

**For-Profit, State, and Nonprofit:
How to Cut the Pie among the Three Sectors***

by

Avner Ben-Ner**

First version: September 2003
Revised: February 2004

*I am grateful to Bernard Gazier and participants at the Centre Saint-Gobain for Economic Studies Conference, *Public Sector, Private Sector: New National and International Frontiers* (Paris, October 2-3, 2003) for helpful comments.

**Professor and Director, Industrial Relations Center, Carlson School of Management, University of Minnesota, abenner@csom.umn.edu.

**For-Profit, State, and Nonprofit:
How to Cut the Pie among the Three Sectors**

Avner Ben-Ner

I. Introduction

What is the best way to deliver various goods and services in the advanced complex economy? What is the appropriate division of labor among the state, the private for-profit, and the nonprofit sectors? This essay explores these questions relative to the well-being of consumers, and offers a set of broad answers grounded in the analysis of the relations between different types of organization and their consumers, and the internal organization of these types of organization. Around the turn of the twenty-first century, economic activity was divided among the for-profit, state, and nonprofit sectors in a few large advanced economies in these ways: for-profit firms employed the vast majority of workers in the economy, from almost two-thirds in France to about three-quarters in Germany, the United Kingdom, and the United States; government organizations (enterprises and agencies) at various levels employed as little as 15% of workers in the US to as much as almost one-third in France; whereas nonprofit organizations employed as little as 5% in France and Germany to nearly 9% in the US. The shares of the three sectors changed during the previous two decades, with the state shrinking and the other two sectors growing.¹

The experience of developed market economies like France, Germany, UK, and US illustrates that both government organizations and for-profit firms can produce and deliver just about any good or service, including ammunitions, airplanes, cars, building products, banking and other financial services, insurance, sports clubs, water, electricity, postal services, internet, arts and culture, medical services, research, prisons, public

¹ Sources: World Bank, World Development Indicators, and OECD National Accounts. The role of the state in the allocation of resources is greater than these figures suggest because of the state's ability to raise revenues from taxes, then to allocate them for production of goods and services in all three sectors, and because of the exercise of its regulatory functions. In the middle of the 1990s, government spending in France was about 46% of GDP, in Germany 44%, in the UK 36%, and in US, 20%.

toilets, public transportation, mail, military services, shelter for the homeless, and many others. The nonprofit sector has been carrying out a narrower set of activities; yet, the nonprofit form of organization is being enlisted to do increasingly more.

The past two decades were a time of great changes, with enormous technological advances and much economic, social, political, demographic, and organizational change. This is a good time to ask questions of the role of the three sectors in the complex, diverse, and ever-changing economy. Why do multiple types of organization coexist in the same economy, sometimes side by side in the same industry? The answer that I offer in this essay is that different types of organization have different advantages and disadvantages, and that the balance of advantages and disadvantages depends on factors that vary across industries and countries.

Adam Smith's famous statement that "[i]t is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest" is central to neoclassical economics. A key theorem of economics is that in a competitive market, firms that seek to maximize profits will meet the interests of consumers as closely as economically feasible. This theorem holds in a perfectly competitive market because, in their search for profit, firms must attract customers with low prices, high quality, and good customer service, not because they care about customers as such, but because customers will patronize firms that satisfy them best. Firms that seek to take advantage of consumers in a perfectly competitive market will lose customers and will go bankrupt. Under such circumstances, a firm that seeks to maximize consumer well-being cannot do better for consumers than a for-profit firm will.

However, there are many departures from the conditions that make provision by for-profit firms optimal for consumers, including imperfect competition, asymmetric information, public goods, externalities, and situations where the identity of the interacting parties matters to them. This essay examines the circumstances that lead to violations of the conditions for optimal provision by for-profit firms, relative to the criterion of maximum consumer well-being, and investigates key corrections in the form

of government regulation and provision, as well as provision by nonprofit organizations.² Such violations, small and large, are ubiquitous in the modern economy. The reason that correctives are not as pervasive as they should be is because they are not costless. The costs associated with the establishing and running government and nonprofit organizations stem from problems with governance, muted efficiency of operation, and difficulties raising capital, which frequently put them at a disadvantage relative to for-profit firms. Employing a cost-benefit analysis, I suggest a tentative allocation of economic activity across the three sectors for different goods and services.

There are many issues connected to the question of distribution of economic activity, including income redistribution, social welfare and social insurance, the pursuit of macroeconomic policies through government employment and spending, the political power attendant to economic power, employment and work issues, and so on.³ However, the scope of this essay is restricted to just one question: *What is the optimal distribution of economic activity across the three sectors relative to the objective of maximizing consumer well-being?*⁴

The paper is organized as follows. The next section examines violations by for-profit firms of conditions for optimum provision relative to consumer well-being; this is a fairly

² The analysis and examples offered in this essay concern the final consumer, primarily individuals. However, the analytical framework is applicable to buyers generally, including firms as purchasers of inputs from other firms, in which case the corrective measures include also contracting, vertical integration, and outsourcing. A key difference between consumers and firms is the ability of the latter to enter into complex contractual arrangements that involve understanding, observation, and enforcement of matters that are beyond the ability of an individual. The choices of such buyers also bear on the distribution of economic activity (e.g., whether government and nonprofit organizations carry out their own cleaning services or purchase them from for-profit firms, or government supplies its own needs or procures goods and services from for-profit firms). See Hart, Shleifer and Vishny (1997), Ben-Ner (in press), and Singer (2003) for examinations of such issues.

³ The analytical framework applied to the examination of the relationship between firms and consumers is also applicable to the investigation of the relationship between firms and workers (see Ben-Ner 1988, and Ben-Ner and Jun, 1996). Dreze and Hagen (1978) establish the equivalence between the two types of analyses (firm-consumer and firm-worker relationships) in a general model.

