

The Organizational Architecture of Nonprofit Governance: Economic Calculation within an Ecology of Enterprises

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Abstract

This paper treats nonprofit firms as elements within the ecology of enterprises that constitute an economy. Within this ecological framework, nonprofit governance must to a significant extent be guided by economic signals generated through market competition. After we examine the problems of economic calculation that nonprofit enterprises face, we consider the organizational logic of nonprofit firms as one that is driven by the creation of points of contact with the market economy. The operation of this logic creates some general limit on the range and size of nonprofit firms, and also presents issues of governance that differ from those faced by profit-seeking firms. Subsequently, we use our conceptual framework to illuminate some issues concerning the organization of nonprofit firms.

Keywords: agency, economic calculation, entrepreneurship, governance, nonprofit firms.

JEL codes: D23, G32, J31, L31, M13

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For the most part, the recent and rapidly growing literature on nonprofit firms has sought to explore the impact of nonprofit firms on the Pareto efficiency of market relationships. One strand of this literature claims that nonprofit firms are technically inefficient due to the absence of residual claimancy, a claim that finds its conceptual moorings in Alchian and Demsetz (1972). Whether nonprofits are thought to lack owners altogether, as illustrated by Hansmann (1988), or whether the emphasis is placed on the diffuse character of ownership, as represented by Sloan (2000), the ill-defined ownership of nonprofit firms leads to technical inefficiency. A second strand of literature explores the possible allocative inefficiencies that might result because nonprofit firms maximize something other than profit. For instance, Steinberg (1986) models allocative inefficiency as arising from output maximization, while Smith, Clement, and Wheeler (1995) model it as arising from quality maximization. By no means does all such scholarship support claims of nonprofit inefficiency. For instance, Weisbrod (1988) advances a form of ecological perspective wherein nonprofit firms arise in places and settings where they have efficiency advantages relative to profit-seeking firms. Kuan (2001) suggests that nonprofit firms can achieve greater total surplus than profit-seeking firms, while Pauly and Redish (1973) argue that nonprofit firms can serve as façades for their profit-seeking owners. Furthermore, (Glaeser, 2003) suggests that competition can render nonprofit firms efficient despite their absence of explicit residual claimancy.

We do not seek here to contribute directly to this exploration of the Pareto efficiency of nonprofit enterprise. We seek instead to locate nonprofit enterprises within the overall organizational ecology of enterprises that comprise an economic order. There is no market for ownership shares in nonprofit firms, which creates problems of economic calculation. Yet nonprofit firms are able to compete effectively against profit-seeking firms, as Thomsen and Rose (2004) observe. Pursuing an insight articulated by Maffeo Pantaleoni (1911), we argue that the competitive ability of nonprofit firms rests importantly on the creation of points of contact with the market economy to facilitate economic calculation. Nonprofit firms thus bear a parasitical relationship to profit-seeking firms, which in turn presents issues of governance that differ from those faced by profit-seeking firms. Subsequently, we use our conceptual framework to illuminate some issues concerning the organization of nonprofit firms.

THE ENTREPRENEURIAL CREATION OF NONPROFIT ENTERPRISES

While it is possible analytically to start from the observed existence of nonprofit firms and examine their economic properties relative to those of profit-seeking firms, a fuller understanding of the place of nonprofit firms within the overall ecology of enterprises that constitute modern societies must also address the creation of nonprofit enterprises. People invest capital in nonprofit enterprises when they could have invested that capital in profit-seeking enterprises. A central principle of economic theory involves the claim that investment in profit-seeking firms tends to produce an allocation of capital

whereby net returns are equalized across investment opportunities. How can investment in nonprofit enterprises be incorporated into this theoretical orientation? In a purely formal way, it could be claimed that investment in nonprofit enterprise yields anticipated utility returns, and with equilibrium requiring that the anticipated net utility from the marginal unit of capital invested in a nonprofit enterprise equaling the net utility derived from the anticipated net return from the marginal unit of capital invested in a profit-seeking enterprise.

