COMPENSATION IN NONPROFIT ORGANIZATIONS

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ABSTRACT

Although the nonprofit sector is enormous, we know little about how workers there are compensated. This may be due, in part, to the fact that the literature is scattered across many fields including Human Resources Management, Accounting, Economics, Finance, Organizational Behavior, Political Science, and Sociology. The paper aims to synthesize the research on nonprofits from an economics point of view, while carefully considering the work in the many other areas. In addition to using data from the U.S. census to provide a description of employment and wages in the nonprofit sector as well as a comparison with the for-profit sector, this paper describes institutional details in nonprofits, considers why organizations form as nonprofits, reviews possible theories for a for-profit / nonprofit wage gap, performance pay in nonprofits, management compensation in nonprofits, gender issues, and international research.
INTRODUCTION

Although the number of people participating in the nonprofit sector is enormous, very little attention has been paid to the compensation of nonprofit employees. This paper aims to fill this gap by presenting a simple description of the employees in the nonprofit sector by making comparisons between the employees and compensation in the nonprofit sector relative to the for-profit sector. In addition, the paper examines the literature in a broad set of disciplines and considers possible theoretical reasons for differences in pay.

The paper draws on the literature in human resource management, finance, accounting, sociology, economics, organizational behavior and political science, but a substantial emphasis is put on the literature from economics. The second section begins with a description of the nonprofit sector in general, a discussion of an industry classification system for nonprofits called the National Taxonomy of Exempt Entities (NTEE), and a description of the “nondistribution constraint” (Hansmann, 1980). The nondistribution constraint suggests that nonprofits may actually make profits but just cannot distribute them to those who are in charge of the organization. The third section describes why some organizations are formed as nonprofits, why others are for-profits and why this may be efficient. This section also documents a trend in the economy where nonprofit and for-profit organizations are combining forces, and where many nonprofits are giving up their tax-exempt status to become for-profit firms.

The direct discussion of compensation happens in the section that describes the leading explanations for pay differences between for-profit and nonprofit firms. These include: labor donations (workers in nonprofits are effectively making donations to their
organizations in the form of lower wages), compensating differentials (workers in nonprofits accept lower wages in exchange for better working conditions, more job flexibility etc.), and differences in returns to characteristics or selection (different kinds of workers choose to or must work in the nonprofit sector). The fifth section of the paper describes the relationship between pay and performance (particularly for managers) in nonprofits. This discussion includes theory, costs of paying for performance, benefits, and the problems in developing adequate performance measures. The sixth section briefly describes more than a dozen data sources for compensation of employees in nonprofits. Large, publicly available data are described as are unique sources developed by individual authors or teams of researchers. The next section describes data collected from the 1990 U.S. census and makes simple comparisons of for-profit and nonprofit workers and their compensation. Many other empirical studies are also summarized in this section.

There has been increased attention devoted to the compensation of managers in nonprofits, and this is the subject of the eighth section of the paper. This includes a discussion of the motivation for paying managers of nonprofits by different methods, and describes a variety of empirical studies on the subject including those using panel data. The important issues of gender and race are the subject of the ninth section. Although women easily outnumber men in the nonprofit sector, few women lead nonprofits and the unadjusted pay gaps are substantial. However, women lead much different kinds of nonprofits than men. The very few international studies on the issue of employment and pay in the nonprofit sector are examined next, and finally some suggestions for future research are provided along with some concluding remarks.
INSTITUTIONAL DETAILS

Before considering theoretical reasons for differences in pay between those employed in the for-profit and the nonprofit sectors, this section provides a brief outline of the nonprofit sector in general (Note 1). In this section, I define the nonprofit sector, explain simple details of the structure of the nonprofit sector, and begin an explanation of Hansmann’s (1980) “nondistribution constraint.” This constraint is central to organizations’ choice of the nonprofit form, as well as the pay gaps and issues of incentive compensation discussed at length below. I also include a discussion of the newly developed classification system called the National Taxonomy of Exempt Entities (NTEE).

Defining the Nonprofit Sector

Defining the nonprofit sector is not as simple as we might imagine. In fact, even settling on a simple set of terms for the sector can be difficult. Salamon and Anheier (1992a) described six different terms or phrases that all seem to have some important aspects related to the issues discussed below. First is the “charitable sector” which survives on support from donations. Second is the “independent sector” which is external from the government or the private sectors. Third, the “voluntary” sector is so termed because of the extensive use of volunteer labor. Fourth, the sector is often called the “tax-exempt” sector due to the fact that following certain conditions, organizations in this sector do not have to pay income taxes as for-profit organizations do. Fifth, some are called “non-governmental” organizations (NGOs) which are often social and developmental organizations but outside of the government. The final term described in Salamon and Anheier (1992a) is the “non-profit sector.” Organizations in the nonprofit sector can earn
profits but just cannot distribute them to those in charge of the organizations. Salamon and Anheier (1992a) described subtle differences between each of these (Note 2). Salamon (1992) suggested that there are “six defining characteristics of the nonprofit sector” (p. 6). He wrote that nonprofits must be: 1. formally constituted, 2. private, not governmental, 3. not created to generate profit for those in charge of the organization, 4. self-governing, 5. voluntary in some way, and 6. designed to serve the public purpose.

For most of the remainder of this work, I consider an organization to be a “nonprofit” if it adheres to the definition as outlined by the Internal Revenue Service (IRS). However, in most of the main discussion of the theoretical reasons for differences in compensation between for-profit firms and nonprofits, this definition need not be so strict. For an organization to become officially designated as a nonprofit in the United States, it must file forms with the IRS to apply for nonprofit status (Note 3). Officially designated nonprofit organizations do not have to pay tax. However, if they have more than $25,000 in annual net revenue, they must file IRS Form 990. Among the 28 possible groupings for nonprofits, by far the most frequently designated are 501c(3) “charitable and religious.” 501c(3)s are considered charitable because according to the IRS they serve “…broad public purposes include(ing) educational, religious, scientific, and literary activities, among others, as well as the relief of poverty and other public benefit actions.” In Table 1, it is clear that of the roughly 1 million nonprofit organizations in the U.S. in 1995, about 60% have the 501c(3) designation. Other major groups include social welfare organizations (501c(4)) of which there were about 139,000 in 1995, and fraternal and beneficiary societies (501c(8)) of which there were about 92,000 in 1995. 501c(3)s have
the added benefit that contributions made to the organization are tax deductible to the contributor. I make this distinction because the majority of all nonprofits are 501c(3)s but, again, the discussion throughout this paper easily applies to a wider variety of organizations.

Hansmann (1980) categorized nonprofits into four groups. Doing so helps to understand the missions and institutional detail of the sector in general. A much more detailed classification system, much like industry codes for firms, is described below. Hansmann (1980) suggested that nonprofits can be either “mutual,” that is controlled by patrons, or “entrepreneurial,” which are free from tight control by patrons. Nonprofits can also be categorized as “donative” if the majority of income comes from donations or “commercial” if the majority of income comes from charging for services. Hansmann (1980) also provided some well-known examples of nonprofits and placed them into each of four categories: 1) mutual and donative such as Common Cause, the National Audubon Society, and political groups, 2) mutual and commercial such as the American Automobile Association, Consumers Union, and Country Clubs, 3) entrepreneurial and donative such as CARE, March of Dimes, and Art Museums, and 4) entrepreneurial and commercial such as the National Geographic Society, The Educational Testing Service, and nursing homes.

The Nondistribution Constraint
After framing the nonprofit sector somewhat, I now focus on a central issue in nonprofits which appears frequently throughout the remainder of the paper, the “nondistribution constraint” (Hansmann, 1980). Hansmann (1980, 1996) pointed out that nonprofit organizations are free to make profits but what distinguishes them from for-profit organizations is that the profits may not be distributed to those with formal control over the organization. (see also the Taxpayer Bill of Rights II, 1996) It turns out that the “nondistribution constraint” is critically important to several issues below, including the choice of for-profit versus nonprofit form, and incentive compensation. Enforcement of the nondistribution constraint is difficult and is usually left in the jurisdiction of the Attorney General’s office of each state.

The NTEE Nonprofit “Industry” Classification System

Just as for-profit firms have an industry classification system, there is a system for categorizing nonprofits called the National Taxonomy of Exempt Entities (NTEE). Hodgkinson (1990) outlined an interesting history of the NTEE. In 1984, the Independent Sector and the National Center for Charitable Statistics began to develop a unique classification system for nonprofits. At that time, there were at least nine different classifications and none seemed satisfactory (Hodgkinson, 1990). Developing such a system will ultimately prove quite useful in trying to decide whether there is a nonprofit versus for-profit wage gap, and in trying to determine exactly what workers in the different sectors are doing with their time.

NTEE can be categorized in several ways. There are 26 “major groups” such as Arts, Culture and Humanities and Educational Institutions and Related Activities which
comprise the first part of the code (see left hand column of Table 2). The 26 major groups can be further generalized into 10 “major categories.” These categories are: 1) Arts Culture and Humanities, 2) Education, 3) Environment and Animals, 4) Health, 5) Human Services, 6) International and Foreign Affairs, 7) Public and Societal Benefit, 8) Religion Related, 9) Mutual/Membership Benefits, and 10) Unknown. Further groupings include 2 digits of sub-codes beneath each of the 26 major groups. The last part of the NTEE code is what is known as the “Common Code” and includes such classifications as Alliance Organizations, Management and Technical Assistance Services, and Public Education. There are a total of 645 unique sub-groupings in the NTEE. Stevensen et al. (1997), Gronbjerg (1994), Turner, Nygren, and Bowen (1992), and Hodgkinson and Toppe (1991) have provided many more details on the NTEE.

There have been several attempts to evaluate the NTEE as instituting such a classification system presents certain problems. For example, Turner et al. (1992) compared the NTEE classification system designations recorded on the IRS Business Master File to other sources for a group of organizations they believed to be in higher education and found a “surprisingly large number” (p. 73) which were not classified correctly (Note 4). Gronbjerg (1994) performed a related analysis for human service organizations in the Chicago area. She also found certain problems with the NTEE classification system but argued that efforts to fix the problems may have helped.

WHY NONPROFIT?: WHY NOT SOME OTHER INSTITUTIONAL FORM?
Although there are more than 1 million nonprofit organizations in the US today, most organizations are not nonprofits. This section discusses potential reasons why organizations choose to form in a particular way. Obviously, the emphasis is on why groups choose to form nonprofits, and the costs and benefits of doing so. This entire literature is based on the pioneering work of Hansmann (1980) and many others (Note 5). Hansmann (1996) provided a thorough up-to-date synopsis of the field. The first part of this major section aims to discuss the costs and benefits of the nonprofit form of organization. The second part focuses more narrowly on the issue of the increasing trend or stronger relationships between for-profits and nonprofits and the increasing “conversions” of nonprofit to for-profit status for many organizations, especially in healthcare.

Why are Some Organizations Nonprofits and Others Not?

Hansmann (1980) outlined several reasons why nonprofits arise. The first is that the buyer of an item and the recipient of the item are not the same person. He considers the case of food donations. If one donates food to a relief organization, he or she cannot tell whether the food actually makes it to its intended destination, say to the survivors of an earthquake. The problem is that it is nearly impossible for the one who donates the goods to monitor those working for the relief organization. If that relief organization is organized as a nonprofit, then, because of the “nondistribution constraint,” those in charge of the organization will be much less likely to abscond with the money. Recall that the nondistribution constraint does not ban the nonprofit organization from making profits per
se. However, the managers of the nonprofits are not allowed to benefit from those profits directly.

Nonprofits are also likely to arise in the case of public goods. A public good is not rival in consumption. The fact that one person enjoys the services of a public good does not preclude others from doing so at the same time (Rosen, 1988). Examples of public goods include radio broadcasts and lighthouses. Consider more carefully the case of public radio. Public radio is free to all and one person listening to his or her radio does not stop others from doing the same. Hansmann (1980) argued that public radio is likely organized as a nonprofit so that it can more effectively raise funds for programming. Because a given donor cannot monitor the use of funds donated to public radio, he or she is probably more willing to donate to an organization where it is clear that the incentives for absconding with the profits are lower.