⁴ The paper does not address the question of how economic activity came to be divided in different countries, except to observe that history has big footprints and long shadows. To understand how things came to be the way they are one would need an analysis that combines de Tocqueville and Braudel. Weisbrod (1988) and Hansmann (1998) provide broad overviews of the mixed economy, emphasizing the role of the nonprofit sector.

rudimentary analysis of market failures. Section III investigates government and nonprofit correctives to for-profit failures. Section IV compares the efficiency of the three types of firms, focusing on issues of governance, agency problems, and access to capital. The final section compares the advantages and disadvantages of the for-profit firms, government regulation and government organizations, and nonprofit organizations and proposes an allocation of economic activities across the three sectors for a number of industries.

II. When Do For-Profit Firms Fail to Operate in the Best Interest of Consumers?

In a perfectly competitive market, for-profit firms operate in a manner that maximizes consumers' well-being. Several related conditions must be met for perfect competition:

1. **(no market power)** there are sufficiently many sellers and buyers operating in the market, or are ready to enter it, so that none has market power,
2. **(information)** sellers and buyers are fully informed about the relevant characteristics of the product,
3. **(rivalry)** consumption is rival,
4. **(excludability)** consumers can be easily charged for their consumption,
5. **(anonymity)** the identities of the transacting parties do not matter to them, and
6. **(no externalities)** the actions of the seller or its products cause harm or benefit to those who do not use the product.

In this section I examine the circumstances when each of these conditions for optimality is met or violated and the consequences for consumers of possible violations.

No market power. Firms may acquire power in the market and hinder competition in several ways. An important case is that of natural monopoly, which arises when there are large unrecoverable investments in capacity to serve a specific group of customers, leading to economies of scale, such as with the distribution of electricity and water. Monopolies or restricted competition may also stem from government restrictions or

licensing, collusion among firms to prevent new entry, small market size, and aspects of products discussed later in this section. Cost and demand conditions may allow only a small number of firms to survive in a particular market, but if entry is easy, fast, and relatively inexpensive, then the market may still be quite competitive.⁵

The consequences of violations of the “no market power” condition include higher prices, lower quality, less reliable products, and generally more restricted and less dynamic markets – all adverse consequences for consumer well-being.

Information. Symmetry of information about a product exists when both seller and customers have free access to the same information about product characteristics. Frequently, sellers know more than their customers about the durability of a manufactured good, the curative value of a medical drug or treatment, the precise ingredients or the nutritional content of a food item, the growing method of crops, the way young children or aged parents are cared for in an institution, how funds donated for improving the living conditions of the poor are actually spent, how donations to an arts museum are precisely used, and so on. Asymmetric information affords the seller the opportunity to take advantage of the relative ignorance of the consumer to enhance profits by misrepresenting the product as something better and more useful than it actually is. For example, faults of used cars are hidden by some sellers, some physicians and hospitals order unnecessary medical procedures,⁶ vegetable oil is sometimes surreptitiously added to chocolate and butter, elderly people may be treated poorly in nursing homes, and so on, all because consumers (or their sponsors in the case of the very young, the infirm, or the voiceless) cannot tell exactly what they are paying for.⁷

⁵ This is the essence of the theory of contestable markets (Baumol, Panzar and Willig, 1982).

⁶ See, for example, Kurt Eichenwald, “How One Hospital Benefited on Questionable Operations: Operating Profits – Surgery Needed or Not?” *The New York Times*, p. 1, August 12, 2003. The article alleges that doctors at a for-profit hospital conducted unnecessary heart surgeries in order to boost profits (“They were pushing for what I thought was ridiculous financial results,” said a former administrator).

⁷ This is the condition that was studied under the rubric of *asymmetric information* by Stiglitz (1974), Akerlof (1970), and many other economists (predominantly in the context of principal-agent relations in the workplace, and corporate finance). One of Akerlof’s examples concerns used cars, whose sellers have an incentive to hide defects and misrepresent the quality of their cars. Buyers know about such incentives and about bad experiences in purchases of used cars, and therefore suspect, although have no way of confirming or refuting all their suspicions, that cars offered to them are less good than how sellers represent

Whereas it is in the interest of every firm to take advantage of the privileged information it has about its product, it is also profitable for every firm to be recognized as an honest seller of reliable products. Therefore, firms seek to establish a reputation for being sellers of products of reliable quality, so that when a product is advertised to have certain characteristics, customers' post-purchase experience shows that indeed those characteristics are present. The reputation mechanism works well in a stable environment, where firms are known and their past behavior is public knowledge. Provision of product warranties is another strategy that firms pursue in order to earn consumer trust. However, residual mistrust often remains, especially in competitive markets, where entry and exit of firms is easy, and therefore reputations and warranties are not that valuable.⁸

It is also in the collective interest of firms to ensure the viability of markets for products affected by significant asymmetric information, essentially to prevent a situation in which 'bad money' drives out 'good money.' They establish voluntarily industry associations and lobby for governmental regulations that ensure standards and can impose various sanctions against violators.

The provision of faulty products is a cause of private litigation. This mechanism undoubtedly reduces the incentives firms have to act on asymmetric information, when courts impose penalties and reparations that make it less profitable to supply faulty products. But private litigation is expensive, causal relationships are difficult to prove in courts, the court system and tort laws are not specialized enough in the numerous areas of potential litigation, and overall it seems that the threat of litigation does not contribute

them. As a result, buyers are willing to pay only lower prices, penalizing sellers of better cars as well as honest sellers, to the effect that such cars may be partially withdrawn from the used cars market. Blumberg (1989) relates numerous anecdotes about exploitation of asymmetric information by firms (including in the used-car market); the anecdotes were collected from hundreds of students who wrote about their personal experiences as employees in various industries. See also Holmstrom and Milgrom (1994) for an analysis of the distorting effects of strong profit incentives on quality.