In taking this formal approach, the nonprofit form of economic organization is assimilated in hedonic fashion to the profit-seeking form. We do not object to this procedure as one type of thought experiment; however; by reducing the nonprofit enterprise to just another profit-seeking enterprise, the substantive question of why an entrepreneur might chose one form over the other is evaded. This entrepreneurial choice surely involves a belief that this form is more suitable than the profit-seeking form. So the question of why an entrepreneur might choose to create a nonprofit firm instead of creating a profit-seeking firm remains to be faced. In some manner, the creation of a non-profit firm must allow an entrepreneur to achieve something that he could not achieve through a profit-seeking firm.¹

In one fashion or another, such an entrepreneur is seeking to change the architectural pattern of outcomes that are generated within the market economy. An entrepreneur could create a profit-seeking museum devoted to Etruscan art,

¹ For treatments of nonprofit entrepreneurship, see Auteri (2003) and Badelt (1997). For a recognition of the challenges that the formation of nonprofit firms pose to models based on homo economicus assumptions, see Rose-Akerman (1996). For a treatment of nonprofit firms as a superior form of profit seeking under particular circumstances, see Glaeser and Schleifer (2001).

but chooses instead to organize the museum as a nonprofit enterprise. In taking this tack, the nonprofit entrepreneur is effectively challenging the substantive economic outcomes generated within the market economy, in particular in this case by rejecting the degree of awareness and knowledge of Etruscan art that would be generated through the activities of profit-seeking firms within the market economy. By choosing to create a nonprofit museum, the entrepreneur is seeking to change the substantive pattern of economic activity from what a pure market economy would have generated.

It is simple enough to model the nonprofit firm as arising out of some entrepreneurial desire to provide subsidies for activities of his choosing. The entrepreneur would thus offer a variable matching grant to customers, where the entrepreneurial grant covers the portion of cost not covered by direct charges to customers. Indeed, this is a simple and direct way to conceptualize the creation of nonprofit firms, in that it maintains close points of contact with the corpus of economic theory. On the demand side of the market, the nonprofit firm increases the amount of the service demanded by lowering the price that consumers must pay. Matters are not quite so simple on the supply side because the absence of a market for ownership shares in nonprofit firms could weaken managerial incentives to govern corporate assets efficiently. The bulk of our examination will focus on these matters of internal organization and governance on the supply side of the market.

While we think there is analytical merit in the formal simplicity of reducing nonprofit firms to profit-seeking firms that have subsidies attached to their

operation, we also think there is merit in locating nonprofit firms as market-generated arenas of societal contestation. Samuel Bowles and Herbert Gintis (1993) explore a wide variety of contested exchanges within society, and we think nonprofit enterprises can be assimilated to such societal processes of contestation. In a related setting, Carolyn Webber and Aaron Wildavsky (1986) argue that budgetary processes are deeply implicated in on-going societal contests over how people shall conduct their lives. While nonprofit enterprises are not normally thought of as areas of contest, unlike courtrooms or legislative assemblies, they nonetheless likewise operate as arenas of contestation over the substantive characteristics of societies, though this perhaps only becomes apparent when considered in light of the profit-seeking alternative to the creation of nonprofit enterprises.

There is a certain ironic quality to the creation of nonprofit enterprises. They emerge within the market economy, and yet operate as agents of substantive change to create a different societal landscape from what would be generated within an economy that was organized wholly through profit seeking firms. There would be no reason for an entrepreneur to create a nonprofit enterprise if he were wholly content with the societal outcomes generated through the market economy. One entrepreneur might desire to subsidize the viewing of Etruscan artifacts, another might want to provide high-quality schooling for orphaned children, and a third might choose to promote research into Alzheimer's. In all such cases, the entrepreneurial desire to subsidize

particular substantive activities through the creation of nonprofit firms involves some margin of rejection of market-generated patterns of outcome.

