select themselves into public management (Delfgaauw and Dur, 2010), a distinction should be made between three generic sectors of employment: the nonprofit sector, the for-profit sector, and the public sector. As such, one takes into account that governmental and nonprofit organizations are characterized by theoretical and behavioral differences that may explain an individual's choice between these two ownership types (Kapur and Weisbrod, 2000; Francois and Vlassopoulos, 2008; Feeney and Rainey, 2010; Ben-Ner et al., 2011; Chen, 2012). Second, besides differences in intrinsic motivation, managers may also be heterogeneous in other work-related dimensions. A number of economic models have considered the implications when managers differ in managerial ability (Handy and Katz, 1998; Delfgaauw and Dur, 2010), self-image concerns (Brekke and Nyborg, 2010), or laziness at work (Delfgaauw and Dur, 2008). Third, just as for-profit firms, public and nonprofit organizations may use financial incentives to align managerial interests with those of the organization (e.g. Roomkin and Weisbrod, 1999; Preyra and Pink, 2001; Brickley and Van Horn, 2002; Dixit, 2002; Ballou and Weisbrod, 2003; Dal Bo et al., 2013). However, when incorporating this idea into self-selection models, one needs to take into account the possibility that monetary rewards may undermine intrinsic motivation (Frey and Jegen, 2001; Bénabou and Tirole, 2003; Canton, 2005).

This paper presents a general microeconomic model of self-selection into nonprofit management. By integrating economic and psychological literature on work motivation, incentives, and managerial behavior in nonprofit, for-profit, and governmental organizations, we extend previous managerial self-selection models in multiple ways. As such, we believe that our model can be used as a framework for future research. For example, it may provide a basis for explaining nonprofit wage differentials or serve as a guideline for future research on sector choice by potential managers. The remainder of the paper is organized as follows. Section 2 discusses the theoretical foundations of the model. Section 3 outlines the model and describes self-selection into nonprofit management. Finally, Section 4 suggests some avenues for future research and Section 5 concludes.

2. Theoretical background

2.1. Heterogeneous individuals

Individuals can be heterogeneous in multiple dimensions. First, there may be heterogeneity in managerial ability. The underlying idea is that high-ability managers produce more output, obtain higher earnings, and attain higher utility (Rosen, 1982; Handy and Katz, 1998). Only a few self-selection models have considered heterogeneity in managerial ability among job applicants (Handy and Katz, 1998; Delfgaauw and Dur, 2010). However, given differences in stakeholder accountability, revenue structure, and organizational objectives, it is unlikely that management positions in each sector require the exact same set of management skills. Tschirhart et al. (2008) investigate the choice of sector of employment by MPA (Master of Public Administration) and MBA (Master of Business Administration) graduates. They take into account differences in perceived competence to work in each sector and find that (1) individuals with MPAs report greater perceived competence to work in the government than those with MBAs, and (2) perceived competence in a sector predicts the desire to work in that sector. Consequently, in line with Tschirhart et al. (2008), we take into account that individuals' managerial ability may vary across sectors, thereby influencing their choice of sector of employment.

As in Bénabou and Tirole (2006), we make a distinction between three types of motivation: extrinsic, intrinsic, and reputational. Extrinsic motivation stems from 'the standard pecuniary or other material rewards that an individual may receive from outside' (Francois and Vlassopoulos, 2008: 23). Chetkovich (2003) finds that financial rewards and job security are the most frequently reported reasons for sector choice among graduate students favoring the for-profit sector. Tschirhart et al. (2008) find that the greater the importance an individual places on having a career that allows him or her to earn a high salary, the less likely an individual will desire a job in the nonprofit sector, and the more likely an individual will desire a job in the for-profit sector. Furthermore, LeRoux and Feeney (2013) show that managers who anticipate financial bonuses or pay increases are more likely to work in the for-profit sector than in the public or the nonprofit sector.