Nonprofits are also more likely to appear in the case of museums and operas where there is considerable heterogeneity in the value individuals place on the performance or exhibit, and where the ratio of fixed to variable costs is extremely high (i.e. the cost of adding an additional audience member is extremely low relative to the cost of setting up an exhibit or performance). In this case, Hansmann (1980) suggested that nonprofits are more likely to form because of a type of what he calls “voluntary price discrimination.” In this case, ticket prices are actually set quite low, but those who value performances more will be willing to donate additional money to the museum or opera company just as in the case of public radio. If the organization is organized as a for-profit firm, then the high-valuation donors will be less likely to want to donate funds because of the worry that the
managers will be residual claimants on any profits. Hansmann (1980) argued that we are much less likely to see television station and sports teams organized as nonprofits because, although the marginal costs of adding an additional “seat” are small relative to the fixed costs of starting the production or organization, the costs can be spread over a much larger audience.

Another example of this type of situation is “implicit loans” in the higher education arena. This works precisely the same way as the implicit price discrimination. In this case, colleges set tuition costs low relative to the true costs of schooling. However, those students with particularly high valuation of their college’s services are free to voluntarily donate back some of the tuition money that they “borrowed” earlier. If universities were not organized as nonprofits with the nondistribution constraint, donors would be much less likely to give.

A final, and perhaps most striking example of choice of organizational form comes from organizations such as hospitals, nursing homes, and daycare centers. All three are similar but daycare centers are discussed here. Given that it is particularly difficult for a parent to monitor what goes on inside a daycare center, a parent might be more willing to place his or her child in a nonprofit daycare center than a for-profit one. This is also because of the nondistribution constraint. Because, in the case of the nonprofit daycare center, the managers are not the residual claimants (they cannot keep any excess profits), managers in nonprofit daycare centers may be less willing to cut corners on the quality of the food, for example. Arrow (1963) also pointed out that consumers may prefer hospitals
to be organized as nonprofits because of some preferences against the motive for profits in such organizations.

There have been some criticisms of Hansmann’s (1980) ideas about the nondistribution constraint and the reasons for certain types of organizational forms. For example, for it to be credible that families choose nonprofit nursing homes over otherwise identical for-profit nursing homes, it must be the case that people can tell which organizations are for-profit and which are not. Permut (1981) attempted to do this through a telephone survey of 225 households. The survey also “… asked if they felt that nonprofits were likely to be more trustworthy, fair, or personally concerned than a for-profit organization” (p. 1626). The survey also inquired about whether respondents would prefer to have an elderly relative in a nursing home or a child in a summer camp that was a nonprofit relative to a for-profit. The results were interesting. The survey found that more than half of the respondents could not tell whether five local nonprofits were nonprofit or not. Also 68% of respondents said that they did not care about the nonprofit status of the nursing home, and 58% did not care about the nonprofit status of the summer camp for children. While just suggestive, these results are interesting in light of Hansmann’s (1980) widely cited work.

Several papers subsequent to Hansmann (1980) have built upon his ideas from a theoretical economics point of view, including Easley and O’Hara (1983, 1986) and Glaeser and Shleifer (1998). Easley and O’Hara (1983) examined the solution to an optimal contracting problem. They demonstrated that the nonprofit form of organization may be preferred when there is a cost to observing output. It may in fact be optimal, not
just another form of organization. Glaeser and Shliefer (1998) described a case where perfectly self-interested entrepreneurs might choose nonprofit status for their business even though they are aware of the nondistribution constraint that may limit the profits they get from the organization. The main point is that the nonprofit signals to customers that there may be weakened incentives to maximize profits.

It is in the context of the nondistribution constraint and the choice of organizational form that pay differences between nonprofits and for-profits in general are discussed below. In particular, from the point of view of a consumer, even though the nonprofit form may seem most appropriate for certain services, “nonprofits may succeed in distributing some of their net earnings through inflated salaries, various perquisites granted to employees and other forms of excess payment” (Hansmann, 1980, p. 844). In addition, to the extent that managers and employees of nonprofits are motivated by personal financial concerns, employees of nonprofits may be less willing to work efficiently and quickly than those in for-profits.

The Trend Away from the Nonprofit Form Toward The For-Profit Form: Conversions

Obviously, nonprofits differ (Vladeck, 1988) and some are more profit-like than others. In fact, there is an increasing trend for either nonprofits to take on profit-making activities in the commercial sector, for alliances to be formed between nonprofit organizations and for-profit firms, and even for nonprofits to convert to for-profit status. Weisbrod (1998) provided a wide overview and Ryan (1999) described several cases of for-profit firms such as America Works, Maximus, Children’s Comprehensive Services, and Youth Services International which are beginning to manage social services.
There are a host of reasons for conversion from nonprofit to for-profit status offered by many authors. Among these concerns is the need to protect against drops in funding (Dees, 1998). Also, nonprofits choose to convert for other financial reasons (Cutler & Horowitz, 1998 discuss the case of hospitals). Schiff and Weisbrod (1993) examined the case that nonprofits may start commercial ventures to help support other nonprofit activities. Finally, Goddeeris and Weisbrod (1998) suggested that some nonprofits are making the switch to for-profit status because of changes in legal constraints, changes in market opportunities, and changes in managerial preferences.

Obviously, when nonprofits make the complete change to for-profit status, their exemption from income tax disappears (Note 6). This exemption from tax described earlier typically is not just from federal taxes but also from state and local taxes and from property taxes. In addition, even if nonprofits engage in commercial activities, those activities are exempt from tax so long as the activity is in some way related to the primary mission of the organization and the purpose for the exemption. However, if the business activity is unrelated to the primary mission of the nonprofit, the organization may be subject to Unrelated Business Income Tax (UBIT). Most authors seem to agree that nearly all income generated by nonprofits is tax exempt (Cordes & Weisbrod, 1998).

These switches away from total nonprofit status do not occur without difficulty. Consider the case of a nonprofit which remains nonprofit but develops some commercial ventures. Dees (1998) described difficulties that may arise for managers who have to deal with the fact that those working in the more philanthropic side of the organization may feel envy about the business side, especially when pay levels differ significantly. Also, Mirvis
and Hackett (1983) suggested that “In our view, the move to run government agencies and nonprofits ‘more like a business’ needs to be carefully considered. If not, they may lose their identities and employees’ motivation and satisfaction may actually suffer” (p. 11). A final difficulty is the consideration of what to do with the proceeds when nonprofits convert to for-profit status. Obviously, due to the nondistribution constraint, the managers of the nonprofit cannot profit from the conversion. Goddeeris and Weisbrod (1998) agreed that the proceeds from the sale of a nonprofit should revert back to the original mission of the nonprofit, but they described several examples where the manager of a nonprofit received large financial windfalls by buying nonprofits and converting them. They also reported that hospital conversions are now experiencing increased IRS scrutiny.

**THEORETICAL REASONS FOR DIFFERENCES IN PAY BETWEEN FOR-PROFITS AND NONPROFITS**

Much of the literature on pay in nonprofits concerns the perceived gap in pay between employees in nonprofits relative to those in for profit organizations. The section on empirical findings on the pay gap below more carefully examines the facts on differences in pay between those employed in the two sectors. It seems instructive, however, to first explore possible theoretical reasons for differences in compensation between the two sectors.

Of the many reasons discussed for differences in pay between the for-profit and nonprofit sectors, four seem to be most relevant. First, many have argued that those in nonprofits earn less because they are “donating wages” to the organizations for which they work (e.g., Preston, 1989). That is, employees are basically donating the difference
between what they would have earned in the for-profit sector and their actual wages in the nonprofit sector back to the nonprofit. The second main reason for differences in pay surrounds the well-known discussion of compensating wage differentials in economics. In this case, workers accept lower wages in the nonprofits in exchange for a host of pleasant amenities on their job, such as flexible hours, more stable job prospects, and a slower pace of work. The third reason is the well-known efficiency wage hypothesis where workers who are difficult to monitor are paid more and work harder so as to avoid losing their jobs and having to take new ones at the lower competitive wage. A fourth main reason for differences in pay for employees in nonprofits may be that their skills are more useful elsewhere, or that they are in general “less able.” These differences are extremely difficult to separate with most existing data sources (also discussed in another section below). The remainder of this section discusses each of these topics and several related ones such as the extreme case of a wage gap – the case of volunteering. Note that, although this section seems to be centered on the decision to work in the for-profit versus nonprofit sector, Burbridge (1994) pointed out that workers probably select an occupation first and then chose a sector in which to work.

Labor Donations

The idea of labor donations is easily seen in a paper by Preston (1989). In her example, workers are willing to trade lower wages for higher social benefits (Note 7). As part of her model workers’ utility is a function of their wage and of “social benefits” provided by the organization for which they work. For a given level of utility, organizations that provide society with greater benefits can pay given workers lower wages
Preston (1989) argued that the limiting case of this is complete labor donations whereby workers donate all of their time to an organization; that is, they volunteer.

There are several interesting implications of Preston’s (1989) ideas. As jobs are more likely to generate social benefits, there is a greater chance of a for-profit / nonprofit wage gap. Consider some ranking of jobs by the social benefit that they provide. An employee managing a nonprofit may actually help provide a great deal of social benefit relative to a for-profit employee. However, as one moves further away from the top of the hierarchy of the organization (e.g., custodians), occupations are less likely to have a nonprofit versus for-profit wage gap (Young, 1987). Preston (1989) provided some empirical support for this. A second interesting implication is that since managers are not constrained to keep wages low (i.e., as they would be by competition from a for-profit firm), they may push wages up because it is simply a pleasant and easy to do this (Note 9). On the other hand, the idea of social benefit provision and donation of wages suggests that wages are expected to be lower in nonprofits. Mirvis and Hackett (1983) reported that those in nonprofits “… are more likely to report that their work is more important to them than the money they earn” (p. 7) (Note 10). However, this could be rationalizing their situation.

A related example to labor donations is a study reported by Frank (1996). Reporting on a sample of 680 Cornell University graduates 9 months after graduation, Frank (1996) demonstrated that even conditional on gender, course mix while at Cornell, and GPA, there was still a very large wage gap between those who entered the nonprofit sector relative to those who went into for-profit organizations. Frank (1996) decided to
add a measure of “social responsibility” to each of the occupations to which the respondents belonged. The responsibility scale was created by asking others how they would rate certain occupations on a social responsibility scale from 1-7 (after standardizing stockbrokers received a –1.44 and teachers a 1.98). Frank (1996) found that salaries fell with increases in the social responsibility scale, even conditional on gender, courses, GPA, and sector (i.e., nonprofit, government, for-profit).

Obviously, the extreme case of labor donations is volunteering, and Menchik and Weisbrod (1987) developed two economic models of volunteering. The first model is based on consumption (i.e., people enjoy volunteering), and the other is based on experience (i.e., people view volunteering as a means to gain valuable experience that they may use later in the paid labor market). They demonstrated that both models imply that as wages increase, volunteering declines. Weisbrod (1988b) estimated that the number of volunteers in the U.S. is very large. He reported previously unpublished results from the Independent Sector that the number of full-time-equivalent volunteers over age 14 increased from 1974 to 1995 from 4.2 million to 6.7 million. Hodgkinson, Weitzman, Noga, Gorski, and Kirsch (1994) and Hodgkinson, Gorski, Noga, and Knauf (1995) reported on trends in household giving and volunteering, including trends in given sectors such as environmental, health, human services, religious organizations and youth development. Vladeck (1988) and James and Rose-Ackerman (1986) described the case where individuals may be willing to donate time to religious organizations. Steinberg (1990a) and Bilodeau and Slivinski (1996) also considered the case of volunteering.
A related explanation for differences in wages for those in the nonprofit sector versus the for-profit sector is related to screening and is carefully explained in the Appendix to Hansmann (1980). This theory is also related to the choice of organizational form as discussed above. Hansmann (1980) considered a model where there are only two types of individuals; those who are greedy (i.e., type “G” workers) and those who seek money and quality of service (i.e., type “C” workers). He further assumed that both types have similar opportunities for work; that is, they are of the same level of ability. Also consider Figure 1 whereby the vertical axis represents the level of quality of service in an organization and the horizontal axis the pay of a manager of the organization. Type G workers will only work for the market wage of $\hat{w}$ because type G workers gain no utility by the quality of service provided by their organization. Type C workers, on the other hand, have preference for providing good service and are willing to earn less while working for an organization that provides good service. Therefore, type C workers will work for less than $\hat{w}$ so long as the level of service is sufficiently high. In Figure 1, $U^c$ and $U^G$ are generally the wage and service levels that are necessary to get type C and G workers to work, respectively. Steinberg (1990a) also discussed that the downside of paying high wages to managers of nonprofits is that you may attract a particular type of worker that may not have interests in line with the organization.