NONPROFIT PARASITISM AND ECONOMIC CALCULATION

While Ludwig von Mises (1920) is widely credited with having articulated the impossibility of economic calculation in a wholly collectivized economy, a similar claim had earlier been articulated by Maffeo Pantaleoni (1911).² Pantaleoni recognized that the financing of political enterprises through taxation creates a system of political pricing that cannot exist independently but can only exist parasitically attached to the system of market prices generated by profit-seeking enterprises. It should be noted that Pantaleoni used parasitical in a wholly technical sense. In the natural world, there are numerous parasitical relationships that are beneficial to host and parasite alike. The technical point is simply that a parasite cannot exist independently of its host, and this is true regardless of whether the parasite is harmful or beneficial to the host. In Pantaleoni's formulation, political enterprises could not engage in economic calculation without the presence of market prices.

There is much merit in keeping Pantaleoni's formulation in mind when addressing the governance of nonprofit firms within the overall ecology of enterprises that comprise contemporary, Western-style economies. Without that framework of market pricing, nonprofit firms would not be able to engage in the various types of economic calculation that would allow them to expand beyond

² For an exposition of Pantaleoni's argument, see Wagner (1997).

relatively simple, primitive forms of economic organization. Although the creation of a nonprofit firm entails an entrepreneurial effort to displace what would otherwise be market outcomes, the parasitical relationship of nonprofit firms to the market economy nonetheless renders nonprofit firms dependent for calculational guidance on the market nexus generated by profit-seeking firms.

Some simple illustrations might help to convey this point. Suppose a museum must choose how to allocate its exhibition space between painting and sculpting. It is simple to state the allocation principle for a profit seeking firm: allocate space so as to equalize the net revenue generated per square foot as between painting and sculpting. For a nonprofit firm that charges no admission, however, no such calculational signals are generated. For calculation to be possible, some semblance of market pricing must be introduced. The more fully such market prices are used as calculational aids, however, the more fully the nonprofit firm loses its nonprofit character.

The market demand for particular programs is, of course, just one item within the menu of calculational problems that firms face. The value of managerial talent is another. For a profit-seeking firm, an increase in managerial talent is worthwhile so long as the capitalized cost of securing that talent is less than the additional firm value that such talent creates. Nonprofit firms, however, have no direct market value, although there is always a value that a nonprofit firm can obtain for its various assets. Even here, however, these efforts at virtual firm valuation are indirect imputations whose magnitudes are derived from market valuations, reflecting once again the parasitical position of nonprofit firms within

the market economy. The evaluation of managerial talent, moreover, gets into the organization of team production that we now consider.

AGENCY AND THE GOVERNANCE OF NONPROFIT TEAMS

Nonprofit firms entail processes of team production just as fully as do profit-seeking firms. For profit-seeking firms, the creation of effective teams is facilitated in several ways through the existence of a market for shares of corporate ownership. Henry Manne (1965) explains how corporate inefficiency provides opportunities for capital gains to entrepreneurs who gain control of such firms and manage them efficiently. Meckling and Jensen (1976) place corporate governance within the framework of agency theory. Furthermore, Fama (1980) explores how the market for corporate management creates a direct relationship between managerial compensation and a firm's net worth. Subsequent literature has painted a portrait of a general tendency for effective team production along with various particular circumstances where claims of efficiency are problematical.

A nonprofit firm faces the same challenges of securing effective team production as a profit-seeking firm faces, only it lacks the capital-market tools that are available to profit-seeking firms. These challenges can be illustrated with reference to the problems that would be faced by the aforementioned entrepreneur who chose to establish a nonprofit museum devoted to promoting knowledge of Etruscan culture within a society. In choosing how much wealth to devote to the museum relative to other activities, the entrepreneur faces formally

a problem of consumer choice; the amount of wealth he donates to the museum will vary directly with the value he places upon the museum's activities. At this stage, the entrepreneur faces a problem of consumer choice but not one of team production. For a small museum of limited duration, this situation could continue indefinitely.