Intrinsic motivation means that an individual 'performs an activity for no apparent reward except the activity itself' (Deci, 1972: 113). Chetkovich (2003) reports that 'serving the public' and 'making a difference' are the most commonly mentioned reasons for sector choice among public- and nonprofit-oriented graduate students. Tschirhart et al. (2008) find a statistically significant positive relationship between the importance placed on having a career that allows one to help others and the desire for nonprofit and public employment. Different conceptualizations of intrinsic motivation are possible (Rose-Ackerman, 1996; Francois and Vlassopoulos, 2008). First, intrinsic motivation can be modeled as pure or output-oriented altruism. In this case, individuals have a concern for the level of output of the organization they work for (Francois, 2007; Ghatak and Mueller, 2011). Second, intrinsic motivation can also be modeled as impure or action-oriented altruism. This means that individuals intrinsically value their personal contribution to the organization's output, and receive a 'warm glow' from exerting effort at work (Andreoni, 1990; Besley and Ghatak, 2005; Delfgaauw and Dur, 2007). Third, intrinsic motivation can also be independent of output and effort. In this case, intrinsic motivation can be modeled as a non-monetary benefit of being employed in the public or nonprofit sector (Handy and Katz, 1998, Delfgaauw and Dur, 2010). Throughout the paper we assume that intrinsic utility is generated by providing effort. As noted by Francois and Vlassopoulos (2008), the advantage of using this form of altruism in modeling manager selection is that no free-riding problem arises, as individuals' intrinsic rewards depend exclusively on their own contribution to the output of the organization.

Individuals may also obtain a reputational return from being employed in the public, nonprofit, or for-profit sector. This stems from the idea that individuals care about their self-image, want to be respected by others, and differ in their need for prestige, status, and social recognition (Wittmer, 1991; Bénabou and Tirole, 2006; Caers et al., 2009; Van Puyvelde et al., 2016). We assume that individuals are heterogeneous in their self-image. The concept of self-image captures how people feel and think about themselves (Akerlof and Kranton, 2005). Consequently, in economic models, individuals' self-image typically describes their gains and losses in utility generated by behavior that conforms to the norms for particular social categories of people (Akerlof and Kranton, 2005). Although self-image is a well-known determinant of human behavior in social psychology, only a few authors have included this concept in their economic models of work motivation (Brekke et al., 2003; Akerlof and Kranton, 2005; Bénabou and Tirole, 2006; Brekke and Nyborg, 2010). In line with Brekke and Nyborg (2010), we take into account that individuals have a preference for regarding themselves as a manager who is important to others, and that this preference may differ across for-profit, public, and nonprofit sectors.

Finally, as in Delfgaauw and Dur (2008), we also consider heterogeneity in individuals' laziness. Heterogeneity in laziness at work typically stems from differences in work ethic and differences in work morale, and can be associated with individual differences in personality traits (Delfgaauw and Dur, 2008). In psychology, the most prevalent taxonomy of individual differences is the five-factor model of personality structure, commonly known as the 'Big Five': agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience. Psychological research has shown that of these five factors, conscientiousness is the one that is consistently positively related with work-related behavior in all job types (Fong and Tosi, 2007; Furnham, 2008). Conscientiousness refers to 'the extent to which someone is achievement oriented, dependable, persevering, hardworking, and deliberate' (Fong and Tosi, 2007, p. 165). It plays an important role in both the level of effort provided by an individual and the level of performance attained by this individual.

Individuals who are low in conscientiousness are typically seen as lazy, careless, not-well organized, and nonproductive (Hogan and Ones, 1997; Caplan, 2003). Consequently, a lack of conscientiousness can be a major problem in the workplace. We assume that people with a higher degree of laziness will be more eager to shirk than others, for example by showing up late, taking their time, and spending their effort on non-work projects (Caplan, 2003). Therefore, as in Delfgaauw and Dur (2008), we assume that managers with a higher degree of laziness will incur a greater cost of effort than their colleagues.