⁸ The issue of trust in for-profit firms is complex, and many factors are involved in developing it. See Ben-Ner and Putterman (2001, and in press).

much towards eliminating asymmetric information's adverse consequences for consumers.⁹

Rivalry. Car repair, medicines, a can of soda, medical treatment, and a seat on an airplane are examples of rival products, because the use by one consumer excludes the simultaneous use by another consumer. In contrast, air, water, national defense, and city parks are *nonrival* to a large degree. With rival goods, the seller receives a direct and clear signal about demand, and can react accordingly: if there is excess demand, increase production and/or price, and do the reverse if there is excess supply. At the equilibrium price, those who have greater demand than others will buy more, but the price will be uniform. Nonrivalry is a defining characteristic of *public goods*.

The problem with nonrivalry is that everybody has to use the same product: everybody breathes the same air, and everybody enjoys the services of the same and only national military force, despite possible differences in demand. With rival goods, differences in demand are expressed through the purchase of different quantities: the total quantity of a rival good supplied on the market is the sum of individual demands. This cannot be done with nonrival goods, so instead of satisfying individual demands, supply is geared to the average consumer, but the price is uniform. As a result, at the prevailing price, those with low demand will regard it as too high, and those with high demand will feel that there is insufficient provision in terms of either quantity or quality of the nonrival good.¹⁰

The problem can be solved by charging different prices and determining the quantity and quality of the product in view of the different demands. But how is the seller going to know what the different demands are, and how is it going to be able to charge different prices for the same good, that is, to institute price discrimination? Imagine the reaction to a for-profit firm's plan to increase the quality of its product if only those who care about higher quality would pay a higher price – but of course will enjoy the same quality as

⁹ For reviews on the role of courts and litigation, see Glaeser and Shleifer (2003), and Polinsky and Shavell (2000).

¹⁰ Of course, pure public goods like national defense are supplied by the state; a tax rate that would fund defense would be equivalent to the price of a private good, and the average or median dominant voter is equivalent to the average consumer.

those who pay a lower price. High demanders will prefer to free ride – pay lower price *and* get the higher quality – thwarting the voluntary price discrimination scheme.

Suppose that high demanders find a way to overcome this free-ridership problem, as it is in their interest to do, and are willing to pay higher prices in some form of donations to the for-profit firm. However, without access to information on the firm's detailed accounts and operations, high-demand consumers have no guarantees that the firm will devote the additional revenue generated by the voluntary contributions to quality improvements instead of bolstering its profit. Consequently, they will refuse to participate in this scheme.¹¹ The alternative is to write contracts with individual consumers and donors, or with an organization that represents them, specifying the price, quality, quantity, and other characteristics of the product. Individual customers will in general be unable to engage in complex contract writing and enforcement. Large or organized consumers and donors could engage in such contracting, as is often the case between suppliers and purchasers (typically for-profit firms themselves) when price discrimination of the sort discussed here is mutually beneficial.

This is the problem with nonrivalry, when it describes the entire product. A similar, less problematic but far more pervasive, issue arises when nonrivalry characterizes only some aspects of the product, such as its design, quality, color, and so on. The severity of violation of the rivalry condition increases with the importance of the nonrival aspect to the cost of production of the product and to consumers' demand for the product.¹² The extent of the nonrivalry and the market failure associated with it vary inversely with the size of the market, and positively with the heterogeneity of demand. For automobiles, there is a very large market, so that the cost of the design is relatively small compared to the number of units and their individual cost, whereas a local theater's cost of production

¹¹ In the US, for-profit firms get practically no donations, and very few volunteers as compared to nonprofit organizations and government (511,000, 6,357,000 and 2,426,000 respectively, in 1998; see Table 1.6, *The New Nonprofit Almanac and Desk Reference*, Independent Sector and Urban Institute, Jossey-Bass, 2002); nearly all volunteers in for-profit firms are in hospitals and old people's homes.

¹² The relative importance is measured in terms of the cost of the design, the number of units produced on its basis, and their marginal cost (the smaller the number of units and the lower the unit cost relative to the cost of the mold, the greater the nonrivalry problem), and the importance of the design, quality, or color to consumers' demand for the product.

is relatively high relative to the number of times the production is presented and the cost of each show; the severity of the nonrivalry problem is therefore greater for local theater than for automobiles. Parents of young children who have to use the same child-care center and have strong and differing views about the center's educational philosophy and techniques will be dissatisfied. Such issues are unlikely to arise in the context of less important matters, such as the color of the walls. Other examples of products with significant nonrivalry aspects include movies that are expensive to produce, medicinal drugs that require large research and development expenses, TV, museums, and parks.

The problem with nonrivalry increases with the heterogeneity of consumers' demand; if all consumers were identical, there would be no problem with nonrivalry. But even with demand heterogeneity, the size of the market may eliminate potential problems because for-profit firms can produce sufficient diversity and avoid a situation in which consumers are forced to buy the same model of car, watch the same movies, walk in the same park, have children in the same day care center, visit the same museum, and so on.

Excludability. The possibility of controlling access to a product and charging for its use is critical to the ability of a firm to cover its costs of production. There are few completely *nonexcludable* products; air and national defense are perhaps the best examples. For the condition for optimal provision to consumers to hold, excludability should be costless. The problem with nonexcludability is that products, or aspects of products, that are nonexcludable, will be provided at a sub-optimal level. Examples include the nonrival aspects of products, since they cannot be unbundled and sold separately. Nonexcludability is a matter of degree: even ordinary goods are not costlessly excludable because they need to be kept under lock and guard. Products that were once nonexcludable, such as TV signals, are now excludable through encryption. Just as nonexcludable products can be made excludable, excludable products like library services may be made nonexcludable in order to ensure free or inexpensive access. In principle, such access could be achieved through subsidies from government or private donors to for-profit firms, but as noted earlier, this is unlikely to happen because of the

fear that for-profit firms would use the money to increase profit more than to increase service.

Anonymity. For a product to be traded competitively, different units must be considered equivalent and must bear the same price, irrespective of the identities of the transacting parties. The more important personal relationships are (on the basis of various sources of identity such ethnicity, religion, culture, place of origin, etc.), the greater the departure from competition.¹³ Furthermore, if continuity is the basis for the formation of social capital, a for-profit firm may be able to take advantage of the sunk costs made by the parties because it would be costly to recreate them elsewhere (Hansmann, 1985). In a similar vein, when a service is valued for the degree of affect that is involved in its delivery, for-profit firms will not be fully trusted or valued because consumers will think that the affect is motivated by financial gain (Gui, 2000).