Problems of team production arise only if the museum is large enough to require formal arrangements of corporate governance, as well as possessing a corporate life that extends beyond that of the entrepreneur. Problems of agency arise at several points within the organizational logic of the nonprofit firm. The first point concerns the focal point that serves to orient corporate governance. For profit-seeking firms, that focal point is the net worth of the firm. A profit-seeking museum may have one executive in charge of painting, another in charge of sculpture, and a third in charge of such transitory activities as lectures and short-term exhibitions. It is reasonable to think of each executive as having a particularly strong interest in his or her domain of interest. It is likewise reasonable to think that differences of opinion would sometimes exist within the executive boardroom about the relative values of different activities. After all, the contribution of different possible museum activities to net worth won't be revealed until some future moment, and it is reasonable to expect to find differences of opinion about different possible projects. That difference of opinion, however, relates to a common object, namely the value of the enterprise, or at least it does to the extent that compensation schemes create genuine team production, as noted in De Angelo (1981) and Makowski (1983). The perhaps special

attachment that the executive in charge of special programs holds for his programs will be tempered by the focus on firm net worth that the firm's compensation scheme creates.

The situation changes for the nonprofit museum. There is no market-generated net worth for the firm that can serve as a focal point for appraising firm performance. The museum becomes an aggregate of programs directed by different executives, but without a common focal point that maps into some such observable entity as a market valuation of the firm. Yet nonprofit firms do govern themselves successfully, which implies that they must be able to develop some alternative focal point that serves to guide corporate governance. In some manner or other, they are able to create effective team production without having recourse to the capital market tools that are available to facilitate the governance of profit-seeking firms.

For nonprofit firms to govern themselves, they must create some focal point of common orientation in place of the focus on firm net worth that guides economic calculation within profit-seeking firms. These focal points will generally be specific to the contexts within which different nonprofit enterprises operate. Our interest does not lie in any effort to describe or illustrate such focal points, but only to note that they are required for organizational calculation. Several implications follow for the differences between nonprofit and profit-seeking firms. One is that homogeneity of value or preference is more important for nonprofit governance than it is for profit-seeking governance. So, too, is the articulation of what is called vision, for the vision that orients economic calculation by nonprofit

firms must contain a vector of characteristics that cannot be reduced to a scalar measure of net worth. In consequence, economic calculation is surely more difficult and controversial for nonprofit firms than it is for profit-seeking firms. Our expectation is that successful nonprofit firms will be able to make relatively strong use of market-generated information in making their economic calculations.

GOVERNING BOARDS

It is easy enough to think of corporate governance from the perspective of a theory of agency because of the focal character of value maximization. No such focal point exists for nonprofit firms. The governance of nonprofit firms cannot be oriented around this scalar magnitude, but rather must be addressed in terms of some vector of characteristics or attributes. Some models seek to impose some such alternative scalar as output maximization or quality maximization, but this is done to remain within a calculus of maximization and not because of its compelling power.

The absence of a sharp focal point has several implications for nonprofit governance. Organizational unity is brought about not by a common interest in value maximization but by a shared set of values concerning the activities of the nonprofit firm. Quite a lot of heterogeneity can be brought into focus when people share in the net worth generated through a firm's activities. When there is no such net worth to share, the principals who oversee the firm might not use the same standards of appraisal. This surely places a greater burden on the selection of board members in terms of the substantive character of their

orientations towards the firm's activities. It also probably means that such firms will tend to be more limited in size, due to the limiting features that is required by substantive homogeneity over values in place of the nominal homogeneity that is sufficient for profit-seeking firms. To be sure, some nonprofit firms have achieved large size by any standard, as illustrated by the Roman Catholic Church and the International Red Cross.