2.2. Heterogeneous sectors

Separating ownership from control gives rise to agency problems in organizations (Fama and Jensen, 1983). Owners (principals) and managers (agents) of an organization can have different interests, and asymmetric information and potential opportunistic behavior by agents make it difficult or expensive for principals to verify the agents' actions (Eisenhardt, 1989). One way to alleviate agency problems and align the interests of managers and owners is the use of financial incentives. Some authors have compared the use of financial incentives in nonprofit, for-profit, and governmental organizations (Roomkin and Weisbrod, 1999; Preyra and Pink, 2001; Ballou and Weisbrod, 2003). Their results show that managerial wages in for-profit firms are characterized by a larger amount of bonus pay than wages in nonprofit and governmental organizations. However, a drawback of monetary reward systems is that they may undermine intrinsic motivation (Frey and Jegen, 2001). Some authors have recognized the importance of motivational crowding out in their microeconomic models of incentives and work motivation (Bénabou and Tirole, 2003; Canton, 2005). In line with the aforementioned studies, we take into account (1) the existence of sectoral differences in fixed pay and variable pay, and (2) the different effects of variable pay on managerial effort.

In addition, compared to for-profit and nonprofit organizations, public institutions are generally characterized by higher levels of bureaucratization and red tape (Rainey et al., 1995; Boyne, 2002; Feeney and Rainey, 2010; Chen, 2012). Bureaucratization denotes the enforcement of formal but inflexible procedures, protocols, and regulations for decision making that contribute to the centralization of power in an organizational hierarchy (Wilson, 2000). Formal but pointless rules are often referred to as red tape (Bozeman, 2000). More specifically, Bozeman and Scott (1996: 8) define red tape as 'organizational rules, regulations, and procedures that serve no appreciable social or organizational function but nonetheless remain in force and result in inefficiency, unnecessary delays, frustration, and vexation'. Higher levels of red tape have been associated with negative work attitudes (Chen, 2012) and a higher degree of managerial alienation (DeHart-Davis and Pandey, 2005). Furthermore, individuals' motivations for selecting a job as public or nonprofit manager may be related to their perceptions of red tape and job discretion in these sectors (Feeney and Rainey, 2010; LeRoux and Feeney, 2013). Consequently, we assume that (1) red tape increases the cost of effort, and (2) perceptions of the sectoral level of red tape influence the choice of sector employment.

Finally, behavioral differences between public and nonprofit providers are not always clearly emphasized (Francois and Vlassopoulos, 2008). Although some economic models of intrinsically motivated managers can be applied to both public and nonprofit organizations (Besley and Ghatak, 2005; Delfgaauw and Dur, 2007; Francois, 2007; Delfgaauw and Dur, 2010), there may be a number of reasons why public and nonprofit providers behave differently. First, as suggested by Francois and Vlassopoulos (2008) and Ben-Ner et al. (2011), differences in accountability may explain behavioral differences between public and nonprofit organizations. While government bureaucrats answer to elected politicians, managers of nonprofit organizations are accountable to a (mostly voluntary) board of directors, which may consist of donors of their organization. Second, public and nonprofit organizations may also have different objective functions (Kapur and Weisbrod, 2000). Some nonprofit organizations emerge in the economy to correct government failures in collective goods markets with demand heterogeneity (Weisbrod, 1975). In this case, public firms often provide collective goods only at the level that satisfies the median voter, while nonprofit organizations attempt to meet the residual unsatisfied demand for these goods. Lee and Wilkins (2011), however, find that managers who value the ability to serve the public and public interests are less likely to work in the nonprofit sector than in the public sector. Consequently, they argue that although the motivation behind nonprofit employment may overlap with several dimensions of public service motivation (for example, the provision of public goods), the intrinsic motivation of public and nonprofit managers is not identical. The treatment of intrinsic motivation in our self-selection model is closely related to this observation made by Lee and Wilkins (2011). More specifically, we assume that individuals may have a different intrinsic preference for working in the nonprofit, public, and for-profit sector due to sectoral differences in organizational accountability and organizational objectives.

3. The model

Consider an economy in which production takes place in three sectors $s \in [f, g, n]$: the for-profit sector (f), the public sector (g), and the nonprofit sector (n). In these three sectors, production takes place in organizations. We consider a moral hazard setting in which effort is not observable. However, the manager's output is observable, and organizations may use output-based pay to ensure managerial compliance. We assume that individuals have a choice between being employed as a manager in a for-profit, nonprofit, or governmental organization. In addition, individuals can decide to remain unemployed or opt for a non-managerial job position. In this case, they obtain the outside option utility $U_O > 0$. Consequently, individuals will choose to be employed as a manager as long as the utility that they obtain from this job is at least as high as their outside option utility.