No externalities. The production and consumption of a product may have unintended effects on parties that are not direct consumers of the product. The problem is that externalities are not paid for; they are a special case of products with nonexcludable aspects. For example, a positive externality is produced when well-educated children behave well in public. A negative externality is generated when a factory pollutes the air, when stressful working conditions contribute to poor driving, or when physicians prescribe antibiotics excessively and strengthen bacteria's resistance to drugs. This condition, albeit important, has fewer implications for the relationship between a seller and *its* consumers than the previous conditions.

In conclusion, under certain circumstances the pursuit of profits conflicts with consumer interests and leads to the failure of for-profit firms to maximize consumer well-being. Table 1 describes generally the degree to which each of the optimality conditions is violated. The degree of violation depends primarily on the product, but other contingencies have an effect too. Some of these contingencies concern the ability of

¹³ Ben-Ner, Stephane, and Wang (2003) show experimentally that various bases for identity have significant effects on economic behavior.

consumers to inform themselves about products (the information condition will be violated less severely in the case of more informed and educated consumers), the size of the market (the no market-power, rivalry, and excludability conditions will be more easily met in a large city than in a small town), the heterogeneity of a population (the more diverse the demand is, the more likely it is that the rivalry, excludability, and anonymity conditions will be violated), the transparency of social relations (the information condition will be violated less if for-profit firm owners are part of the community), the strength of ethnic and religious identity (contribution to violations of the identity condition), and much more. Therefore, the degree of violation noted in Table 1 is not only a function of a product's characteristics, but also of other contingencies. The entries in the table reflect an exercise in identifying issues that may arise in the production and delivery of various goods and services in common but unspecified circumstances. For instance, in the case of bottled water, there is a competitive market with many competitors selling close substitutes and there is easy entry, but there exists considerable asymmetric information about the content and composition of the water, and because the existences of a few well-known brands there is a strong reputation effect; bottled water is rival, is excludable, the identity (as such) of the interacting parties does not matter much, and there are few externalities. Despite profound similarities, bottled and tap water are different with respect to issue of organizational form best suited for their delivery. The distribution system of tap water entails much more important economies of scale, hence monopolistic tendencies, than in the case of bottled water; asymmetric information is not too severe, because one test suffices for many distribution points; it is fully rival, and is nonexcludable only to the extent that society regards access to drinking water as a right; it is an impersonal product, and there are a few externalities (primarily those associated with water tables and such, but not much in consumption).

Electricity distribution can be analyzed in a similar fashion to tap water. Current technologies of electricity production permit relatively easy transmission from multiple points and alternative sources, so there is scope to some competition; there is no asymmetric information problem, electricity is fully rival and excludable; externalities seem to be the main problem. Contemporary automobile production is carried out with

technologies that permit the creation of relatively (to the size of the global market) inexpensive molds, so the market is competitive and the nonrivalry problem minimal; the main problem is with externalities in production. For another example, consider prisons. The demand for the product comes from the public (or the authority in charge of prisons), not the incarcerated prisoners. From the public's point of view there is no competition, it is very difficult to know what is going on inside a prison, the facility and treatment are the same for all prisoners in a particular prison, and hence there is considerable nonrivalry. The product is rival, and identity and externalities seem to play a limited role only.

A more detailed justification of this table, including specification of the circumstances that bear on the degree to which each of the optimality conditions is violated for each example is beyond the scope of this paper; the purpose of the table is to provide germinal ideas to stimulate the reader to evaluate the extent to which for-profit firms satisfy the demand of different consumers in diverse industries and circumstances.

III. Government and Nonprofit Correctives and Substitutes for For-profit Failures

The foregoing analysis has established that for-profit firms fail to maximize consumer well-being when circumstances allow them to take advantage of their customers in order to maximize their own profit. The present section examines what, if anything, can government and nonprofit organizations do to improve on for-profit firms' performance with respect to each of the optimality conditions, ignoring for now the special costs of operating these organizations.

a) Government

The state (government in the broad sense) has many roles that do not bear directly on the question addressed in this essay. There are many kinds of government organizations, differing in their geographic scope, autonomy from higher levels of the state, and other dimensions. Regulation of economic activity and direct provision of goods and services are two governmental functions that are undertaken with at least a partial view towards

improving consumer well-being, and I shall evaluate these functions only with respect to this question. I will reduce the complex and complicated institution of the state to an essential minimum, and will defer discussion of important issues, including the possibility of capture of government objectives by private interests, until later.¹⁴

The state's regulatory role

Governments can regulate the price, quantity, and quality of products sold by for-profit firms, as well as the inputs required for production. In principle, regulators could affect all markets to operate optimally. The large number of violations and their geographical distribution would require that regulators be active throughout the economy, from the goods producing industries to diverse services delivered in numerous establishments and localities. To a certain degree, this does take place in the complex contemporary economy. Regulators study, inspect, oversee, enforce, penalize, and litigate firms in a vast swath of the economy, from ensuring that the foundations of new buildings are sound, that trains are safe, that restaurants are clean, that child care center teachers are licensed, that cars are safe, that gas pumps are accurate, that theaters have fire exits, that medicinal drugs do what their manufacturers claim, and so on.

Regulation does not affect the for-profit firm's objectives, and usually affects their incentives only through the threat of fines and penalties. Regulation works through the acquisition of information (continuously, periodically, or through random sampling such as unscheduled inspections of meat-packing plants) to set price, quantity, and quality standards. Regulators face a severe problem of asymmetric information relative to the regulated. For example, to control market power, regulators need to know almost everything that concerns cost and production in the regulated firms. To deal with the information condition, regulators must not only know what firms actually do, but also why they do that, and how else they could operate. Regarding nonrivalry and nonexcludability, government regulators could facilitate donations by certifying their use, and so on. To carry out the regulatory function effectively requires a daunting amount of

¹⁴ A detailed analysis of the role of government in the provision of nonexcludable and nonrival goods can be found in Kaul (2003).

information, a large number of expert regulators to gather and analyze the information, as well as a cadre of regulators' counterparts in for-profit firms. This limits considerably the effectiveness of the regulatory function of government to place a role in every instance of need for it.