The governing board is clearly the primary internal mechanism for controlling managerial agency problems in non-profit organizations. Nonprofit boards are either elected by the members of the organization (if the organization has members) or are self-perpetuating (new board members are approved by existing board members). While monitoring by donors and customers can also impose disciplinary pressure on nonprofit managers, free-riding incentives and poor information limit the effectiveness of donor and customer monitoring in many organizations. Further, donors and customers do not have legal standing to file derivative lawsuits against managers on behalf of the organization. Internal managers play a prominent role on the boards of most for-profit organizations. Fama and Jensen (1983) argue that the lack of alternative control devices implies that the optimal nonprofit board is more separated from management than for the typical for-profit corporation. They correspondingly assert that nonprofit boards generally include few if any internal agents as voting members to guard against managerial expropriation of organizational resources. While we do not dispute this claim, we would also note the additional layer of complexity that is entailed in the application of agency theory to nonprofit firms,

due to the absence of transferable ownership. However it is accomplished, effective nonprofit firms will be those whose conduct could be reduced to explanation in terms of some form of maximization, where the commonality of values among board members can be represented by agreement on imputed values for the firm's different activities.

While our interest is in simply trying to understand the calculational problems of nonprofit firms without seeking to invoke some standard of Paretian efficiency, the current nonprofit literature reveals two distinct tacks regarding the efficiency of nonprofit governance. One tack treats agency relationships within nonprofit firms as being even more problematic than they are in for-profit firms. For instance, Herzlinger (1996) and Steinberg (1990) argue that due to the lack of ownership incentives and the existence of complex, hard-to-define objective functions, the performance of managers is hard to measure and the Board of Directors lacks effective control mechanisms. To similar effect, Glaeser (2003) argues that one of the implications of this weak governance of nonprofits is that workers will influence, and possibly subvert the behavior and goals of the organization. To the extent nonprofits are dependent on donations, however, donor preferences become weighted more heavily relative to worker preferences.

In contrast, Fama and Jensen (1983) and Williamson (1983) claim that large donors or independent, outside members of the board of directors can perform the role of residual claimant and are motivated enough to monitor and control the activities of the management. Preya and Pink (2001) even argue that the nonprofit firm can help to resolve agency problems due to information

asymmetry between managers and boards of directors. Without entering the discussion of whether agency problems are more or less severe in nonprofit firms, it seems apparent both that they do face agency-related problems and that they are able to create effective team production without possessing the capital market tools that profit-seeking firms possess.

MANAGERIAL RECRUITMENT AND COMPENSATION

Our limited understanding of the internal operation of nonprofit firms constitutes a major gap in our knowledge about such forms of economic organization. If we ask what keeps the managers of profit-seeking corporations from transferring corporate wealth into their personal accounts, we get a number of answers, most of them connected in one way or another to the capital market, which is a market that does not operate directly for nonprofit firms. For one thing, lower earnings translate into lower share prices, which might elicit outside takeovers. There can also be internal change through dissident stockholders, as well as through action by Directors. In all such cases, the central point of contention is a claim about the future value of the corporation, which is something that does not exist for nonprofit firms. Regardless of organizational form, there will be some opportunity and temptation to transform corporate into personal assets. This could take the form of higher salaries, longer vacations, or paying too much for materials as a way of rewarding friends and associates. Regardless of specific example, there are both internal and external controls on

these situations, and nearly all of these are connected to the equity value of the firm.

Nonprofit firms confront the same situation, only the equity value of the firm can do no work in this respect. Hence, the control of agency must work by alternative means, by proxies of one type or another. Some of these might have close market substitutes; for instance, the market for executive talent, as noted by Fama (1980). There is some argument and evidence about profit-seeking firms and how good executive performance increases future earnings for such managers. This relationship points to the market for nonprofit managers as a possible means by which managerial efficiency is selected, even though managerial efficiency cannot be assimilated to some notion of value maximization

Under the assumption that the for-profit agency theory is correct and applicable to the nonprofit context, a number of scholars have tried to test empirically whether there is a relation between measures of a nonprofit's performance and the compensation package of its managers. A recent example of such an empirical analysis is Brickley and Van Horn's (2002) examination of the relationship between performance and turnover and compensation of chief executive officers in a sample of both nonprofit and for-profit hospitals. Their results suggest that there is little difference between managerial incentives in the two types of hospitals. In both the nonprofit and the for-profit hospitals, the CEO's compensation was significantly related to performance of financial measures and not to measures of more altruistic activities. They find that the

relationship between CEO pay and measures of economic performance is as strong in nonprofit hospitals as in for-profit hospitals. They also tested the possibility that the emphasis on financial performance could be due to competition that forces the nonprofit to focus on survival, but their results did not support this argument.