We consider a continuum of individuals who are risk-neutral and heterogeneous in four dimensions. First, they differ in managerial ability $\alpha^s \in [0, \bar{\alpha}]$. We argue that (1) managerial ability is required to generate output, (2) individuals with a higher managerial ability are more effective managers, and (3) managerial ability of an individual may be different for each sector. Second, individuals are heterogeneous in their intrinsic motivation: $\gamma^s \in [0, \bar{\gamma}]$. As nonprofit and governmental organizations are often characterized by differences in accountability and differences in objective functions, we thereby incorporate the possibility that individuals may have a different intrinsic preference for working in these sectors. Third, we assume that individuals may have a preference for regarding themselves as a manager who is important to others, and that this preference may differ across sectors: $\lambda^s \in \left[0, \bar{\lambda}\right]$. Finally, we assume that individuals are also heterogeneous in their laziness at work: $\theta \in [0, \bar{\theta}]$. We assume that managers with a higher degree of laziness will be more eager to shirk than others, and therefore will incur a greater cost of effort than their colleagues. In other words, differences in work ethic, work moral, and conscientiousness are not directly modeled, but captured in the dimension 'laziness at work'. The reason behind this is that this dimension is related to the cost of effort, and consequently also to shirking behavior and agency problems in organizations. As such, the utility function of being employed as a manager in sector s is given by:

$$U^s = q_1 U_E^s + q_2 U_I^s + q_3 U_R^s - C^s \tag{1}$$

where U_E^s is the extrinsic utility from working in sector s, U_I^s is the intrinsic utility from working in sector s, U_R^s is the reputational utility from working in sector s, and C^s is the cost of effort in sector s. q_1, q_2, and q_3 are parameters denoting the relative importance of the components in the utility function $(q_1 + q_2 + q_3 = 1)$. The extrinsic utility component refers to the individual's potential earnings. A distinction can be made between potential fixed pay (base pay) and potential variable pay (output-based pay). The output X^s produced by a manager in sector s is a function of his/her effort e^s and managerial ability α^s: $X^s = \alpha^s e^s$. Consequently, the extrinsic utility component of a manager in sector s can be written as:

$$U_E^s = w_B^s + \ w_X^s \, X^s = w_B^s + w_X^s \, \alpha^s e^s \tag{2}$$

where $w_B^s > 0$ is the potential base pay in sector s and $w_X^s \geq 0$ is the potential output-based pay in sector s. In addition, we assume that the intrinsic utility component is given by:

$$U_I^s = \frac{\gamma^s e^s}{(1+w_X^s)} \tag{3}$$

As such, we take into account that incentive-based monetary rewards crowd out intrinsic motivation. The remaining utility component, reputational utility, depends on the individual's self-image concerns and his/her produced output:

$$U_R^s = \lambda^s X^s = \lambda^s \alpha^s e^s \tag{4}$$

The underlying idea is that the more output the manager generates, the more important he/she is for others working in the organization. Finally, individuals also derive disutility from exerting effort. We assume, as usual, that the cost of effort is increasing and convex, and posit that this cost will be influenced by the degree of laziness for exerting effort (θ), and the perceived level of red tape in sector s (r^s):

$$C^s = (1+\theta)(1+r^s)\frac{(e^s)^2}{2} \tag{5}$$

Consequently, the utility function for being a manager in sector *s* is given by:

$$U^s = q_1 w_B^s + q_1 w_X^s \alpha^s e^s + q_2 \frac{\gamma^s e^s}{(1+w_X^s)} + q_3 \lambda^s \alpha^s e^s - (1+\theta)(1+r^s)\frac{(e^s)^2}{2} \tag{6}$$

Maximizing this utility function with respect to effort (e^s) gives us the optimal level of effort for a manager in the for-profit, public, and the nonprofit sector:

$$e^{*s} = \frac{\left[q_1 w_x^s \alpha^s + q_2 \dfrac{\gamma^s}{(1+w_x^s)} + q_3 \lambda^s \alpha^s\right]}{(1+\theta)(1+r^s)} \tag{7}$$

As such, the following lemma can be formulated:

Lemma 1. *(1) Optimal effort increases in managerial ability, all else equal. (2) Optimal effort increases in individuals' intrinsic* motivation, *all else equal. (3) Optimal effort increases in individuals' self*-image concerns, *all else equal. (4) Optimal effort decreases in laziness at work, all else equal. (5) Optimal effort decreases with the level of red tape, all else equal. (6) Optimal effort increases with output-based pay, all else equal, but this effect is reduced by the crowding out of intrinsic motivation.*

By substituting the optimal effort level (Eq. 7) in the utility function (Eq. 6), we obtain individuals' maximum utilities from being employed in the for-profit, public, and the nonprofit sector (see Appendix 1):

$$U^s(e^{*s}) = q_1 w_B^s + \frac{\left[q_1 w_x^s \alpha^s + q_2 \dfrac{\gamma^s}{(1+w_x^s)} + q_3 \lambda^s \alpha^s\right]^2}{2(1+\theta)(1+r^s)} \tag{8}$$

We assume that individuals choose between a job as manager in the for-profit, public, and the nonprofit sector. Consequently, they will prefer a job as nonprofit manager if the maximum utility that they can obtain from this job is higher than the maximum utility level that can be obtained from becoming a for-profit or a public manager:

$U^n(e^{*n}) > U^f\left(e^{*f}\right)$

$$\Leftrightarrow q_1 w_B^n + \frac{\left[q_1 w_x^n \alpha^n + q_2 \frac{\gamma^n}{(1+w_x^n)} + q_3 \lambda^n \alpha^n\right]^2}{2(1+\theta)(1+r^n)} > q_1 w_B^f + \frac{\left[q_1 w_x^f \alpha^f + q_2 \frac{\gamma^f}{\left(1+w_x^f\right)} + q_3 \lambda^f \alpha^f\right]^2}{2(1+\theta)(1+r^f)} \tag{9}$$

$U^n(e^{*n}) > U^g(e^{*g})$

$$\Leftrightarrow q_1 w_B^n + \frac{\left[q_1 w_x^n \alpha^n + q_2 \frac{\gamma^n}{(1+w_x^n)} + q_3 \lambda^n \alpha^n\right]^2}{2(1+\theta)(1+r^n)} > q_1 w_B^g + \frac{\left[q_1 w_x^g \alpha^g + q_2 \frac{\gamma^g}{\left(1+w_x^g\right)} + q_3 \lambda^g \alpha^g\right]^2}{2(1+\theta)(1+r^g)} \tag{10}$$

Handy and Katz (1998) show that lower wages in the nonprofit sector attract managers who are more committed to the cause of the nonprofit. In other words, they assume positive self-selection among potential managers in terms of intrinsic motivation. We argue, however, that self-selection of intrinsically motivated individuals into nonprofit management is not that straightforward. More specifically, in order for individuals to self-select themselves into nonprofit management, two conditions need to be fulfilled simultaneously.

Proposition 1. *Individuals will strictly prefer a job as nonprofit manager if:*

$$\begin{cases} \frac{\left[q_1 w_x^n \alpha^n + q_2 \frac{\gamma^n}{(1+w_x^n)} + q_3 \lambda^n \alpha^n\right]^2}{2(1+\theta)(1+r^n)} - \frac{\left[q_1 w_x^f \alpha^f + q_2 \frac{\gamma^f}{\left(1+w_x^f\right)} + q_3 \lambda^f \alpha^f\right]^2}{2(1+\theta)(1+r^f)} > q_1\left(w_B^f - w_B^n\right) \\ \frac{\left[q_1 w_x^n \alpha^n + q_2 \frac{\gamma^n}{(1+w_x^n)} + q_3 \lambda^n \alpha^n\right]^2}{2(1+\theta)(1+r^n)} - \frac{\left[q_1 w_x^g \alpha^g + q_2 \frac{\gamma^g}{\left(1+w_x^g\right)} + q_3 \lambda^g \alpha^g\right]^2}{2(1+\theta)(1+r^g)} > q_1\left(w_B^g - w_B^n\right) \end{cases}$$

However, as can be seen from this proposition, the conditions depend on a number of factors besides intrinsic motivation, including managerial ability, self-image concerns, laziness at work, the perceived level of red tape in each sector, and the potential levels of base pay and output-based pay in each sector. Furthermore, the parameters reflecting the relative importance attached to each utility component also influence the choice of sector of employment. In sum, in contrast to previous models, we emphasize that self-selection into nonprofit management is a complex process that depends on multiple factors.