For an organization to maintain a level of service $\tilde{Q}$, it must pay type C workers $\tilde{w}$ and, as always, pay type G workers $\hat{w}$. One way for consumers to be assured that
they are receiving service of quality $\tilde{Q}$ is for the organization to organize as a nonprofit. If an organization (e.g., a food relief organization as described earlier) organizes as a nonprofit, only type C workers will volunteer to work because the organizations can only pay $\tilde{w}$ which is less than $\hat{w}$. By virtue of being set up the way they are, nonprofits may be able to attract precisely the kinds of employees they want to attract.

Compensating Wage Differentials

A host of authors including Burbridge (1994), Glaeser and Shliefer (1998), Young (1984), James and Rose-Ackerman (1986), and Handy and Katz (1998) have suggested that one reason we may expect lower wages in nonprofits is because of the amenities associated with nonprofit jobs (Borjas, 1996) (Note 11). The typical case of compensating differentials is the one where workers are paid more when they must face higher risks of death. The higher pay is simply to compensate for the increased risk. Classic examples of equalizing difference are those of Rosen (1974, 1986). There are many suggestions that nonprofits provide amenities for their workers such as more pleasant work environments, greater job flexibility, more stable positions, and more control over the job.

Steinberg and Jacobs (1994) suggested that there is a much higher rate of turnover in nonprofit organizations than in for-profit organizations. They say that this represents a “problem” (p. 86) for the compensating differential explanation for lower wages in nonprofits. If it were the case that turnover were the only job characteristic to differ between the for-profit and nonprofit sectors, this problem would exist. However, given the other evidence on differences in jobs across the sectors, this is probably not the case.

Efficiency Wages
A theoretical reason why one might expect to see higher wages in nonprofits has to do with efficiency wages. In this case, workers who are difficult to monitor are paid more and work harder so as to avoid losing their job and having to take a new one at the lower competitive wage. Ito and Domian (1987) described the case of symphony orchestras which are nonprofit organizations where monitoring of workers is difficult and workers are paid high wages. Ito and Domian (1987) attributed the high wages to efficiency wages but don’t consider the potential (in this case) positive ability bias (Note 12).

Differences in Returns to Characteristics and Ability Bias

Clearly, labor donations and compensating wage differentials are interesting theoretical reasons for differences in pay between the for-profit and nonprofit sectors. However, these are sometimes “residual arguments” that serve as reasonable explanations for a gap that exists after certain careful attempts have been made to remove it. The idea here is to consider the simple case of selection bias. If an omitted variable (e.g., ability) is correlated with nonprofit status and with compensation, and if this measure of ability is not taken into account when estimating the relationship between wages and nonprofit status, the estimated effect of nonprofit status on wages will be biased. Using cross-sectional data, Heckman (1978) and Lee (1978) offered possible ways to consider these issues. Weisbrod (1983) discussed selection, in a paper described in detail below, but argued that the assumptions required to deal with the selection are strong. Goddeeris (1988), in a follow up to Weisbrod, considered selection and found it to be quite important.

Because one way to interpret the issue of ability bias in measuring the for-profit versus nonprofit wage gap is that the true difference simply lies in the fact that workers
with different unmeasured characteristics are more likely to choose to work in nonprofits, one way to deal with this issue is to collect data on individuals who switch from the nonprofit to the for-profit sector or vice versa. Preston (1989) also argued that one possibility for the gap is that women are more likely to work in nonprofits and that the gap may simply be a gender effect.

**PAY FOR PERFORMANCE IN NONPROFITS**

The concept of using measures of performance to compensate employees is not new. However, given the nondistribution constraint in nonprofits, performance pay in nonprofits has historically not been very significant. In fact, many have thought that it is not legally possible to pay employees in nonprofits based on performance. This is not the case (Note 13). Steinberg (1990b) noted that profits can be made and distributed to outside contractors or employees, but not to those in charge.

This section explains some basics of incentive pay generally (Note 14) and the increased use of incentive pay in nonprofits specifically. It also covers benefits and costs of such a systems for the organization and other workers and constituents. In addition, the concept of the difficulty of measuring performance in a nonprofit is discussed along with the associated problems that it might create for performance pay. Pynes (1997a, 1997b) discussed several forms of compensation in nonprofits including broadbanding, skill-based pay and pay for knowledge, merit pay, and gainsharing. Her book is a summary of human resources (HR) practices in nonprofits. This section deals exclusively with pay for performance (Note 15).

Increased Use of Pay and Performance in Nonprofit Organizations
Hansmann (1980) wrote that money given to a manager that varies with “... annual surplus achieved by the firm is likely to be viewed as a distribution of profits either by the state authorities charged with policing nonprofit corporations or by the Internal Revenue Service” (p. 900). However, there is now increased attention in the nonprofit sector on using monetary incentives to motivate nonprofit employees (Bailey & Risher, 1996). Abelson (1998) cited Stacey Palmer, the managing editor of *The Chronicle of Philanthropy*, as discussing the fact that nonprofits are becoming increasingly innovative in how they pay managers in order to attract and retain them. Casteuble (1997) reported on a survey on Association Executive Compensation and Benefits conducted by the American Society of Association Executives (association executives manage trade associations, individual membership societies, voluntary organizations, and other nonprofits). The survey suggested that many participating associations currently provide and will continue to provide incentive pay for top managers. In addition, Ernst and Young’s Not-for-Profit Business Services group conducted a survey of 250 nonprofits in the New York area and found that 16% had some sort of incentive pay in 1990 (Note 16). However, Elaine Allen, the National Director for Ernst and Young’s Not-for-Profit Business Services group stated, “I think these trends toward innovative total compensation plans serve as a testament to the resourcefulness, commitment, and determination of the nonprofit community” (Incentives, 1992, p. 10). Ms. Palmer also stated that “In the face of a crunch that has sent some highly successful businesses into an economic tailspin, the not-for-profit community has demonstrated its administrative acumen by making every
effort to reward and retain its most vital resource: the people who make the organization work” (p. 11).

Oster (1996) noted that franchises (where a local affiliate pays a fee to use the national name but the local affiliate keeps all extra revenue it generates) may be important in nonprofits. Just as the franchise is important for helping to guard against managerial shirking (see Martin, 1988; Krueger, 1991), franchises may be particularly important in nonprofits where performance is particularly difficult to measure. Oster (1996) noted that franchises are widely used in nonprofits, including Planned Parenthood with 171 affiliates, the Boy Scouts of America with 400, Goodwill Industries with 179 affiliates and the United Way with 2300.

Theory and Benefits of Pay Versus Performance

Now that it has been demonstrated that incentive pay exists in at least some nonprofits, this section turns to a discussion of incentive pay generally and benefits of paying for performance. Some useful and important questions to ask when considering how to pay workers include: whether to pay by time (salaries) or by output (piece rates) (Lazear, 1986, 1996a, 1996b, 1998). There are obvious advantages to paying “by the piece,” such as the fact that workers work more quickly and produce a higher level of output and have less incentive to shirk (Steinberg, 1990b; Rose-Ackerman, 1996). Lazear (1996b) provided an example of Safelite Glass Company, where the compensation system was changed from an hourly measure to a productivity-based measure (piece rate) and productivity went up by 36% and pay increased by 9%.
In addition to piece rate workers, one place where the relationship between pay and performance has received a great deal of attention is in the compensation of top managers of firms. Rosen (1992) and Kostiuk (1990) examined the relationship between organization size and CEO pay and found that the size of a for-profit firm is one of the greatest predictors of pay of the top manager. Murphy (1985) and Jensen and Murphy (1990) are two classic cases where the relationship between stock price and CEO pay have been studied. The idea is that the performance of the CEO can be measured based on the firm’s stock price, and as the stock price rises so should the pay of the manager. Murphy (1985) found convincing evidence that the pay-to-performance link was strong, however, Jensen and Murphy (1990) argued that it was once much stronger and could be made stronger still. Hall and Liebman (1998) carefully examined the pay-to-performance link between firm performance and executive pay while considering the importance of stock options.

Two other issues in considering pay and performance for managers in for-profit firms have been the issues of relative performance (Antle & Smith, 1986; Gibbons & Murphy, 1990) and tournaments (Lazear & Rosen, 1981; Main, O’Reilly, & Wade, 1993). Because a great deal of risk is involved if an employee’s pay is entirely based on output, Antle and Smith (1986) and Gibbons and Murphy (1990) examined relative performance. The idea is that if a firm were to simply tie a manager’s pay to firm performance, the manager may take on too much risk, especially in times of a volatile economy. The firm stock price may drop in a recession for no fault of the manager. The solution to the problem is to pay managers relative to how they do in comparison to other
similar organizations (e.g., in the case of for-profit firms those in the same industry).

There is no reason that such methods could not be applied to nonprofits as well, although the nature of the comparison group may be more difficult to detect.

Problems with Paying Those in Nonprofits Based on Performance

Although there are many positive features of compensating employees based on performance, there are many difficulties imposed by the use of incentive pay, especially in the case of nonprofit organizations, as described in the following section. These problems include the fact that it is difficult to measure output, managers may focus on the wrong objectives, that implicit contracts may exist along other dimensions, risk is too high for the employees, and that donations may fall if donors feel that there is an incentive contract in place for employees of the nonprofit (Note 17).

Weisbrod and Schlesinger (1986) discussed the case of performance measurement and performance pay. Clearly, for managers of nursing homes, it would be easy to focus on a measure such as mortality. Say for example that the compensation of the top manager of a nursing home is paid more when people live longer in the institution. This is clearly an important and easily measured outcome. However, it may be the case that managers focus on such a measure and then only admit healthy people so as to increase their compensation rather than admitting people who really need help. Weisbrod and Schlesinger (1986) suggested using “trusworthiness” as a measure of performance, but pointed out how difficult this is to measure (see the more complete discussion of performance measurement below). Herzlinger (1994) reported a related situation where a particular museum had revenues from it’s gift shop that were 17 times revenues from
admission. This alone does not suggest that there is a problem (e.g., admission to the museum is free but the institution’s only revenue is from the gift shop), but if too much focus is placed on the revenue and not enough on the original mission of the museum, this could prove problematic.

Another problem that arises from performance pay or even high pay of employees in nonprofits may come from the trustees. Young (1984, 1987) suggested that because trustees are working without pay for nonprofits, they might expect something similar from managers of their organization and, therefore may not want to pay for performance. In addition, Young (1987) described that there may be implicit contracts between nonprofits and their workers that although the pay is relatively low, the work environment is “…intentionally secure and relaxed” (p. 175). He suggested that switching to a system that pays for performance and might even punish those who do not perform so well would not be fair. Young (1987) additionally pointed out that it may be difficult to find managers of nonprofits who know that much about pay for performance. The kinds of payment techniques used in for-profit firms (e.g., bonuses) have not historically been used in nonprofits. However, new strides have been made to educate managers specifically for the nonprofit sector (e.g., Young & Steinberg, 1995).

The final issue is concerned with the exempt status of the institution itself, and whether incentive pay may cause an organization to lose its exempt status. If an organization fails in upholding the nondistribution constraint, it could lose its exempt status and then formally no longer be a nonprofit. Emory, Swenson, Lerner, and Fuller (1992) and World Family Corp (1983) provided two interesting examples. Emory et al.
(1992) described a situation of a nonprofit daycare center that is facing some financial difficulties. This organization then hired a for-profit firm to help it with certain tasks including management, staffing, and the development of curriculum. The major decisions, however, were left to the original staff of the nonprofit. Obviously, the for-profit firm was paid for the services it provided. The IRS found in this case that the daycare center could keep its exempt status because the main control of the organization was kept in the hands of those in charge of the nonprofit and the for-profit firm did not have substantial authority.

The second example is older (from 1983), and concerns an organization that granted money to missionaries of the Church of Jesus Christ of Latter Day Saints (LDS) while they were on mission. The organization, World Family Corp. (WFC), is a nonprofit organization that hires people to do fundraising and pays them as much as 20% commissions on funds they collect. Additionally, one of the managers of WFC collected a 10% commission. “The issues presented here are whether petitioner (WFC) is operated exclusively for religious, charitable, scientific, or other exempt purposes, and whether part of petitioners net earnings inures to the benefit of private individuals” (World Family Corp., 1983, p. 959). In this case also, the organization was allowed to keep its nonprofit exemption. “Accordingly, we find that petitioner’s (WCF) commission system does not constitute private inurement in violation of the proscription contained in Section 501(c)(3) [of the IRS code]” (World Family Corp., 1983, p. 970). Further, “… a contingent-fee arrangement made by a tax-exempt entity is not per se unreasonable.” (World Family Corp., 1983, p. 968) (Note 18).
Performance Measures in Nonprofits

Paying employees, and managers in particular, based on performance is interesting in theory. However, paying based on performance when performance is difficult to measure (as is clearly the case in nonprofits) can be very problematic (Weisbrod, 1988a, 1989; Cleaverly & Mullen, 1982). Oster (1996) argued in the case of nonprofits that if performance measures are not clear then pay for performance contracts are not efficient (Note 19). In fact, as Weisbrod (1988) argued, it may be better not to base pay on performance at all than to base it on a poor measure. Kanter and Summers (1987) concluded that nonprofits have multiple constituencies and must, therefore, focus on performance along many dimensions.