Preyra and Pink (2001) examined managerial compensation in hospitals in Ontario, and found that CEOs in publicly traded firms earned twice as much, on average as those in similarly sized nonprofit hospitals, but also bore about eight times the income variance. Baber, Daniel and Roberts (2002) found that changes in the compensation of managers of charitable organisations are positively associated with changes in spending on programs that enhance the charitable mission. Because of the hard-to-observe objectives of nonprofits, Roomkin and Weisbrod (1999) hypothesize that nonprofit organizations, as compared to for-profit firms, will use less performance-based compensation for their employees. Among their findings is that pay is higher in the for-profit sector and that the composition of pay (base pay versus bonus) differs by organizational form. They find that bonuses are larger in size in the for-profit sector. They therefore conclude that for-profit hospitals provide stronger incentive to managers than nonprofit hospitals. In an attempt to determine the objectives of a nonprofit organisation, Erus and Weisbrod (2003) study the structure of the employees' compensation plans in different organizational types. Overall, their results support the hypothesis that nonprofits use weaker incentives that are less

tied to observable performance. They also find limited evidence of different behaviour between religious and secular nonprofits.

Other empirical work concentrates more on the role and the composition of the Board of Directors. Because nonprofits cannot distribute their earnings, Brody (1996) argues that nonprofits have no principals at all and so lack ownership incentives to monitor the work of the managers. Putterman (1993) similarly argues that nonprofit firms do not have owners in the ordinary sense of ownership as the right of utilization, the right to the product, and the right to alienate. Still, the Board of Directors can exercise the right to monitor and control, which allows it to act in some fashion as a fiduciary of the sponsors and donors, thereby playing a role of principal.

It is possible to argue that by working for a lower salary, nonprofit managers post a form of performance bond. Managers derive utility from the firm's activities, and the greater its success the higher that utility. This arrangement has some features of a program of deferred compensation. The manager accepts lower-than-market compensation today, due to the utility value placed on the nonprofit firm's activities. The value of the total compensation package will depend on the future successfulness of the firm, which is partly under managerial control. In this respect, Preston (1989) analyses the earnings of American white-collar workers of different sectors. These results support the hypothesis that nonprofit employees are prepared to earn less because they have other preferences than income. Although other-than-profit preferences can explain the lower wages in the nonprofit sector, other explanations are also

possible. For instance, a selection bias toward low quality workers in the nonprofit sector could also explain the lower wages. In this respect, Goddeeris (1988) uses the same data set as Weisbrod (1983) but controls for self-selection into the different sectors. When the model accounts for self-selection, nonprofit lawyers do not appear to receive significantly lower wages. Furthermore, Mocan and Tekin (2003) find to the contrary that wages are higher in the nonprofit sector.

Taking a different tack, Young (1997) finds that nonprofit entrepreneurs more frequently describe their motivation in such terms as “pride of accomplishment”, “search for personal identity”, and “need for autonomy and independence” than do profit-seeking entrepreneurs. Some authors (e.g. Handy and Katz (1998)) argue that there exists a kind of self-selection process whereby nonprofit enterprises attract committed managers, which mitigates agency problems. This formulation presumes that these managers have some kind of intrinsic altruistic motivation to pursue the objectives of the organization. If this is so, some caution must be exercised in extending the findings of agency theory developed in a profit-seeking context to nonprofit enterprises. As Kreps (1997, p. 362) formulates the problem, “explicit extrinsic incentives that are imposed may fight rather than complement pre-existing incentives.”