Government provision

In comparison, government organizations could provide directly products that for-profit firms fail to provide optimally, and could improve consumer well-being less expensively than through regulation – all it would take is to direct government organizations to operate to maximize consumer well-being. This simple direct-control mechanism works well in the case of some optimality conditions, but not so in others.

Government organizations should be able to refrain from using market power and be able to emulate the competitive outcome.¹⁵ Directives to avoid the exploitation of asymmetric information against the interests of consumers and to internalize externalities are conceptually easy to draft and to follow.

The case of products affected by nonexcludability offers a natural scope for government provision, with government organizations being funded by compulsory taxes. However, there is no market mechanism that can signal true demand when the effective price is set to zero. Of course, the public knows that national defense, for example, is not free, but the voting mechanism does not permit the selection of a tax price and a defense quantity and quality schedule according to which choices can be made. Voting for political candidates whose views bundle many issues is far from approximating such a schedule. Consequently, the outcome through the political mechanism is likely to leave many consumers (voters) unsatisfied, although the outcome may improve upon lack of provision of the nonexcludable product altogether.¹⁶ The closer the correlation among the various issues on different parties' agendas and the closer the relationship between

¹⁵ Montias, Ben-Ner and Neuberger (1994) discuss this issue in connection with Oskar Lange's principles for running government-owned firms.

¹⁶ Nonexcludable goods may have excludable partial substitutes: private militias may take the place of national armies, private guards may substitute for police, and private book collections may replace public libraries. A complete comparison should include these alternatives.

income and demand for nonexcludable products, the more satisfying is government provision.¹⁷ Finally, the smaller the differences in demand, the easier it is to provide the products in response to the public's demand.

Government provision of nonrival products requires the ability to charge different prices for the same product, which can be accomplished with differential tax rates if the conditions just discussed hold, which is not very likely. Government organizations' ability to obtain donations is quite restricted, not necessarily because of distrust on the part of consumers that government will appropriate profits instead of improving service, but because of the general reluctance to support government beyond compulsory taxation. Where the size of the market permits, government organizations could supply different products to different demand groups, as for-profit firms do with their products, such as cars, restaurants, and so on. However, this runs counter a strong sense (that is sometimes anchored in law) that the government should provide universal-access services and be non-sectarian.¹⁸

Similar reasons lead to the suggestion that government organizations are not likely to be able to provide optimal levels of products that are linked to identity. However, the absence of the profit motive and the desire to assist the public may make government organizations better providers of products with a significant relational component than for-profit firms.

b) Nonprofit organizations

The ability of nonprofit organizations to minimize or avoid violations of the six optimality conditions and to improve for-profit provision depends on how they are constituted. Nonprofit organizations seek to provide products for the benefit of at least some, if not all, of their customers rather than to generate maximum profits for their shareholders. Some nonprofit organizations serve a defined group of members; these

¹⁷ This assumes that the income tax is progressive.

¹⁸ For example, the government in the Netherlands supports financially the provision of products such as education, arts, and media to diverse ethnic and cultural groups, not through its own organizations but through nonprofit organizations.

members may be the owners of the organization and thus entitled to profits generated by the organization, and formally govern the organization. These nonprofit organizations are called consumer cooperatives, membership organizations, and clubs. In addition to members, cooperatives may serve customers who are not their members. Other nonprofit organizations serve deserving people who often are not able to pay full price on the market, and are supported by individual donors or organizations (including the state). Such organizations, often termed charities, are run by donor representatives or by social entrepreneurs and boards of directors selected by them, and use all profit to enhance the product. A third type of nonprofit organization represents a hybrid of the previous two, and has a mix of revenues from sales and donations. Such organizations include many hospitals, theater, universities, and so on.¹⁹ In the US, charities and hybrid nonprofit organizations are prohibited from distributing profits and are required to invest all surplus; this restriction does not apply to cooperatives, and is less common in other countries, regardless of the specific type of nonprofit organization.

In general, nonprofit organizations have little or no incentives to exercise market power against the interests of their customers. The primary reason is that they operate for the benefit of consumers; when they are formally prohibited from distributing profits, they reinvest profits in the organization.²⁰ However, cooperatives and hybrid nonprofit organizations may use market power against non-members or consumers who are not in their target group, in order to benefit their members and core consumers.²¹

Similar considerations apply to the information condition. Nonprofit organizations have generally no incentive to exploit asymmetric information. They are expressly interested

¹⁹ This is a very coarse way of classifying nonprofit organizations, but is sufficient for the purposes of this essay. The legal classification of the universe of nonprofit organizations in the US is described in Ben-Ner and Van Hoomissen (1993), Figures 1 and 2; for Europe, see Ehlermann (1992), and various papers in Borzaga and Defourny (2001).

²⁰ In fact, many consumer cooperatives, mutual financial institutions, agricultural purchasing cooperatives, and the like were formed to fight the negative consequences of limited local competition in the provision of groceries, power generation, and so on.

²¹ For example, cooperative grocery stores may sell products to their members at lower prices, as well as distribute to members profits from non-members.

in the well-being of their customers and may elicit customer trust and custom.²²

However, in some nonprofit organizations management may prefer to use profit generated by exploitation of some consumers' insufficient information in order to support other activities or other consumers. This can be done with rival products, where different consumers can receive different qualities of the product (such as the reliability of car repair), but not with nonrival products (such as the curriculum in a school, care in a child care center, or produce available in a grocery store).