Actual measures of performance in nonprofits are numerous. For example, the Council of Better Business Bureau (undated) publishes a pamphlet called *The Council of Better Business Bureau’s Standards for Charitable Solicitations*. Among the many useful pieces of information is the suggestion to consider the ratio of program service expense to total expenses. For example if program service expenses are very low relative to say fundraising or administrative expenses, one might want to be more careful about charitable donations (Note 20). Other measure include income growth, increased funding, cost savings, increased public awareness, quality of service, and fundraising volume (Rocco, 1991), customer satisfaction (Bailey & Risher, 1996), or trustworthiness (Weisbrod & Schlesinger, 1986). Note that obviously some of these performance indicators are extremely difficult to measure. Bowen (1994) cautioned against using certain variables such as total revenue minus total cost as a measure of performance for
nonprofits. This is because total revenues may include “…very large amounts of
noncurrent income” such as a large gift to build a new building.

DATA SOURCES USED IN THE NONPROFIT LITERATURE

Although there are many theories about compensation and the potential differences
in compensation between the for-profit and the nonprofit sectors, empirically testing for
differences or even convincingly examining pay in nonprofits in general is very difficult.
First, because of the issues of selection, it is difficult to consider whether workers in a
given sample of nonprofit organizations are really like those in for-profits. Obviously,
given a sample of for-profit and nonprofit workers, we can measure differences between
the groups across measures we have collected, such as levels of education and gender.
However, we cannot observe other characteristics of the workers so we cannot
appropriately tell whether “returns” to certain measurable characteristics are transferable.
Secondly, until recently, the data have not been very good. This section outlines a dozen
examples of datasets used in nonprofit compensation research, and highlights the problems
and virtues of each. There are many other small surveys, but the ones included below
highlight some of the features of such surveys. Additional discussion in the empirical
section that follows covers other data sources. The discussion in this section is separated
into publicly available data and data that were specifically collected by researchers for a
given purpose.

Publicly Available Sources of Data for Research on Compensation in Nonprofits

Preston (1989) used two publicly available data sources for her well-known study
on the for-profit nonprofit wage gap. The first was the 1980 Survey of Job Characteristics
(SJC) which has a variable on nonprofit status plus detailed information on wages, hours, industry, occupation, demographics, experiences, union status, race, and gender. In addition, it includes four other interesting variables on schedule flexibility, sick leave flexibility, whether one is asked to work overtime, and whether one is directed by a supervisor. Many of these are useful questions for a study of the nonprofit versus for-profit wage gap. Unfortunately, there are only about 300 useable observations in the data so the sample is too small to tell us much that is convincing about the gap.

In order to remedy the small sample problem found in the SJC, Preston (1989) also used the 1979 and 1980 Current Population Surveys (CPS). The CPS is a monthly survey conducted by the Census Bureau of about 50,000 households per month. The sampling structure of the CPS allows for some “longitudinal” data in that ¼ of the sample observations can be matched over time, but only for a year. The great feature of the CPS is that it is so large. As Preston (1989) pointed out, however, “The only major drawback of the CPS is its failure to identify nonprofit status of the worker” (p. 444). At first blush, this appears to be a fatal problem with the data because the point of the exercise is to consider differences between those in nonprofit versus for-profit organizations. However, Preston (1989) tried to remedy the situation by classifying workers into for-profit or nonprofit status by separating them into industries. She used other sources to identify industries with at least two-thirds of employment in the nonprofit sector. She then classified all workers from the CPS who work in those industries as nonprofit workers. These industries include hospitals, health services, elementary and secondary schools, educational services, colleges and universities, libraries, museums, art galleries, and zoos,
religious organizations, welfare services, residential welfare facilities, and nonprofit membership organizations. Obviously, some of the workers in these industries were employed by for-profit firms and some workers in other industries were nonprofit employees. However, these were the best large-sample data available at the time of Preston’s (1989) paper.

The 1977 Quality of Employment Survey was used by Mirvis and Hackett (1983). The authors identified 70 nonprofit employees, 239 governmental employees and 1,171 for-profit employees. The data included information on occupation, demographics, education, experience, and self-reported information on the quality of employment including working conditions. Again, as in Preston (1989), there was no specific question that identified the sector of the workers, and Mirvis and Hackett (1983) used industries to define sector.

The 1990 U.S. census now identifies nonprofit workers in a question that separates workers into a set of categories which the census defines as a worker’s “class.” The ten responses are 1) less than 16 years of age, unemployed or never worked, 2) employee of a private for-profit company, 3) employee of a private not-for-profit, tax exempt group, 4) local government employee, city council, etc., 5) state government employee, 6) federal government employee, 7) self employed in own non-incorporated business, 8) self employed in own incorporated business, 9) working without pay in family business or farm, and 10) unemployed, last worked in 1984 or earlier. In the next section on “empirical findings on the pay gap”, I include some analysis of pay differences between nonprofits and other forms of organization based on this question.
Schackett and Trapani (1987) used a well-known U.S. longitudinal data set called the National Longitudinal Survey (NLS). Specifically, they considered the cohorts of young men, 1966-1975 and young women, 1968-1977. The NLS separates people into four categories: those in “regulated industries” industries 506-579 and 701-759 (this accounts for 559 people in the sample); nonprofit workers who are in industries 867-898 (this accounts for 1175 workers); government workers in industries 906-936 (285 workers); and 2641 non-regulated workers who make up the difference. The nice feature of these data is the fact that there are multiple observations on many workers over time. This allows researchers to examine changes in sector status for a given workers, thus avoiding the ability bias problem described above. However, the problem found in Preston (1989) and Mirvis and Hackett (1983) of not being able to specifically identify nonprofit workers, except by virtue of their industry, is apparent here. Also see Johnston and Rudney (1987) who use data from the 1982 Census of Service Industries.

Another dataset that is also longitudinal but only includes information on the five highest paid workers is data from the IRS on the tax returns of nonprofits (Note 21). Hallock (1999a) used these data in a paper on the compensation of managers of nonprofits. The data include the information that must be supplied to the Internal Revenue Service by 501(c)(3) organizations that are exempt from income tax. Among the variables are revenue, assets, and expenses of the nonprofits. There are many useful features including the fact that there are hundreds of accounting variables, thousands of observations, the data are publicly available from the IRS, and the data include the National Taxonomy of Exempt Entity (NTEE) industry identifiers described above. The data do have several
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drawbacks, however. First, it is difficult to generalize from these data to all nonprofits because only organizations with greater than $25,000 in annual revenue must file form 990. Secondly, although the data are excellent for examining compensation of managers in relatively large nonprofits (Hallock, 1999a), they are not particularly useful for comparisons to nonprofit organizations generally or for lower-level workers. Finally, although detailed pay data on the top five managers including base pay, and expense accounts are included, the names of the managers are not included, so matching individual managers over time is impossible (Hallock, 1999a).

Specific Data Collection Exercises for Research on Pay in Nonprofits

In addition to the publicly available sources described above, many researchers of compensation in nonprofits have either collected their own data or used data originally collected by consulting firms, nonprofit groups, or government agencies, for other purposes and then later examined them for more academic purposes. Several of these datasets are described in this section.

Weisbrod (1983) examined 737 private lawyers. Fifty-three of these were identified as “public interest lawyers” as they identified themselves as working for a “…private nonprofit law firm engaged in class-oriented activities of a left, reformist sort” (p. 250). Preston (1988) examined 3167 daycare centers using data originally collected by Abt Associates. In this sample, the unit of observation was not an individual but an entire center. In her book on human resource management in the nonprofit sector, Pynes (1997a) described three surveys of nonprofit organizations that try to help with what is known about pay in nonprofits. The first is Compensation in Nonprofit Organizations which was
conducted by Abbot, Langer, and Associates, the second, conducted by the Society of Nonprofit Organizations, is the Nonprofit World Salary Survey, and the third is the study of management salaries in nonprofits conducted by Towers Perrin.

There are also useful examples of data from Hospitals that have been used to examine compensation in nonprofits. Hutchcraft (1997) cited a study by Woolhandler and Himmelstein in the *New England Journal of Medicine* that includes data from 6000 hospitals from the Health Care Financing Administration on fiscal year 1994 medical payments. Also Roomkin and Weisbrod (1999) studied the pay of hospital managers using a large survey of hospitals from the Hay Group (Note 22).

The last data source to be described here is one explained in more detail in Hallock (1999b). He used data originally published in book form by the Council of Better Business Bureaus (various years). The data collected for his paper are from a sub-set of IRS form 990 data, but include some financial data and the compensation of the top manager. The unique feature of the data over the 990 data described in Hallock (1999a) is that the names of the top manager are disclosed and, therefore, individual people can be matched over time and the gender of the top manager is identified. The question of a pay gap, within the nonprofit sector, by gender, at the top of nonprofits as detailed in Hallock (1999b) is described in the section below on “Gender and Race in Pay in Nonprofits.”

**EMPIRICAL FINDINGS ON THE PAY GAP**

Although there is a substantial amount of literature on nonprofits and compensation in nonprofits, there is surprisingly little convincing empirical work on the subject. This section surveys a few of the better-known examples. I separate the
discussion in this section into those cases that document a pay gap including papers by Mirvis and Hackett (1983), Johnston and Rudney (1987), and Shackett and Trapani (1987), and those that attempt to consider issues of causality slightly more deeply such as Weisbrod (1983), Preston (1988), Preston (1989), and Goddeeris (1988). Although these papers are interesting and enlightening, it is clear that a great deal more effort needs to be put into the empirical study of pay gaps in nonprofits.

Descriptive Findings on Nonprofits and the Gap in Pay between For-Profit and Nonprofit Organizations

To begin, it is useful to examine some simple descriptive statistics from the 1990 census. In Table 3, I have presented simple mean characteristics for a set of workers form the 1990 PUMS Census 1% person’s sample. Note that this discussion only includes workers with annual income in 1989 of at least $1000, who work at least 40 hours in 1989, who “usually” worked at least 35 hours per week, and who were between the ages of 16 and 65 inclusive. Given these selection criteria, there are 791,964 observations in the 1990 census. These individuals have the following characteristics. The average age is 38. Forty percent are female. Eight-five percent are white. The average annual income is $27,609 and average hourly wage is $12.37 (Note 23). Thirty-two percent graduated with exactly a high school degree and 16% had a college degree. Only 6% worked in the nonprofit sector, 72% worked in the for-profit sector, 18% in the government sector, and 4% were self employed (Note 24).

Insert Table 3 about here
It is clear from Table 3 that nonprofit workers (column 2) are different from other workers in several ways. For example, they are slightly older than the average worker, and much more likely to be female. Note that while only 40% of these “full time” workers are female, 60% of the nonprofit workers are female. Also, in these raw data, it is clear that workers in the nonprofit sector earn slightly less than workers in any other of the sectors (including for-profit, government, and self-employment). The final thing to note is that nonprofit workers are much more highly educated than workers in any of the other sectors. Workers in the nonprofit sector are much less likely to be in the “bottom” two education categories (i.e., less than a high school education or exactly a high school education), and much more likely to be in the top two categories of college education or more than college. These differences between nonprofit and other workers are also documented by others as described below.

Mirvis and Hackett (1983) provides a well-known example of relatively early empirical work on nonprofits. They use the 1977 Quality of Employment Survey created by the Institute of Social Research at the University of Michigan to document a large unadjusted gap in pay between workers in the for-profit and nonprofit sectors. They found, for example, that the unadjusted wage gap between the nonprofit and for-profit sectors was very large as the average nonprofit income for full time workers was $10,200 and that for for-profit workers was $14,981. Note, however, that the 1977 Quality of Employment Survey does not specifically identify workers by “sector” (e.g., nonprofit, government, for-profit etc.) but that Mirvis and Hackett (1983) categorized workers into sectors based on the industries for which they worked. Among the other findings of Mirvis
and Hackett (1983) are that the very young (less than 30) and the relatively old (greater than 55) are more likely to work for nonprofits than for-profits (Note 25). They also stress that the better educated are more likely to be found in nonprofits, wages are lower in nonprofits, and that there is “more variety and challenge” in nonprofit jobs.