4. Avenues for future research

Our model shows that self-selection of heterogeneous individuals into nonprofit management is a complex process: lower wages in the nonprofit sector do not necessarily guarantee that highly intrinsically motivated individuals will self-select themselves into nonprofit management. From this finding, we derive three important avenues for future research: (1) self-selection and nonprofit wage differentials, (2) self-selection and agency problems in nonprofit organizations, and (3) factors affecting sector choice by potential managers.

4.1. Self-selection and nonprofit wage differentials

Empirical studies on managerial pay across organizational forms within the same industry generally find that nonprofit managers earn less than their for-profit counterparts (Preston, 1989; Roomkin and Weisbrod, 1999; Preyra and Pink, 2001; Ballou and Weisbrod, 2003; Preston and Sacks, 2010; Narcy, 2011). Handy and Katz (1998) suggest that this may reflect nonprofit organizations' successful policy of attracting committed individuals. However, when making a distinction between fixed pay and bonus pay, another image occurs. Ballou and Weisbrod (2003), for example, compare managerial wages in the U.S. hospital industry and find that (1) mean base salaries are the highest in the nonprofit sector, lower in the public sector, and the lowest in the for-profit sector, (2) bonuses are the largest in the for-profit sector, much lower among nonprofits, and the lowest among governmental hospitals, and (3) bonus eligibility differs strongly across organizational forms, ranging from 85% in for-profit hospitals to 67% in secular nonprofit hospitals, 43% in religious nonprofit hospitals, and only 28% in governmental hospitals. Taking these findings into account, we argue that in order to investigate nonprofit wage differentials, researchers should make a clear distinction between fixed pay and bonus pay. Given that our self-selection model acknowledges this distinction, and analyzes the effect of both types of pay on the choice of sector of employment, we believe that it provides a useful basis for future research on wage strategies as a tool to induce self-selection of individuals into nonprofit management.

4.2. Self-selection and agency problems in nonprofit organizations

Unlike for-profit firms, nonprofit organizations do not have shareholders who (1) are legally entitled to residual claims and (2) have financial incentives to control their agents (Brickley and Van Horn, 2002; Ben-Ner et al., 2011; Van Puyvelde et al., 2012). In addition, given the complex objectives and hard-to-observe outputs of most nonprofit organizations, owners may experience difficulties in finding effective performance criteria that can serve as a basis for managerial remuneration schemes (Brickley and Van Horn, 2002; Jegers, 2009; Van Puyvelde et al., 2012). Consequently, just as in for-profit firms, agency problems may also be present in nonprofit organizations (Du Bois et al., 2009; Van Puyvelde et al., 2016). Handy and Katz (1998) suggest that lower wages generate positive self-selection among potential nonprofit managers in terms of intrinsic motivation. As such, agency problems between owners and managers may be largely resolved. We argue, however, that self-selection into nonprofit management depends on multiple factors besides intrinsic motivation, including managerial ability, self-image concerns, laziness at work, the perceived level of red tape in each sector, and the potential levels of fixed pay and variable pay in each sector. Consequently, lower wages in the nonprofit sector do not necessarily guarantee that highly intrinsically motivated individuals will self-select themselves into nonprofit management. We argue that empirical research should therefore investigate more closely the simultaneous effect of wages, job preferences, and individual characteristics on the choice of sector of employment, for example by using a random utility model (e.g. Van Puyvelde et al., 2015).

4.3. Factors affecting sector choice by potential managers

Although empirical research on work motivation in for-profit, nonprofit, and governmental organizations is quite extensive, only a few authors have investigated factors that influence self-selection into nonprofit sector employment (Rawls et al., 1975; Chetkovich, 2003; Tschirhart et al., 2008; Lee and Wilkins, 2011; LeRoux and Feeney, 2013). An important difference between these studies is the composition of their sample. While some authors have looked at sector choice by graduate and undergraduate students (Rawls et al., 1975; Chetkovich, 2003; Tschirhart et al., 2008), others have investigated which factors account for a manager's decision to work in the for-profit, nonprofit or the public sector (Lee and Wilkins, 2011; LeRoux and Feeney, 2013). We believe that our model (1) provides a microeconomic theoretical underpinning for these studies, and (2) may serve as a guideline for future research on sector choice by potential managers.