Concerning nonrivalry and nonexcludability, nonprofit organizations may be able to provide a safe and trustworthy place where customers can reveal their desires (demand) for the product and make donations to ensure that the product (day care for their children, aid to the poor in distant locations, interesting theater productions) is made available in the way they desire. Through their input in the decision-making of their organizations, customers and donors can enforce proper use of their information and donations.

Nonprofit organizations enjoy a clear advantage in the provision of products that entail the affective involvement of the parties and whose value depends on the identity of those who participate in consumption. This is the case with many cooperatives, membership organizations, cultural groups, and other settings where it matters who is participating in the organization, and where the product is partly the interaction itself.

Nonprofit organizations' attitude towards externalities depends on how the externalities affect their customer or membership base. A regional electric power cooperative is more likely than a for-profit firm or a state enterprise to consider the consequences of pollution associated with the location of their plant and the equipment they use. Similarly, a local nonprofit organization is more likely to consider the effects of its location on the

²² Arrow (1963) was the first to suggest that asymmetric information may give rise to the nonprofit form of organization, when he examined the trust patients need to have in their health-care givers, and concluded that the profit motive may get in the way of trustworthy care. Hansmann (1980) made the first comprehensive statement of the protection that the legal constraint against distribution of profit in nonprofit organizations lends to consumers and how this earns their trust in these organizations. Ortmann and Schlesinger (2003), Bacchiega and Borzaga (2003) and others (myself included) consider this constraint to be a minor source of the trustworthiness that nonprofit organizations may enjoy (consumer control being the main source). See Hansmann (2003) for a rebuttal.

neighborhood than a for-profit firm, or a nonprofit organization with a national scope would.

IV. Governance, Agency, and Access to Capital in Government and Nonprofit Organizations Relative to For-profit Firms

Table 2 summarizes the foregoing discussion of the comparative performance of government and nonprofit organizations relative to for-profit firms that violate the consumer well-being optimality conditions. Nonprofits and government dominate the for-profit firm with regard to catering to the objectives of consumers. But simply put, the desire to do well for consumers is not worth much if the organization is inefficient and resources are wasted. In this section, I examine efficiency conditions that relate to governance, agency problems, and access to capital.

The first condition is that owners or controllers can agree among themselves what the organizational objectives should be, and are able to formulate and communicate their objectives to management. The second condition for efficiency is to bring management to comply with these objectives. Third, management has to enlist the efforts of employees towards the pursuit of these objectives. Fourth, owners must be able to marshal resources necessary for production, including financial capital. There are distinct differences among for-profit, government, and nonprofit organizations in the ways and the extent to which they can meet these conditions.²³

For-profit firms' owners are typically interested in profit, with only an instrumental concern for the products of their firms. (This is, of course, the source of the violations of the optimality conditions examined in section II). The objective of profit maximization is clear and easy to communicate to management, and there is a simple metric to measure it. However, owners can rarely observe management's efforts, and when they do, they often cannot judge the merits of these efforts, which are quite specialized. This gives rise to an

²³ A discussion of these issues in the three types of organization can be found in Ben-Ner, Montias, and Neuberger (1993).

agency problem, whereby management can pursue its financial and other objectives at the expense of owners. To ameliorate the problem, owners seek to align management's interests with their own by offering them ownership shares, profit sharing, and other incentives linked to firm profit and share value. The difficulty in controlling management increases with the size of the company and the complexity of its operations, as well as with the number of owners, because they tend to free-ride on the supervision efforts of each other.²⁴ But owners are not alone in exercising control over management. Outsiders who believe that a company is not managed well may see an opportunity for gain by purchasing it and disciplining or replacing existing management; the threat alone has disciplining effects. Failed managers are likely to see their job opportunities curtailed. Additionally, in competitive markets, a firm will not be able to raise prices above the market, and if it provides poor returns to shareholders, they will abandon it and starve it for capital. A well-managed and profitable enterprise will be able to attract capital from investors. These various mechanisms tend to impose a considerable degree of discipline on management. Importantly, whether management pursues shareholders' interests closely or those of its own, it will seek to run a firm efficiently, because efficient operation is consonant with both types of objectives.

In contrast to for-profit firms, government organizations do not have clearly defined owners.²⁵ Government organizations are owned by, or belong to, the citizens of the jurisdiction in which they are chartered. The meaning of citizen ownership of government organizations is, of course, different from that of ownership of for-profit firms. In particular, it does not accord individuals the right to returns generated by government organizations, the right to control them, or the right to transfer their ownership shares. In a democracy, these rights are exercised by elected officials who delegate them to management of individual organizations (enterprises, bureaus, agencies) through a long chain of agency relations.

²⁴ There are differences across countries in the way large companies are managed; for example, in some countries boards of directors are dominated by representatives of banks, organized labor, and other institutions, arrangements that reduce the free-ridership problem but introduce other issues.

²⁵ For a comprehensive analysis of the internal organization of government agencies, see Vickers and Yarrow (1988).

A government organization, whether regulatory or provider of a product, is ordinarily not constituted to make profit but to attain other objectives, subject to a break-even constraint. A government organization has the difficult task of defining its concrete objectives as opposed to broad goals. It is the rare case where a government organization has a single quantifiable objective. A for-profit firm that runs a train service has to generate profit to its owners, whereas a government organization is charged to provide train service that is accessible, continuous, affordable, and safe (Héritier, 2002). The managerial problem is that there is no weighting scheme that will aggregate these objectives the way prices allow aggregation of profits from different activities. Thus, the first condition for organizational efficiency is generally very difficult to attain in government organizations.

Meeting the second condition, of bringing management to pursue owners' objectives, is a function of the difficulty with the first condition. Management has considerable leeway to pursue *its* own objectives, or those of parties that are not the recognized or authorized 'owners.' The problem is not necessarily graft, but with tilting the mission of the organization, for example towards the wishes of interest groups. The common remedy for agency problems in for-profit firms – connecting incentives to results – is difficult to institute when results are hard to pin down. Thus, government organizations must be run without the powerful financial incentives that for-profit firms have at their disposal.