Johnston and Rudney (1987) published a similarly descriptive paper on the characteristics of nonprofit workers in the *Monthly Labor Review* only a few years after Mirvis and Hackett (1983). Johnston and Rudney (1987) used the 1980 census to study worker characteristics by sector. In the 1980 census, there is also no question that asks workers about the sector they work in directly. Johnston and Rudney (1987) used the same kind of method as Mirvis and Hackett (1983) and assigned workers employed in industries with a large fraction of nonprofits to nonprofit status. They also found substantial evidence that workers in nonprofits are better educated than workers in other sectors. In addition, they found that the fraction of workers in professional and executive occupations was much higher in nonprofits. For example, 47.9% of workers in nonprofits are in executive, administrative, professional, and technical occupations compared with only 26.5% in for-profits. Also 31.9% of those in nonprofits are considered professionals and only 11.8% of those in for-profit firms.

Johnston and Rudney (1987) also considered the 1982 Census of Services. Using these data they documented that in many services sector jobs, those in nonprofits actually earned more than those in for-profit firms. They also found that nonprofits had, on average, more employees per organization that for-profits which is contrary to findings in Mirvis and Hackett (1987).
Additional Literature on the For-Profit versus Nonprofit Wage Gap

In Table 4, I perform a set of very simple regressions of the log of annual pay for two samples of employees from the US Census on a wide variety of characteristics including age, gender, race, education, occupation, and industry, and still found a pay gap of between 5 and 7%. Although this does condition on many characteristics, this obviously does not definitively suggest that nonprofits cause lower pay. This section surveys a set of papers that have tried to examine these issues more carefully.

Weisbrod (1983) is one of the early examples of a paper that tried to go beyond the simple mean differences in pay between for-profit and nonprofit employees. As mentioned above, he examined 737 private lawyers. 53 of these were identified as “public interest lawyers” as they identified themselves as working for a “… private nonprofit law firm engaged in class-oriented activities of a left, reformist sort” (p. 250). He ran a simple regression of pay of the lawyers on a set of easily measurable characteristics such as experience, experience-squared, race, gender, whether the individual as on the law review, whether the individual served as a clerk, the quality of the law school, whether the person was in the top or bottom quarter of his or her class, and the size of the organization for which the lawyer worked. He then took the coefficients from this regression and tried to predict pay for lawyers in the “public interest.” His null hypothesis was that the predicted (based on coefficients from this regression) and actual wages for “public interest” lawyers would be equal. In fact, he found that predicted pay for lawyers in the public interest was
$24,350 and that actual pay was only $20,300. He concluded that, therefore, there may be some compensating differential for being a “public interest” lawyer.

Another important contribution to the empirical literature on nonprofit pay is Preston (1989). She used the 1980 census and the Survey of Job Characteristics to consider the pay gap between for-profit and nonprofit workers. Recall that the 1980 census does not identify the nonprofit status of a worker directly, but that Preston (1989) used industry to identify nonprofit status. The Survey of Job Characteristics does identify nonprofit status. She found that even after adjusting for a set of covariates, there seems to be a penalty for being in the nonprofit sector of between 5% and 20% depending on the occupation of the worker. Preston (1989) suggested that the gap could be due to low ability workers choosing this sector. Because the gap is not completely explained by measurable characteristics, it is consistent with the “labor donations” hypothesis developed in Preston (1989) and discussed above.

Preston (1989) also attempted to consider the compensating differential explanation for lower wages in the nonprofit sector by including a set of “work life controls” in her pay regressions. The idea is that part of the nonprofit pay gap may be due to the better working conditions in nonprofit jobs. She did not find much evidence for this, but this may be due to the quality of her compensating differential measures.

Preston (1989) went on to consider whether the pay gap may be due to selection or quality of workers. In order to get some bearing on these issues, she explored various selection techniques and used longitudinal data from the Current Population Survey.
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(matching across years). She found that it is very difficult to tell whether the results are
due to selection.

The fact that the gap may be due to ability is compelling. Wesibrod (1983) thought that the fact that “public interest” lawyers may earn less than private lawyers could be explained by some of the theoretical issues described earlier in this paper including, the quality of the office and surroundings, the intensity of work, the types of people one has to interact with, and the types of activities one has to engage in. Clearly, “private interest” lawyers may have more pleasant hours, nicer working conditions and prefer to work for “public interest” causes but one other issue that was prominent in the theoretical discussion is not directly addresses by Weisbrod (1983) and that is “ability” bias. Goddeeris (1988) addressed this directly using Weisbrod’s (1983) data.

Goddeeris (1988) explored the possible “ability” issue more deeply and showed using a simple statistical model, that Wesibrod’s (1983) result that lawyers in the “public interest” make less, “and know it” may be masked by selection. He also suggested that those who work in the public interest have different preferences. Goddeeris (1988) simultaneously estimated earnings and choice of job sector functions to more carefully consider the wage gap between public interest and private lawyers. The point it that it is possible that those in the nonprofit sector would have earned less even if they were in the private sector, and this may explain their choice of nonprofit sector in the first place. He noted that the previous work assumed that workers were identical in wage preferences, and that non-wage job characteristics and selection into a sector are not related to ability or productivity. He thought that neither of these assumptions was very strong, and went on to
develop a model where he simultaneously estimated the choice of sector and wages for lawyers and found that the large wage gap was due to selection. That is, once selection is considered, the nonprofit / for-profit wage gap disappears (Note 26).

There is a large unadjusted nonprofit / for-profit wage gap which is now clearly documented. However, due to data constraints, it is very difficult to disentangle the various theoretical reasons for this gap. The empirical evidence is potentially consistent with the “labor donations” hypothesis, compensating differentials, efficiency wages, and ability bias. Hopefully, more large national survey data sources will be used that carefully consider nonprofit status of workers as the 1990 census has done. Perhaps panel data surveys will follow suit so that we may obtain a clearer picture of the reasons behind the true wage gap.

EXECUTIVE PAY IN NONPROFITS

Although there has been increased discussion of pay for performance in nonprofits, there has been surprisingly little work on the pay of managers of nonprofits, primarily because of a lack of data. This section reviews the importance of and legality of performance pay for managers of nonprofits, and reports on some of the empirical findings of recent studies on pay of top managers of nonprofits. It reviews the motivation for paying managers of nonprofits in certain ways, and surveys the empirical evidence on managerial pay in nonprofits by describing a set of studies of small data sets collected by consulting firms and others, and one large set of data collected from IRS Form 990 tax returns.

Motivation for Managerial Pay in Nonprofits
Just as there has been increased scrutiny over CEO pay in firms in the US in the last few decades, there is increasing pressure on nonprofits to disclose compensation and report financial statistics carefully. For example, Young (1987) stated that “… charitable agencies are relatively open organizations, subject to scrutiny by government on behalf of the contributing public. In this fishbowl environment, it can be difficult to pay high managerial salaries, which might look out of line and embarrassing in the context of charity, despite whatever justification exists for the need to attract and retain superior administrative talent” (p. 173). Freeman (1975) and O’Connell (1992) also stressed the importance of retention. Freeman (1975) stated that “If we assume that the supply of ‘able’ managers depends on their records, and that nonprofit institutions do not substitute salary or prestige for ownership income by enough to counterbalance the absence of the latter, nonprofits will be unable to attract high quality management talent” (p. 99). O’Connell (1992), who was then President of the Independent Sector, wrote “Overshadowed by the tiny proportion of the highly paid are the vast majority of nonprofits whose people are so inadequately compensated that all but the most dedicated leave through exhaustion or better offers (p. 34).

New rules suggest that nonprofit organizations must disclose compensation of top managers and that charities must justify the pay. Parts of the new law require that organizations 1) document how much they pay their heads, 2) report financial information about the charity quickly, and 3) document how the salaries of the chiefs were determined (Note 27). (Taxpayer Bill of Rights II, 1996). At the IRS, Marcus Owens, head of the Exempt Organizations Division, stated “… what the IRS will accept as reasonable
compensation is probably a lot more than the general public will stand” (Casey, 1996, p. B1). There has also been increased emphasis on pay for performance in nonprofits (Note 28). In addition, there has been a great deal of discussion of the pay of managers of for-profit firms. It is interesting to consider whether the pay of managers of nonprofits differs, both in levels and in determinants of pay.

Empirical Work on Pay of Managers in Nonprofits

Although there has been a great deal of discussion of the pay of managers in for-profit firms (e.g., Murphy, 1985; Hall & Liebman, 1998), much less attention has been paid to managers in nonprofits (Note 29). This is probably due, among other things, to the facts that pay of managers in nonprofits is much lower, as we see below, and that far less data have been available to study compensation in nonprofits. This section briefly describes earlier work using data from a variety of sources, and then focuses more detail on a study by Hallock (1999a) that used data from IRS Form 990 tax returns.

Variety of Data Sources and Results

In a careful and interesting study, Oster (1998) investigated the link between managerial pay and organization size in nonprofits using cross-sectional data from five different nonprofit industries; universities, social service organizations, hospitals, foundations, and a broad set of organizations, with sample sizes between 31 and 95. She documented a strong positive link between organization size and managerial pay, which agrees with Rosen (1992) and others who found a strong link between firm size and CEO pay in for-profit firms. She also reported that “… both ideology and the composition of revenues substantially affect executive compensation levels” (p. 207). The great virtue of
Oster’s (1998) results is the care she used to focus on specific industries and to select an appropriate organization size measure. However, the sample sizes are small and the data are cross sectional so do not solve some of the problems of ability bias discussed above.

Pink and Leatt (1991) studied 213 nonprofit Hospitals in Ontario and found only a weak relationship between management compensation and hospital surplus or deficit, but found a strong link between pay and hospital size as measured by the number of beds. Their paper only examined the sum of the compensation of the top five managers. Also, all of the analysis reports the compensation data in levels, not logs which is more common. Additionally, there seems to be wide variation in the mix of compensation and performance data. Clarkson (1972) represents an early study that discusses pay and performance in nonprofit hospitals. He reported that nonprofit hospital administrators are much more likely to give across-the-board raises than performance-based raises using data from 1956. Langer (1989) examined 1,142 nonprofit organizations that were surveyed by Abbott, Langer, and Associates. He only reported simple correlations but many are instructive. He showed that experience, education, numbers of workers supervised, and budget all were positively correlated with managerial pay (Note 30).

Findings Using Panel Data From the Internal Revenue Service

Hallock (1999a) used panel data from IRS Form 990 tax returns to study the pay of managers in nonprofits. Using data on 32,144 managers over five years (1992-1996), he found the average pay of top managers across many industries to be about $160,000, which is much less than the average pay of managers of for-profit firms (See Table 5). He also found that a large fraction of the compensation of managers of nonprofits came in the
form of benefit plans and expense accounts (see Table 6). Also, there is a great deal of pay variability at the top of charities within charities (the top manager often makes much more than the second in command and so on), and across charities as defined by their National Taxonomy of Exempt Entities (pay differs dramatically by industry) (see Table 6). In addition, Hallock (1999a) examined the effects of organizational performance on managerial pay in nonprofits using several measures of performance. For example, he found that the median “profit” levels (revenue – expenses) for the organizations in his sample were $1,117,222, the median “return on assets” (“profits”/assets) was 7.01%, and the median change in assets was $991,317. He also suggested the ratio of program service expense to total expense as described above. Results for tying pay of nonprofit heads to performance are not particularly clear. He did, however, find a strong relationship between organizational size and managerial pay as in Oster (1998) (Note 31).

Hallock (1999a) also examined several other aspects of pay in nonprofits, including the effects of government grants, governance in nonprofits (Note 32), and tournaments. It is possible that as managers increase the numbers and size of grants to their organizations, that they are paid more. Hallock (1999a) reported that nonprofits with higher levels of government grants pay their managers more (Note 33). However, because the data are arranged in a panel, organizational fixed effects can be taken into account. Once organization fixed effects are controlled for, there is a weak negative relationship between grants and pay of managers in nonprofits. This may be due to the fact that
government agencies monitor managerial actions and, within organizations, managers can be paid less in the presence of this monitoring. There is a literature on the influence of boards of directors on the pay of managers of firms in the U.S. (Note 34). Hallock (1999a) also focused on the relationship between managerial pay in nonprofits and the board of directors of the nonprofits (i.e., the institution which sets the pay of the top manager) (Note 35). He found that the larger the number of paid board members, the lower the pay of the top executive. Perhaps, if the board is larger, there is less of a need to have a highly paid (able) top manager. Perhaps board size is a substitute for managerial experience or ability.