CONCLUSION

The governance of nonprofit firms presents intriguing challenges for economic theorizing. The nonprofit sector is large and persistent, so nonprofit

firms are obviously able to govern themselves effectively. Yet nonprofit firms do not possess the full range of calculational tools that profit-seeking firms possess, for many of those tools are fashioned through the operation of capital markets, either directly, as in the case of corporate takeovers, or indirectly, as in the incentives created through programs of managerial compensation. Our thesis is that successful nonprofit firms are those that are able to secure sufficient calculational guidance from the price signals emitted through the profit-seeking activities of market-based firms. We thus close on a bit of an ironic note: nonprofit firms emerge out of the market economy in an effort to do something different than what the market economy allows, and yet the ability of such nonprofit firms to succeed requires that they stay in close proximity to the pricing signals emitted through the interactions among profit-seeking firms.

References

- Auteri, M., 2003. "The Entrepreneurial Establishment of a Nonprofit Organization." *Public Organization Review*, 3: 171-89.
- Alchian, A. A. and H. Demsetz, 1972. "Production, Information Costs, and Economic Organization." *American Economic Review*, 62: 777-95.
- Badelt, C. 1997. "Entrepreneurship Theories of the Nonprofit Sector." *Voluntas* 8: 162-178.
- Baber, W. R., P L.Daniel and A. A. Roberts. 2002. "Compensation to Managers of Charitable Organizations: An Empirical Study of the Role of Accounting Measures of Program Activities." *The Accounting Review* 77: 679-93.
- Bowles, S. and H. Gintis 1993. "The Revenge of Homo Economicus: Contested Exchange and the Revival of Political Economy." *Journal of Economic Perspectives* 7: 83-102.
- Brickley, J. A. and R. L.Van Horn. 2002. "Managerial Incentives in Nonprofit Organizations: Evidence from Hospitals." *Journal of Law and Economics*, 45: 227-249.
- Brody, E. 1996. "Agents without Principals: The Economic Convergence of the Nonprofit and For-Profit Organisational Forms." *New York Law School Review*, 40: 457-535.
- De Angelo, H. 1981. "Competition and Unanimity," *American Economic Review*, 71: 18-27.
- Erus, B. and B. A. Weisbrod, 2003. "Objective Functions and Compensation Structures in Nonprofit and For-Profit Organizations." In *The Governance of Not-for-Profit Organizations*, ed. By E. L. Glaeser, (Chicago: University of Chicago Press, 2003), pp. 117-42.
- Fama, E. F. 1980. "Agency Problems and the Theory of the Firm." *Journal of Political Economy* 88: 288-307.
- Fama, E.F. and M.C.Jensen.1983. "Agency Problems and Residual Claims." *Journal of Law and Economics*, 26: 327-349
- Glaeser E.L., 2003. "Introduction". In *The Governance of Not-for-Profit Organizations*, ed. By E. L. Glaeser, (Chicago: University of Chicago Press, 2003), pp. 1-43.
- Glaeser, E. L. and A. Schleifer 2001. "Not-for-Profit Entrepreneurs." *Journal of Public Economics* 81: 99-115.