However, when exploring factors that account for a manager's choice of sector of employment, it is necessary to consider two important caveats, namely (1) assumptions of causality embedded in the research design, and (2) the interdependency of the variables used in the study (Willems, 2014). First, as there may be socialization and self-selection of managers in nonprofit, for-profit, and governmental organizations, it is difficult to attribute causality to the relationship between managers' personal values and organizational ownership type (Becker and Connor, 2005). Factors that predict the choice of sector employment, such as performance pay, job discretion, job security, and job flexibility, may also be outcomes of choices already made to work and be a manager in one of the sectors (Willems, 2014). Second, when conducting logistic regression analyses with multiple independent variables to predict the sector of employment, methodological issues may arise because some work-related variables may be predicted by a linear combination of the other independent variables (Cortina, 1993). Consequently, following Willems (2014), we argue that future research should (1) make a stronger distinction between antecedents and effects of being a manager in the nonprofit, for-profit, and the public sector, and (2) acknowledge the relatedness of crucial job-related variables such as performance pay, work satisfaction, job flexibility, job security, and promotion opportunities in order to avoid over-interpretation of seemingly distinct effects. In addition, future research may also (1) relax the risk-neutrality assumption (Buurman et al., 2012), (2) consider heterogeneity in other work-related dimensions (Word and Park, 2015), or (3) investigate self-selection into non-managerial job positions (Mosca et al., 2007).

5. Conclusion

This paper presented a more general microeconomic model of self-selection into nonprofit management than currently available in the literature. Besides taking into account heterogeneity in intrinsic motivation, managerial ability, self-image concerns, and laziness at work, we also considered for each sector the perceived level of red tape, and the potential levels of fixed pay and variable pay. We showed that self-selection into nonprofit management is a complex process, and formulated two conditions that needed to be fulfilled simultaneously in order to have self-selection of heterogeneous individuals into nonprofit management. Based on this finding, we suggested three important avenues for future research: (1) self-selection and nonprofit wage differentials, (2) self-selection and agency problems in nonprofit organizations, and (3) factors affecting sector choice by potential managers.

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Appendix 1: Utility levels in case of optimal effort

The utility function of a manager in sector *s* (Eq. 6) can be rewritten as:

$$U^s(e^{*s}) = q_1 w_B^s + \left(q_1 w_x^s \alpha^s + q_2 \frac{\gamma^s}{(1+w_x^s)} + q_3 \lambda^s \alpha^s\right) \tilde{e}^s - (1+\theta)(1+r^s)\frac{(\tilde{e}^s)^2}{2}$$

By substituting the optimal effort level (Eq. 7) into this equation we obtain:

$$U^s(e^{*s}) = q_1 w_B^s + \left(q_1 w_x^s \alpha^s + q_2 \frac{\gamma^s}{(1+w_x^s)} + q_3 \lambda^s \alpha^s\right) \frac{\left[q_1 w_x^s \alpha^s + q_2 \frac{\gamma^s}{(1+w_x^s)} + q_3 \lambda^s \alpha^s\right]}{(1+\theta)(1+r^s)}$$

$$- \frac{\left[q_1 w_x^s \alpha^s + q_2 \frac{\gamma^s}{(1+w_x^s)} + q_3 \lambda^s \alpha^s\right]^2}{2(1+\theta)(1+r^s)}$$

$$\Leftrightarrow U^s(e^{*s}) = q_1 w_B^s + \frac{\left[q_1 w_x^s \alpha^s + q_2 \frac{\gamma^s}{(1+w_x^s)} + q_3 \lambda^s \alpha^s\right]^2}{2(1+\theta)(1+r^s)}$$

which is the utility level of a manager when he/she provides the optimal effort level in sector *s*.