GENDER AND RACE IN PAY IN NOPROFITS

Steinberg and Jacobs (1994) noted that it is interesting that although such a large fraction of the nonprofit sector is populated by women, very little of the research focuses on them. They argued that “… the low level of wages paid in this sector is, in no small part, a function not only of the devaluation of women’s work in the sector but also the result of the devaluation of the nonprofit sector because it is heavily populated by women” (p. 90). This section aims to review a few of the papers that have touched on issues of gender in nonprofits, especially in regards to pay. It focuses both on women in the sector generally, and on female executives and trustees.

Preston (1990) examined why women are more likely employed in the nonprofit sector. Note that Johnston and Rudney (1987) showed that although women are much more likely than men to be in the nonprofit sector, few women are among the well-educated and many are in administrative support jobs. They ask whether women prefer the job
characteristics or the wage structure in nonprofits. Preston (1990) used the 1977 quality of employment survey and only examined full time, white collar workers. She found that women are much more likely than men to join the nonprofit sector, even controlling for occupation. She also found that, on average, those in nonprofits earn much less than those in for-profit organizations, but argued that because there is a smaller gender wage gap in nonprofits, women may be relatively better off there. Controlling for this “expected wage differential,” Preston (1990) concluded that women are no more likely than men to join the nonprofit sector. Preston (1994) noted that between 1973 and 1991, women in the nonprofit sector earned roughly the same as men within occupations, but that they were found in much different occupations.

Preston (1994) found that although women have reached a significant level of equality in the nonprofit sector, nonwhites have not. She wrote that, “Within the nonprofit sector, black women had significantly lower levels of education, significantly lower wages, and a less prestigious occupational distribution than white women. In addition, the gaps in earnings and achievement increased between 1969 and 1991” (p. 71) (Note 36).

Very little is known about female executives, both in the for-profit and nonprofit sectors. There are some exceptions. Bertrand and Hallock (1999) studied the gender wage gap for top executives of large U.S. firms. Over the period they examined (1992-1997), they found that women tripled their presence among the top five managers of large firms, and that although there was a large raw pay gap between men and women, a sizeable part of this was accounted for by measurable characteristics. Bartlett and Miller (1985) discussed female executives and networking. Although, there has been some growth of the
fraction of women at the top of large U.S. firms, there has recently been a significant rise
in the fraction of women who serve in higher-level positions in state agencies, nonprofits,
and firms. Steinberg and Jabcobs (1994) noted that “… women appear to be having a
relatively easier time moving into positions of leadership in nonprofit organizations than in
for-profit organizations” (p. 95) For example, Bullard and Wright (1993) reported that
although women only accounted for 2% of agency heads in state governments in 1964,
they accounted for 18% in 1988 (Note 37). However, these women seemed to be
concentrated in particular types of agencies. They also reported that women in these
agencies only earned about 80% of what their male counterparts earned. However, these
was no discussion of the characteristics (e.g., education, experience) of the men and
women in the sample. Also, Guy (1993) compared men and women in public management
and found that women were much less likely to be in decision-making positions, but that
they are making progress. For example, in 1910 only 10% of the people in the federal GS
grade workforce were women. In 1987, this number jumped to 48%. In addition, Abzug,
DiMaggio, Gray, Useem, and Kuang (1994) reported on a case study of a small set of
“elite” nonprofits in Cleveland and Boston. They examined the Cleveland Museum of Art,
Cleveland University Hospital, Cleveland United Way, Boston Museum of Fine Arts,
Massachusetts General Hospital, and Boston United Way in 1925, 1955, and 1985 and
reported that female presence on boards of directors of these organizations increased
significantly over time.

Preston (1994) noted that although the male-female wage differential in nonprofits
generally is small, for managerial workers (as measured in broad managerial categories by
the Current Population Survey), it can be as high as 20% (Note 38). Hallock (1999b) studied whether there is a gender wage gap at the very top of nonprofits using data on 606 top managers collected from the Council of Better Business Bureaus Annual Charity Index (various years) for 1990-1994. He found that, 19% of the managers were women which is a much higher fraction than for large firms (Note 39). Also, in the raw data, women earned about 21% less than men. However, women were found to lead much different kinds of organizations measured by industry or organization size (as measured by assets, income, or revenue). Once simple characteristics are accounted for, the gender wage gap disappears (Note 40). Note that Oster (1996) also found little evidence of a gender pay gap at the top of nonprofits once other covariates were controlled. Hallock (1999b) also found evidence consistent with the fact that the relationship between pay and performance for executives in nonprofits differs by gender. In the sample, there was evidence of no relationship between pay and performance for men, and a negative one for women.

INTERNATIONAL

Although there is surprisingly little research on nonprofits in the United States, there is almost none in other countries. A few of the exceptions that do mention the nonprofit world in general or compensation in nonprofits in other countries are described here. One problem is that comparing “nonprofits” is very difficult across countries. For example, in Germany there is no perfect translation of the English word “nonprofit.” The closest case is “Organisation Ohne Erwerbscharakter” which translates to “organizations with no profit motive or commercial character” (Anheier, 1993, p. 186). James (1990) also described these problems of comparability (Note 41). She explained that what are
known as nonprofits in the U.S. can be known as non-governmental organizations, (NGOs), private voluntary organizations (PVOs), or community associations. She also explained that tax breaks to nonprofits do not often exist in other countries, but that the nondistribution constraint still holds. Knapp and Kendall (1993) reported that there is very little data on the voluntary sector in the United Kingdom and, therefore, little is known about it. Salamon and Anheier (1992b) considered the National Taxonomy of Exempt Entities (NTEE) as a way of classifying nonprofits across countries. They discovered that it is not particularly useful for international comparisons and, therefore, developed the International Classification of Nonprofit Organizations (ICNPO) which has 12 major groups and 24 sub-groups. This is a far smaller number of groups than in the NTEE described above.

Borzaga (1993) described the Italian nonprofit sector with a very broad overview including some facts on employment levels but nothing specifically on compensation. Anheier (1993) provided a review of employment and earnings in West German nonprofits. He reported that women compose two-thirds of the jobs in the nonprofit economy and only one-third of the jobs in the entire economy. In the U.S., women are also much more highly represented in nonprofits. Anheier (1993) also reported that changes in the German economy toward a more service oriented economy (as in the U.S.) are helping the nonprofit economy to expand since nonprofit jobs are heavily centered in the service sector.

Rose-Ackerman (1996) reported many statistics (from Salamon and Anheier, 1996) by country on the composition of the nonprofit sector by industry. For example, she reported on nonprofit employment as a percent of all employment. Salamon and Anheier
(1996) also reported OECD data suggesting value added by the nonprofit sector as a percentage of GDP by country, and reported the following statistics: USA 3.8%, Germany 2.3%, Sweden 1.4%, Austria 0.7%, France 0.3%, and Portugal 0.2%. These data are suggestive at best, especially given the earlier discussion of the difficulties in defining the nonprofit sector. Salamon and Anheier (1996) also studied many other countries including Italy, Japan, the UK, Hungary, Brazil, Egypt, Ghana, India, and Thailand.

CONCLUDING COMMENTS

Where do we go from here? The availability of newer sources of data will hopefully be a step in the right direction. As described above, much of the early literature on nonprofits was hampered by the fact that the nonprofit versus for-profit status of a worker had to be inferred from his or her industry. Newer data sources are including information on the “sector” of the worker and this will clearly help in our efforts. Also new legislation is leading to increased scrutiny of nonprofit finances and compensation of the leaders of nonprofits. Hopefully this new legislation will add to the interest in nonprofits so that we may better be able to understand how employees are compensated in this important sector.

There are many avenues for further research on the question of compensation in nonprofits, including each of the topics covered in this paper. In particular, although there is a significant amount of theory concerning pay in nonprofit organizations, new data will allow us to more carefully study issues of pay difference between sectors, sector choice, gender differences, pay versus performance, managerial pay, international comparisons, and individual industrial sectors.
With regard to pay gaps, there are many theoretical reasons for pay differences including, labor donations, compensating differentials, efficiency wages, and ability differences. However, data concerns have hampered the study of pay gaps in nonprofits for some time. Having more detailed access to information on the same individuals who switch from one sector to another over time would be very useful in this regard. Perhaps, introducing details of sector (including nonprofits) into existing large-scale longitudinal data sets would help investigate these ideas.

A second main avenue for future research that is quite related is sector of choice. Why do some individuals choose to work in nonprofits versus for-profit firms? Do individuals prefer to work in nonprofits at particular times in their lives? Have the answers to these questions changed over time?

Issues of gender mark a third important area for additional research. Since about 60% of workers in the nonprofit sector are women and a much larger fraction of the managers in nonprofits (relative to for-profits) are women, this is clearly an important subject. Carefully examining the determinants of sector of choice and pay differences by gender deserves increased attention in future research.

Since many nonprofits are beginning to compensate employees (and not just managers) based on performance, this is a fourth direction for future work. Although considering performance measures is difficult, recent work in the area suggests that this line of research will be promising.

Given that organizations differ so much internationally, the fifth avenue for future research is international comparisons of compensation in nonprofits. This will be
extremely difficult since even simple definitions of which organizations are nonprofits differs by country. Locating additional detailed compensation data by country will be especially difficult. However, this type of research would be very valuable.

Finally, there is a great deal of heterogeneity in nonprofit organizations which makes their study particularly difficult. Given that there is now a detailed classification system for nonprofit organizations (the NTEE described above), it would clearly be worthwhile to carefully study the compensation of managers and employees of nonprofits within industrial sectors. For example, the study of university Presidents (Ronald Ehrenberg and colleagues at Cornell are working on this now), heads of museums, foundations, hospitals, and other nonprofit organizations would be very interesting. Perhaps the systems of compensation across these nonprofit types are also marked with significant heterogeneity. Additional comparisons of compensation across sectors (e.g. government, private for-profit, and nonprofit) will also be interesting.

The literature on nonprofits is spread over a wide variety of disciplines including Human Resources Management, Accounting, Economics, Finance, Organizational Behavior, Sociology, and Political Science. Even though this paper has considered over 150 diverse works on the subject, there is still much more to be learned. We do know that there is a substantial pay gap, and that there are several possible explanations for this including compensating differentials (workers in nonprofits are paid less because they enjoy non-wage attributes in their jobs), labor donations (by accepting lower wages workers are essentially donating their time to nonprofits), and ability effects (workers in nonprofits may have earned less had they worked for for-profit organizations). Although
substantial work has been done on documenting the simple pay gap, considering theories for differences in pay, issues of gender and race, and nonprofits internationally, there is still a great deal of work to be done.
ACKNOWLEDGMENT

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NOTES


2. Also see Weisbrod (1988c) for an excellent overview of nonprofit institutions and forms as well as Andreoni (1990).

3. This section is based heavily on Stevenson, Pollak, and Lampkin (1997). Also see Bowen, Nygren, Turner, and Duffy (1994) for a careful description of the nonprofit sector.

4. An example is “College Park Towers” which is a senior citizen housing complex and not a college.

5. See, for example Fama and Jensen (1983a, 1983b). In a discussion of agency problems and residual claims in general, Fama and Jensen argued that it isn’t donations of organizations alone that lead to the presence of nonprofits, but that the nondistribution constraint is crucial. James and Rose-Ackerman (1986) also provided a careful explanation of theories of nonprofit formation.


7. In a brief review of altruism and economics, Simon (1993) argued that economists should go beyond economic motives and include altruism in their theories.

8. Rawls, Ulrich, and Nelson (1975) described data from two samples of MBA graduates from Valderbilt University. They suggest that respondents who look for jobs in the nonprofit sector have different personality, behavioral and value characteristics.
9. Feldstein (1971) called this “philanthropic wage setting” (p. 69) in the hospital industry. He stated that “… there is a variety of evidence that suggests that hospitals were paying higher wages than necessary.” (p. 69)

10. See Hackman and Oldham (1976) for a discussion of autonomy and skill variety and their effects on work performance in the context of organizational behavior.

11. Hendricks (1977) provided a related example where those in regulated industries might find certain job amenities and therefore demand lower wages. The paper aimed to focus on the effect of regulation on labor of a given level of quality. He found that given a fixed level of quality, earnings in regulated industries were lower than in other industries, for the sample considered.