- Goddeeris J. H., 1988. "Compensating Differentials and Self-Selection: An Application to Lawyers", *Journal of Political Economy*, 96: 411-428
- Handy, F. and E. Katz, 1998. "The Wage Differential between Nonprofit Institutions and Corporations: Getting More by Paying Less?" *Journal of Comparative Economics*, 26: 246-61
- Hansmann, H. 1988. "Ownership of the Firm." *Journal of Law, Economics, and Organization*, 4: 267-304
- Herzlinger, R.E. 1996. "Can Public Trust in Nonprofits and Governments Be Restored." *Harvard Business Review*, pp. 97-107
- Kreps, D. M., 1997. "Intrinsic Motivation and Extrinsic Incentives." *American Economic Review*, Proceedings 87: 359-364
- Kuan, J., 2001. "The Phantom Profits of the Opera: Nonprofit Ownership in the Arts as a Make-Buy Decision," *Journal of Law, Economics, and Organization*, 17(2).
- Makowski, L. 1983. "Competition and Unanimity Revisited," *American Economic Review* 73: 329-39.
- Manne, H. G. 1965. "Mergers and the Market for Corporate Control." *Journal of Political Economy* 73: 10-20.
- Meckling, W. H. and M.C. Jensen 1976. "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure." *Journal of Financial Economics* 3: 305-60.
- Mises, L. von. 1920. "Economic Calculation in the Socialist Commonwealth." Reprinted in F. A. Hayek, (ed.) *Collectivist Economic Planning* (London: George Routledge and Sons, 1935) pp. 87-130.
- Mocan, H. and E. Tekin, 2003. "Nonprofit Sector and Part-Time Work: An Analysis of Employer-Employee Matched Data on Child Care Workers." *Review of Economics and Statistics*, 85: 38-50
- Norton E.C. and D. O. Staiger, 1994. "How Hospital Ownership Affects Access to Care for the Uninsured." *RAND Journal of Economics*, 25: 171-85
- Pantaleoni, M., 1911. "Considerazioni sulle proprietà di un sistema di prezzi politici," *Giornale degli Economisti* , 42: 9-29 and 114-33.
- Pauly M.V. and M.R. Redish, 1973. "The Not-For-Profit Hospital as a Physicians Cooperative." *American Economic Review*, 63: 87-99
- Preston A. E, 1989. "The Nonprofit Worker in a For-Profit World." *Journal of*

Labor Economics 7: 438-463

- Preyra, C. and G. Pink 2001. "Balancing Incentives in the Compensation Contracts of Nonprofit Hospital CEOs." *Journal of Health Economics* 20: 509-25
- Putterman, L. 1993. "Ownership and the Nature of the Firm." *Journal of Comparative Economics* 17: 243-63.
- Roomkin, M. J. and B. A. Weisbrod. 1999. "Managerial Compensation and Incentives in For-Profit and Nonprofit Hospitals." *The Journal of Law, Economics and Organization* 15: 750-81.
- Rose-Ackerman, S. 1996. "Altruism, Nonprofits and Economic Theory." *Journal of Economic Literature* 34: 701-728.
- Sloan F. 2000. "Not-for-profit Ownership and Hospital Behavior." in A. J. Culyer and J. P. Newhouse, eds. *Handbook of Health Economics*, vol. 1B, North Holland, Elsevier, p. 1141-1174
- Smith, D.G., J.P. Clement, and J.R. Wheeler, 1995. "Philanthropy and Hospital Financing." *Health Services Research*, 30: 615-35
- Steinberg, R. 1986. "The Revealed Objective Functions of Nonprofit Firms" *Rand Journal of Economics*, 17: 508-526
- Steinberg, R. 1990. "Profits and Incentive Compensation in Nonprofit Firms." *Nonprofit Management and Leadership*, 1:137-151
- Thomsen, S. and Rose, C. 2004. "Foundation Ownership and Financial Performance: Do Companies Need Owners?" *European Journal of Law and Economics* 18: 343-64.
- Wagner, R. E. 1997. "Parasitical Political Pricing, Economic Calculation, and the Size of Government: Variations on a Theme by Maffeo Pantaleoni." *Journal of Public Finance and Public Choice* 15: 135-46.
- Webber, C. and A. Wildavsky 1986. *A History of Taxation and Expenditure in the Western World*. New York: Simon and Schuster.
- Weisbrod, B. A. 1988. *The Nonprofit Economy*. Cambridge: Harvard University Press.
- Weisbrod, B. A. 1983. "Nonprofit and Proprietary Sector Behavior: Wage Differentials among Lawyers." *Journal of Labor Economics*, 1: 246-63.
- Williamson O. E., 1983. "Organization Form, Residual Claimants, and Corporate Control." *Journal of Law and Economics*, 26: 351-66

Young, D. R. 1997. "The First Seven Years of Nonprofit Management and Leadership." *Nonprofit Management and Leadership*, 8: 193-201