The span of attention of both the ultimate owners, the citizenry, and of their agents, the elected officials, is limited by the fact that they have many additional concerns competing for their time and energy. The existence of numerous government organizations leads to a large span of control, which in turn leads to the long chain of delegation referred to earlier. The combination of limited attention span and large control span exacerbates the agency problem at lower levels of government organizations, including in the relationship between management and employees. There are two twin problems at this level. First, managers have weaker incentives (as compared to their for-profit counterparts) to manage employees strictly. Second, managers are prevented from using certain types of incentives that are proffered to for-profit employees, such as profit sharing and other

financial incentives tied to organizational performance. As a result, employee motivation will be weaker, and so will be performance.²⁶ The alternative to use external criteria to judge performance, particularly through benchmarking against similar organizations, is not available because government organizations often fill a specific niche by themselves. The competitive pressure of the market that forces discipline is unavailable for similar reasons.

Finally, investment and access to capital are often determined outside the operating government organizations, and are less directly connected to results than in for-profit firms. This factor reduces the operational efficiency of government organizations. On the other hand, the ability of the government to issue bonds and to tax makes entry of new organizations easier.

Nonprofit organizations face similar problems to government organizations on several levels, commencing with complex objectives, and the absence of financially motivated owners. In nonprofit organizations, like in many for-profit firms, a board of directors or trustees bears the authority to make key decisions. However, nonprofit boards are rarely as active or as influential as for-profit firm boards; nonprofit managers are probably less accountable to their boards than government managers are to their superiors. In cooperatives and member-controlled organizations, the situation is better, but even there, membership involvement, just like shareholder involvement, may not suffice to control management effectively. Unless an organization and its product are very important to its members, they are not likely to invest many resources in its control. Other mechanisms that control management in for-profit firms are not available in nonprofit organizations. Hence, management autonomy is probably greatest in nonprofit organizations, leading to

²⁶ Government organizations tend to compensate for these problems by instituting a myriad of rules and regulations aimed at controlling employees' behavior, leading to inflexibilities and other phenomena associated with bureaucracies. These tendencies are exacerbated by the need to protect government organizations from large swings in employment when politicians change, by granting employment protection to employees.

possible deflection of organizational goals, lax supervision of employees, and therefore suboptimal performance.²⁷

Access to capital by nonprofit organizations is limited to member subscriptions, donations, and retained earnings. The mechanism on which for-profit firms rely, raising funds from investors, is not available to nonprofit organizations, as it would contravene the consumer orientation by seeking profit to reward investors. Overall, nonprofit organizations' access to capital is less efficient than that of for-profit firms.²⁸

The analysis presented in this section suggests that, in general, government and nonprofit organizations encounter more hurdles to efficient operation than do for-profit firms. In other words, if all three types of organization were to produce the same product in the same environment, the for-profit form would be more productive than the other two forms and would therefore offer a lower price or higher quality. Various contingencies, including the size of communities, the educational attainment of consumers, the extent of the social capital, and more, affect the comparative degree of efficiency in government and nonprofit organizations. For example, communities that are more cohesive will be able to exercise better control over management of government and nonprofit organizations; the more diverse the population in a jurisdiction is the less likely it will be that government will provide separate services to all of them (leaving room for both for-profit and nonprofit provision); ethnic groups interested in a set of services (including cultural activities, child care and elder care, etc.) will be able to control them better through a single control and oversight infrastructure than groups with disparate interests; and so on. Table 3 summarizes the comparative efficiency of government and nonprofit organizations relative to for-profit firms without reference to various contingencies, implicitly assuming some 'common' levels for them.

²⁷ See Ben-Ner (1994), Manne (1999), and Birchall (2002) for analyses of the role of members and boards of directors in effective control over management. The problem with management in nonprofit organizations does not arise because 'bad' agents self-select into nonprofits; indeed, many authors consider nonprofit managers at least as committed to their organizations' goals as are for-profit managers; see Badelt (2003), Young (2003), Bilodeau and Slivinski (1996), and Glaeser and Shleifer (2001). The more severe agency problem arises because of more lax control over management.

²⁸ See Steinberg (in press) for a discussion of issue of capital and investment in nonprofit organizations, and for references to the literature.

V. Benefits versus Costs: Comparing the Advantages and Disadvantages of For-profit, Government and Nonprofit Organizations

No type of organization enjoys superiority in its relationship with consumers *and* its internal efficiency. As Table 3 illustrates, for-profit firms are generally more efficient, but as Table 2 has shown, government and nonprofit organizations tend to treat consumers better. An organization's net comparative advantage or disadvantage relative to other organizations depends on the characteristics of its product and other factors that determine how it fares on the consumer well-being optimality conditions, and on the attributes of its controllers and other factors that determine how it fares on the internal efficiency conditions. The answer to the question which products should be provided by for-profit firms, government, and nonprofit organizations or should be regulated depends therefore on a number of factors.

Table 4 contains my recommendations for the allocation of roles to the three types of organization in provision and regulation of products in various industries. The table constitutes, in effect, combination of the conclusions of the analyses summarized in Tables 1, 2 and 3. Table 4 suggests that there often may be room for more than one type of organization in the provision and regulation of a particular product, because the contingencies that affect their desirability vary across consumers and communities.²⁹ To illustrate how the analysis underlying the entries in Table 4 may be carried out, consider the child care and education industries. In many communities these industries and their products are characterized by significant elements of market power, asymmetric information, nonrivalry, nonexcludability, and externalities, as well as the need for consideration of the identity of the children and teachers (Akerlof and Kranton, 2002). Provision by for-profit firms is therefore generally suboptimal relative to the well-being of consumers (students, their parents, or the organs of government sponsoring their care

²⁹ In the table, regulation by nonprofit organizations refers to consumer organizations that evaluate goods and services (such as the Consumer Union in the US), and to the very common associations of for-profit firms that provide various degrees of non-binding regulation (such as Better Business Bureaus, and industry-based associations).

and education). Therefore, government and nonprofit organizations should be the providers of choice unless they suffer from large efficiency disadvantages relative to for-profit firms. Nonprofit educational organizations can be run efficiently when and where parents or other sponsors are involved in control over management, or if there is close supervision by an organization in which parents and community are involved. Government provision is often preferred to nonprofit organizations because of the desire to insure free access and avoid a difficulties associated with subsidization of students,³⁰ and the desire to imbue students with common rather than sectarian values.³¹ In contrast, vocational training often lacks many of these elements, and is therefore appropriately provided by for-profit firms.