12. In his review of nonprofits Steinberg (1990a) discussed efficiency wages but does not think they would be a good idea in nonprofits because raising pay may be bad for the moral of other workers including volunteers.


14. See Weisbrod (1988c) for an excellent overview of nonprofits generally and for a description of incentives in nonprofits.

15. Also see Ryterband (1991) for a discussion of profit sharing, pensions, and deferred compensation in nonprofits from a legal point of view.

16. Rocco (1991) stated that “recent studies” have found that 25 percent of nonprofits offer incentive pay.

17. See Steinberg (1990b) for a discussion of this last point.
19. Emory et al. (1992) further reported on additional case studies. They describe the case of a Radiologist paid on a percent of departmental revenue. This was not ruled as a violation of the organization’s exempt status.


20. Gemeinhardt and Werner (1995) and Werner and Gemeinhardt (1995) use “administrative efficiency” (equal to administrative costs divided by total costs) and budget growth in their study of nonprofits in the Houston area. They find no link between these variables and pay of 1,811 employees in 69 nonprofits. However, they consider no covariates in the analysis and this includes all workers, not just managers.

21. Froelich and Knoepfle (1996) try to examine the accuracy of the IRS Form 990 data by surveying a sample of 7032 organization and comparing the responses to those in the 990 data and other sources. They suggest that although there have been some problems with reporting on the 990 in the past, the motivation to accurately fill them out has increased and that their study “… finds the IRS 990 return to be a generally reliable source of financial data.” (p. 50). See Froelich (1997) for a more detailed description of the IRS data.

22. Feldstein (1971) is an early example of the study of hospitals.

23. This is computed as annual income divided by the product of usual hours last year and weeks worked last year.
24. Geminhardt and Werner (1995) also include some descriptive information from a sample of 2333 employees “at all organization levels” and find some evidence that is consistent with these findings.

25. For the full time workers in my census sample, this is only true of the relatively older workers.

26. Filer (1986) studies artists and shows that after controlling for measurable characteristics they earn no less than others.

27. Part of the new law states that pay levels may not be “excessive” but it is not clear what is meant by “excessive.” (Nonprofits Ask, 1997).

28. In a study by William Mercer Inc. of 72 foundations and trade associations, 58 percent said they offered incentive and deferred pay, 61 percent started incentive plans within the last five years, but 30 percent stated that they “resist” incentives since it may be inconsistent with their status as exempt entities. (Nonprofit Executives, 1995).

29. See Fry (1996) for a discussion of details of tax deferred and other compensation plans for executives in nonprofits from a practitioner’s point of view.

30. Webster (1994) also mentions the importance of organization size in determining managerial pay in nonprofits.

31. Note that Oster (1996) stated that although there is a pay to performance link that it is partially constrained since nonprofit boards may feel pressure to not pay managers too much. See Joskow, Rose, and Shepard (1993) and Joskow, Rose and Wolfram (1996) for studies of the effects of constraints in firms on CEO pay.

33. Rose-Ackerman (1987) is an economic theory paper on how changes in government grants influence managerial decisions. She finds that more grant money from the government does not lead to a one for one increase in output as some managers crowd out private donations (which are more restrictive) to focus on their own personal objectives.

34. Also see Hallock (1997, 1999c) and Weisbach (1988).


36. Johnston and Rudney (1987) report results that are at odds with this.

37. Despite these advances, Odendahl and Youmans (1994) report that as of 1990 only 31 percent of the largest foundations had any women as trustees and that those organizations with larger budgets were more likely to have men as trustees. See also, Odendahl and O’Neil (1994).

38. Preston (1994) notes that the fraction of women in the managerial occupations of nonprofits increased from 4.1 percent in 1969 to 12.7 percent in 1991.

39. Shaiko (1996) found that of the 240 public interest organizations he studied, 20 percent were headed by women. He also found that although women are much more likely than men to work for nonprofits, they are much less likely to lead them.

40. Casteuble (1997) notes in an article on association executives that women in the top position earned about 61 percent of what men earned but that there was evidence that they
lead smaller organizations. Shaiko (1996, 1997) finds that nonprofits lead by men have larger budgets.

41. Also see James (1989) for a further overview of nonprofits across countries.
REFERENCES


Table 1: Tax-Exempt Organizations Registered with the IRS in 1995

<table>
<thead>
<tr>
<th>Section</th>
<th>Number in 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>501(c)(2) Titleholding Corporations</td>
<td>7,025</td>
</tr>
<tr>
<td><strong>501(c)(3) CHARITABLE AND RELIGIOUS</strong></td>
<td>626,226</td>
</tr>
<tr>
<td>501(c)(4) Social Welfare</td>
<td>139,451</td>
</tr>
<tr>
<td>501(c)(5) Labor, agricultural organizations</td>
<td>66,662</td>
</tr>
<tr>
<td>501(c)(6) Business leagues</td>
<td>75,695</td>
</tr>
<tr>
<td>501(c)(7) Social and recreational clubs</td>
<td>65,501</td>
</tr>
<tr>
<td>501(c)(8) Fraternal and beneficiary societies</td>
<td>92,115</td>
</tr>
<tr>
<td>501(c)(9) Voluntary employees’ beneficiary associations</td>
<td>14,681</td>
</tr>
<tr>
<td>501(c)(10) Domestic fraternal beneficiary societies</td>
<td>21,046</td>
</tr>
<tr>
<td>501(c)(11) Teachers’ retirement funds</td>
<td>11</td>
</tr>
<tr>
<td>501(c)(12) Benevolent life insurance associations</td>
<td>6,291</td>
</tr>
<tr>
<td>501(c)(13) Cemetery companies</td>
<td>9,433</td>
</tr>
<tr>
<td>501(c)(14) State chartered credit unions</td>
<td>5,225</td>
</tr>
<tr>
<td>501(c)(15) Mutual insurance companies</td>
<td>1,185</td>
</tr>
<tr>
<td>501(c)(16) Corporations to finance crop operations</td>
<td>23</td>
</tr>
<tr>
<td>501(c)(17) Supplemental unemployment benefit trusts</td>
<td>583</td>
</tr>
<tr>
<td>501(c)(18) Employee funded pension trusts</td>
<td>3</td>
</tr>
<tr>
<td>501(c)(19) War veterans’ organizations</td>
<td>30,828</td>
</tr>
<tr>
<td>501(c)(20) Legal service organizations</td>
<td>141</td>
</tr>
<tr>
<td>501(c)(21) Black lung trusts</td>
<td>25</td>
</tr>
<tr>
<td>501(c)(22) Multiemployer pension plans</td>
<td>0</td>
</tr>
<tr>
<td>501(c)(23) Veterans’ associations founded prior to 1880</td>
<td>2</td>
</tr>
<tr>
<td>501(c)(24) Trusts described in section 4049 of ERISA</td>
<td>1</td>
</tr>
<tr>
<td>501(c)(25) Holding companies for pensions, etc.</td>
<td>638</td>
</tr>
<tr>
<td>501(d) Religious and apostolic organizations</td>
<td>107</td>
</tr>
<tr>
<td>501(e) Cooperative hospital service organizations</td>
<td>61</td>
</tr>
<tr>
<td>501(f) Cooperative service organizations of operating educational orgs.</td>
<td>1</td>
</tr>
<tr>
<td>521 Farmers’ cooperatives</td>
<td>1,810</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,164,779</strong></td>
</tr>
</tbody>
</table>

Table 2: Industry Classifications, National Taxonomy of Exempt Entities (NTEE)

<table>
<thead>
<tr>
<th>Major Groups (26 of these)</th>
<th>Major Categories (10 of these)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Arts, Culture, and Humanities</td>
<td>I. Arts, Culture, and Humanities</td>
</tr>
<tr>
<td>B. Educational Institutions and Related Activities</td>
<td>II. Education</td>
</tr>
<tr>
<td>C. Environmental Quality, Protection, and Beautification</td>
<td>III. Environment and Animals</td>
</tr>
<tr>
<td>D. Animal Related</td>
<td>III. Environment and Animals</td>
</tr>
<tr>
<td>E. Health – General and Rehabilitative</td>
<td>IV. Health</td>
</tr>
<tr>
<td>F. Mental Health, Crisis Intervention</td>
<td>IV. Health</td>
</tr>
<tr>
<td>G. Disease, Disorders, Medical Disciplines</td>
<td>IV. Health</td>
</tr>
<tr>
<td>H. Medical Research</td>
<td>IV. Health</td>
</tr>
<tr>
<td>I. Crime, Legal Related</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>J. Employment, Job Related</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>K. Food, Agriculture, and Nutrition</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>L. Housing, Shelter</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>M. Public Safety, Disaster Preparedness, and Relief</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>N. Recreation, Sports, Leisure, Athletics</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>O. Youth Development</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>P. Human Services – Multipurpose and Other</td>
<td>V. Human Services</td>
</tr>
<tr>
<td>R. Civil Rights, Social Action, Advocacy</td>
<td>VII. Public, Societal Benefit</td>
</tr>
<tr>
<td>S. Community Improvement, Capacity Building</td>
<td>VII. Public, Societal Benefit</td>
</tr>
<tr>
<td>T. Philanthropy, Voluntarism, and Grantmaking Foundations</td>
<td>VII. Public, Societal Benefit</td>
</tr>
<tr>
<td>U. Science and Technology Research Institutes, Services</td>
<td>VII. Public, Societal Benefit</td>
</tr>
<tr>
<td>V. Social Science Research Institutes, Services</td>
<td>VII. Public, Societal Benefit</td>
</tr>
<tr>
<td>W. Public, Society Benefit: Multipurpose and Other</td>
<td>VII. Public, Societal Benefit</td>
</tr>
<tr>
<td>X. Religion Related, Spiritual Development</td>
<td>VIII. Religion Related</td>
</tr>
<tr>
<td>Y. Mutual/Membership Benefit Organizations, Other</td>
<td>IX. Mutual/Membership Benefit</td>
</tr>
<tr>
<td>Z. Other</td>
<td>X. Unknown</td>
</tr>
</tbody>
</table>

Notes: The NTEE codes are similar to industry codes for firms. The NTEE codes are four characters. There are 26 “Major Groups” which comprise the first digit of the codes. Below each of these 26 groups are two digits of sub-codes with finer organization-type classifications. The final digit is called the “Common Code.” There are a total of 645 unique subgroups. There are 10 “Major Categories” (See column 2 above) which comprise the broadest organization classifications. See Stevenson, Pollak, and Lampkin (1997) Appendix B for more detail on the NTEE.

### Table 3: Sample Means and Standard Errors from 1990 Census Data

<table>
<thead>
<tr>
<th>Demographics</th>
<th>All</th>
<th>Nonprofit</th>
<th>For-Profit</th>
<th>Government</th>
<th>Self Employ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>38.48</td>
<td>40.31</td>
<td>37.65</td>
<td>40.07</td>
<td>43.35</td>
</tr>
<tr>
<td>(0.01)</td>
<td>(0.05)</td>
<td>(0.02)</td>
<td>(0.03)</td>
<td>(0.06)</td>
<td></td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>0.40</td>
<td>0.60</td>
<td>0.39</td>
<td>0.43</td>
<td>0.20</td>
</tr>
<tr>
<td>(0.01)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>0.85</td>
<td>0.86</td>
<td>0.85</td>
<td>0.80</td>
<td>0.93</td>
</tr>
<tr>
<td>(0.0004)</td>
<td>(0.002)</td>
<td>(0.0005)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compensation</th>
<th>All</th>
<th>Nonprofit</th>
<th>For-Profit</th>
<th>Government</th>
<th>Self Employ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Income</strong></td>
<td>27,608.95</td>
<td>26,148.02</td>
<td>26,940.25</td>
<td>26,912.84</td>
<td>44,416.74</td>
</tr>
<tr>
<td>(25.45)</td>
<td>(86.30)</td>
<td>(29.21)</td>
<td>(39.00)</td>
<td>(260.84)</td>
<td></td>
</tr>
<tr>
<td><strong>Hourly Wage</strong></td>
<td>12.37</td>
<td>11.93</td>
<td>12.06</td>
<td>12.55</td>
<td>17.71</td>
</tr>
<tr>
<td>(0.01)</td>
<td>(0.04)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.10)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>All</th>
<th>Nonprofit</th>
<th>For-Profit</th>
<th>Government</th>
<th>Self Employ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Less High School</strong></td>
<td>0.14</td>
<td>0.07</td>
<td>0.17</td>
<td>0.07</td>
<td>0.10</td>
</tr>
<tr>
<td>(0.0004)</td>
<td>(0.001)</td>
<td>(0.0005)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td><strong>High School</strong></td>
<td>0.32</td>
<td>0.19</td>
<td>0.35</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td><strong>Some College</strong></td>
<td>0.30</td>
<td>0.29</td>
<td>0.30</td>
<td>0.31</td>
<td>0.29</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td><strong>College</strong></td>
<td>0.16</td>
<td>0.23</td>
<td>0.14</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>(0.0004)</td>
<td>(0.002)</td>
<td>(0.0005)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td><strong>College Plus</strong></td>
<td>0.08</td>
<td>0.22</td>
<td>0.05</td>
<td>0.17</td>
<td>0.16</td>
</tr>
<tr>
<td>(0.0003)</td>
<td>(0.002)</td>
<td>(0.0003)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector</th>
<th>All</th>
<th>Nonprofit</th>
<th>For-Profit</th>
<th>Government</th>
<th>Self Employ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonprofit</strong></td>
<td>0.06</td>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(0.0003)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
</tr>
<tr>
<td><strong>For-Profit</strong></td>
<td>0.72</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>0.18</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(0.0004)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
</tr>
<tr>
<td><strong>Self-Employed</strong></td>
<td>0.04</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>(0.0002)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
</tr>
</tbody>
</table>

| N                     | 791,964 | 48,397    | 567,797   | 143,049    | 32,721      |

*Source: 1990 PUMS Census 1% sample person’s file.*

*Note: Standard errors are in parentheses. Included only those between ages 16 and 65 inclusive, those with at least $1000 in annual wage and salary income, those working at least 35 usual weekly hours, and those with at least 40 weeks worked last year.*
Table 4: Simple Regressions of Pay on Nonprofit Status