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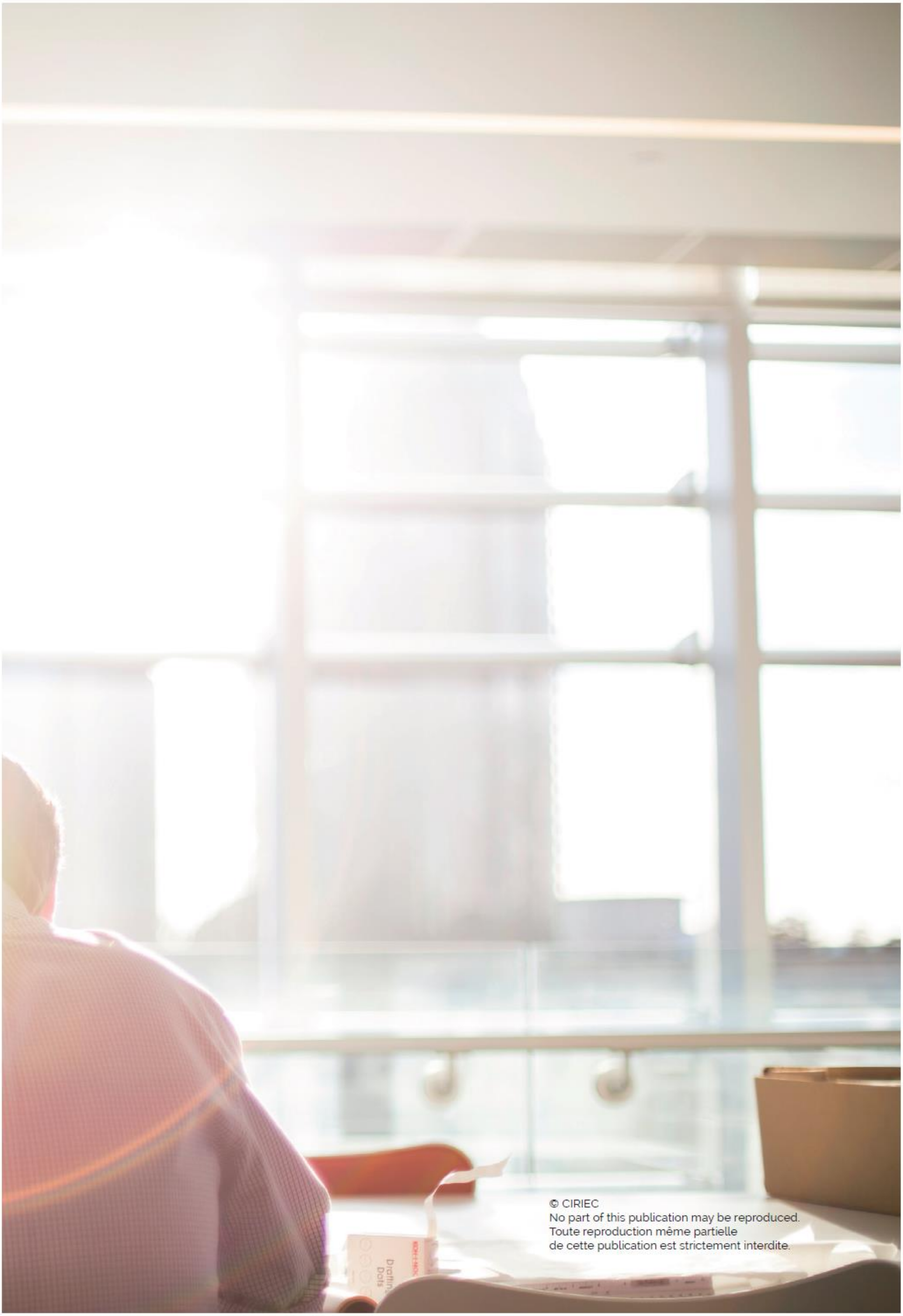

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Université de Liège | Quartier Agora | Place des Orateurs 1 | Bâtiment B33 - boîte 6 | BE-4000 Liège (Belgium) | T +32 (0)4 366 27 46 | F +32 (0)4 366 29 58
ciriec@ulg.ac.be | www.ciriec.ulg.ac.be