<table>
<thead>
<tr>
<th></th>
<th>Includes all Workers</th>
<th>Includes only Private for Profit and Private Nonprofit (excludes self employed and Government workers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonprofit</td>
<td>-0.13 (0.002)</td>
<td>-0.13 (0.003)</td>
</tr>
<tr>
<td></td>
<td>-0.07 (0.003)</td>
<td>-0.05 (0.003)</td>
</tr>
<tr>
<td>Government</td>
<td>-0.08 (0.002)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>-0.04 (0.002)</td>
<td>—</td>
</tr>
<tr>
<td>Self-Employ</td>
<td>-0.05 (0.003)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>-0.04 (0.003)</td>
<td>—</td>
</tr>
<tr>
<td>Age</td>
<td>0.08 (0.0004)</td>
<td>0.08 (0.004)</td>
</tr>
<tr>
<td></td>
<td>0.06 (0.0003)</td>
<td>0.06 (0.004)</td>
</tr>
<tr>
<td>Age²/100</td>
<td>-0.08 (0.0004)</td>
<td>-0.08 (0.0005)</td>
</tr>
<tr>
<td></td>
<td>-0.06 (0.0003)</td>
<td>-0.06 (0.0004)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.36 (0.001)</td>
<td>-0.37 (0.001)</td>
</tr>
<tr>
<td></td>
<td>-0.30 (0.001)</td>
<td>-0.32 (0.002)</td>
</tr>
<tr>
<td>White</td>
<td>0.11 (0.002)</td>
<td>0.14 (0.002)</td>
</tr>
<tr>
<td></td>
<td>0.07 (0.002)</td>
<td>0.08 (0.002)</td>
</tr>
<tr>
<td>Less than HS</td>
<td>-0.21 (0.002)</td>
<td>-0.21 (0.002)</td>
</tr>
<tr>
<td></td>
<td>-0.13 (0.002)</td>
<td>-0.14 (0.002)</td>
</tr>
<tr>
<td>Some College</td>
<td>0.17 (0.002)</td>
<td>0.17 (0.002)</td>
</tr>
<tr>
<td></td>
<td>0.09 (0.001)</td>
<td>0.09 (0.002)</td>
</tr>
<tr>
<td>College</td>
<td>0.46 (0.002)</td>
<td>0.49 (0.002)</td>
</tr>
<tr>
<td></td>
<td>0.29 (0.001)</td>
<td>0.30 (0.002)</td>
</tr>
<tr>
<td>College Plus</td>
<td>0.65 (0.002)</td>
<td>0.68 (0.002)</td>
</tr>
<tr>
<td></td>
<td>0.47 (0.003)</td>
<td>0.47 (0.003)</td>
</tr>
<tr>
<td>Occupations</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Industries</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Constant</td>
<td>8.22 (0.007)</td>
<td>8.20 (0.008)</td>
</tr>
<tr>
<td></td>
<td>8.39 (311.70)</td>
<td>8.40 (784.09)</td>
</tr>
<tr>
<td></td>
<td>0.335</td>
<td>0.353</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.452</td>
</tr>
<tr>
<td>N</td>
<td>791,964</td>
<td>616,194</td>
</tr>
<tr>
<td></td>
<td>791,964</td>
<td>616,194</td>
</tr>
</tbody>
</table>

Source: 1990 PUMS Census 1% sample person’s file.
Note: Standard errors are in parentheses. Included only those between ages 16 and 65 inclusive, those with at least $1000 in annual wage and salary income, those working at least 35 usual weekly hours, and those with at least 40 weeks worked last year. Omitted categories in the regressions are for-profit workers, men, non-whites, and those with exactly a high school education.
| Table 5: Sample Means and Standard Errors for Pay of Top managers of Nonprofits from IRS Data |
|-------------------------------------------------|------------------|------------------|------------------|------------------|------------------|
| Officer / Director #1                            | 160,098          | 153,591          | 163,463          | 162,832          | 161,708          | 158,509          |
|                                                 | (1,464)          | (2,149)          | (6,376)          | (2,176)          | (2,028)          | (1,879)          |
| Officer / Director #2                            | 122,381          | 117,820          | 124,071          | 124,179          | 124,396          | 121,066          |
|                                                 | (803)            | (1,567)          | (2,287)          | (1,710)          | (1,843)          | (1,512)          |
| Officer / Director #3                            | 111,530          | 107,206          | 114,901          | 112,685          | 112,657          | 110,046          |
|                                                 | (1,052)          | (1,665)          | (4,365)          | (1,693)          | (1,690)          | (1,537)          |
| Employee #1                                      | 112,658          | 113,837          | 110,762          | 112,699          | 115,066          | 111,099          |
|                                                 | (956)            | (2,148)          | (1,557)          | (1,736)          | (2,743)          | (2,097)          |
| Employee #2                                      | 92,242           | 93,946           | 93,968           | 92,715           | 91,099           | 90,229           |
|                                                 | (635)            | (1,432)          | (1,280)          | (1,405)          | (1,346)          | (1,533)          |
| Employee #3                                      | 83,126           | 88,875           | 85,531           | 81,813           | 81,075           | 79,845           |
|                                                 | (973)            | (4,756)          | (1,173)          | (1,242)          | (1,232)          | (1,288)          |

Source: IRS tax form 990 for individual organizations for 1992-6

Note: Standard Errors are in parentheses. (a) Compensation defined as the sum of base pay, benefit plan contributions plus expense accounts. These are broken into separate categories of pay (and by industry) in table 4 below.
Table 6: Pay for Top Managers of Nonprofits by Industry Group

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Number Organizations</th>
<th>Top Officer or Director</th>
<th>Base Pay</th>
<th>Benefits Package</th>
<th>Expense Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Arts, Culture, and Humanities</td>
<td>2,030</td>
<td>117,605</td>
<td>10,412</td>
<td>2,391</td>
<td></td>
</tr>
<tr>
<td>B. Educational Institutions and Related Activities</td>
<td>7,420</td>
<td>125,429</td>
<td>15,143</td>
<td>4,495</td>
<td></td>
</tr>
<tr>
<td>C. Environmental Quality, Protection, and Beautification</td>
<td>423</td>
<td>98,384</td>
<td>9,113</td>
<td>1,607</td>
<td></td>
</tr>
<tr>
<td>D. Animal Related</td>
<td>248</td>
<td>108,363</td>
<td>8,022</td>
<td>2,379</td>
<td></td>
</tr>
<tr>
<td>E. Health – General and Rehabilitative</td>
<td>11,553</td>
<td>187,382</td>
<td>20,064</td>
<td>3,369</td>
<td></td>
</tr>
<tr>
<td>F. Mental Health, Crisis Intervention</td>
<td>554</td>
<td>109,327</td>
<td>10,453</td>
<td>1,040</td>
<td></td>
</tr>
<tr>
<td>G. Disease, Disorders, Medical Disciplines</td>
<td>424</td>
<td>159,196</td>
<td>15,918</td>
<td>2,821</td>
<td></td>
</tr>
<tr>
<td>H. Medical Research</td>
<td>376</td>
<td>205,025</td>
<td>19,020</td>
<td>6,581</td>
<td></td>
</tr>
<tr>
<td>I. Crime, Legal Related</td>
<td>124</td>
<td>99,777</td>
<td>8,063</td>
<td>1,576</td>
<td></td>
</tr>
<tr>
<td>J. Employment, Job Related</td>
<td>257</td>
<td>108,255</td>
<td>11,972</td>
<td>2,656</td>
<td></td>
</tr>
<tr>
<td>K. Food, Agriculture, and Nutrition</td>
<td>65</td>
<td>80,771</td>
<td>7,178</td>
<td>1,507</td>
<td></td>
</tr>
<tr>
<td>L. Housing, Shelter</td>
<td>522</td>
<td>72,092</td>
<td>4,177</td>
<td>946</td>
<td></td>
</tr>
<tr>
<td>M. Public Safety, Disaster Preparedness, and Relief</td>
<td>39</td>
<td>161,908</td>
<td>18,295</td>
<td>2,138</td>
<td></td>
</tr>
<tr>
<td>N. Recreation, Sports, Leisure, Athletics</td>
<td>268</td>
<td>108,054</td>
<td>9,548</td>
<td>3,373</td>
<td></td>
</tr>
<tr>
<td>O. Youth Development</td>
<td>383</td>
<td>89,048</td>
<td>8,297</td>
<td>1,119</td>
<td></td>
</tr>
<tr>
<td>P. Human Services – Multipurpose and Other</td>
<td>3,261</td>
<td>94,855</td>
<td>8,195</td>
<td>1,661</td>
<td></td>
</tr>
<tr>
<td>Q. International, Foreign Affairs, and National Security</td>
<td>402</td>
<td>126,566</td>
<td>14,535</td>
<td>3,121</td>
<td></td>
</tr>
<tr>
<td>R. Civil Rights, Social Action, Advocacy</td>
<td>53</td>
<td>122,724</td>
<td>7,961</td>
<td>4,685</td>
<td></td>
</tr>
<tr>
<td>S. Community Improvement, Capacity Building</td>
<td>388</td>
<td>115,513</td>
<td>9,632</td>
<td>2,139</td>
<td></td>
</tr>
<tr>
<td>T. Philanthropy, Voluntarism, and Grantmaking Foundations</td>
<td>1873</td>
<td>109,006</td>
<td>8,280</td>
<td>1,302</td>
<td></td>
</tr>
<tr>
<td>U. Science and Technology Research Institutes, Services</td>
<td>401</td>
<td>188,523</td>
<td>19,431</td>
<td>3,994</td>
<td></td>
</tr>
<tr>
<td>V. Social Science Research Institutes, Services</td>
<td>80</td>
<td>165,509</td>
<td>23,447</td>
<td>2,649</td>
<td></td>
</tr>
<tr>
<td>W. Public, Society Benefit: Multipurpose and Other</td>
<td>170</td>
<td>164,847</td>
<td>27,383</td>
<td>1,096</td>
<td></td>
</tr>
<tr>
<td>X. Religion Related, Spiritual Development</td>
<td>383</td>
<td>72,315</td>
<td>7,260</td>
<td>5,446</td>
<td></td>
</tr>
<tr>
<td>Y. Mutual/Membership Benefit Organizations, Other</td>
<td>280</td>
<td>101,249</td>
<td>11,385</td>
<td>1,335</td>
<td></td>
</tr>
<tr>
<td>Z. Other</td>
<td>167</td>
<td>111,303</td>
<td>10,625</td>
<td>984</td>
<td></td>
</tr>
</tbody>
</table>

Source: IRS tax form 990 for individual organizations for years 1992-5

Notes: Total of 24,626 organization years represented. The rows represent the 26 major categories of the National Taxc (NTEE).
Figure 1. Hansmann’s Model of Screening

\[ Q \quad U^C = U^C(\hat{W}, 0) \quad U^G = U^G(\tilde{W}, 0) \]