As the table reveals, I do not find much reason for government provision of *goods*. The large size of the market for goods reduces problems with provision by for-profit firms associated with the first five conditions (in Table 2), and judicious regulation should suffice to deal with the sixth, externalities. Consequently, the cost of government organizations' operational inefficiencies may outweigh the benefits of government provision. Why is there no need for nonprofit organizations in the provision of goods? Generally, when consumers organize to protect or advance their self-interest, they need to be close to the product. Because the market for goods is large, the organizing consumers will constitute only a small minority among all consumers, so the benefits of their actions will be dissipated over a large number of consumers, whereas they will have to bear all the costs.

Some services, like garbage collection, financial services, and certain forms of training are provided by for-profit firms under circumstances that are similar to goods, and with similar violations of optimality conditions. When there are more severe violations, government intervention or nonprofit provision is called for. Many services are provided under circumstances that vary greatly across communities; violations of optimality conditions vary with these circumstances, as does the ability to operate organizations

³⁰ See Hart, Shleifer and Vishny (1997) for a discussion of vouchers in for-profit schools.

³¹ James (1993) argues that the desire to inculcate religious values that are not imparted in public schools explains the size of the nonprofit education sector in various countries.

more or less efficiently. Hence there will be organizational variation across communities in the provision of services like those listed in Table 4.

The three types of organization examined in this essay have advantages and disadvantages that are related to their very nature, and are bundled together. Nevertheless, neither advantages nor disadvantages are immutable, and policies can be developed to ameliorate weaknesses and enhance strengths in all three forms of organization. For example, partnerships across organizations from different sectors make it possible to build on the strengths of the partners (Hanss, 2001, Minow, 2003, and Sandmo, 2003); education of managers to understand the unique disadvantages faced by government and nonprofit organizations improves management of these organizations and their ability to operate efficiently (Steinberg, in press); development of institutions that support pro-social values limits violations of optimality in provision by for-profit firms (Ben-Ner and Putterman, 1998); establishment of support organizations that facilitate decision-making in nonprofit organizations improves their efficiency (Young, in press); encouragement of access to information increases transparency and accountability and strengthens the ability of all types of organization to provide their products efficiently; and enactment of legislation and regulations adapted to the needs of each type of organization has an important function in advancing their effectiveness and efficiency. Such policies can foster a more efficient distribution of economic activity across the three sectors, taking advantage of the *sui generis* strengths of each sector while improving their performance.

References

- Akerlof, G. A. 1970. "The Market for 'Lemons': Quality, Uncertainty and the Market Mechanism." *Quarterly Journal of Economics*, vol. 84, 487-500.
- Akerlof, G. A. & Kranton, R. E. 2002. "Identity and Schooling: Some Lessons for the Economics of Education." *Journal of Economic Literature*, 40(4), 1167-1201.
- Anheier, H. K. & Ben-Ner, A. 1997. "Shifting Boundaries: Long-Term Changes in the Size of the For-Profit, Nonprofit, Cooperative, and Government Sectors." *Annals of Public and Cooperative Economics*, special issue on *Structural Changes and General Interest: Which Paradigms for the Public, Social and Cooperative Economy?* (Monnier, L. & Thiry, B. eds.), vol. 68(3), 335-353.
- Arrow, K. 1963. "Uncertainty and the Welfare Economics of Medical Care." *American Economic Review*, vol. 80(2), 941-973.
- Bacchiega, A. & Borzaga, C. 2003. "The Economics of the Third Sector: Toward a more Comprehensive Approach." *The Study of Nonprofit Enterprise: Theories and Approaches* (Anheier, H. K. & Ben-Ner, A., eds.), New York: Kluwer Academic/Plenum Publishers, 27-48.
- Badelt, C. 2001. "Entrepreneurship in Nonprofit Organizations: Its Role in Theory and the Real World Nonprofit Sector." *The Study of Nonprofit Enterprise: Theories and Approaches* (Anheier, H. K. & Ben-Ner, A., eds.), New York: Kluwer Academic/Plenum Publishers, 139-156.
- Baumol, W., J. Panzar, and R. Willig. 1982. *Contestable Markets and the Theory of Industry Structure*, San Diego: Harcourt Brace Jovanovich.
- Ben-Ner, A. in press. "Outsourcing by Nonprofit Organizations," in *Effective Economic Decision Making by Nonprofit Organizations* (D. Young, ed.) New York: The Foundation Center.
- Ben-Ner, A. 2002. "The Shifting Boundaries of the Mixed Economy and the Future of the Nonprofit Sector." *Annals of Public and Cooperative Economics*, April vol. 73(1), 5-40. Excerpts appeared in French translation as "Les frontières mouvantes de l'économie mixte et l'avenir du secteur non lucrative," *Problèmes économiques*, March 5, 2003, no. 2.799, 18-24.
- Ben-Ner, A. 1994. "Who Benefits from the Nonprofit Sector? Reforming Law and Public Policy Towards Nonprofit Organizations." *Yale Law Journal*, vol. 104(3), 731-762.
- Ben-Ner, A. 1988. "The Life Cycle of Worker-Owned Firms in Market Economies: A Theoretical Analysis." *Journal of Economic Behavior and Organization*, vol. 10, October, 287-313. Reprinted in *Producer Cooperatives and Labor-Managed Systems* (David Prychitko and Jaroslav Vanek, eds.), Edward Elgar Publishing Ltd., 1996.

- Ben-Ner, A. and B. Jun. 1996. "Employee Buyout in a Bargaining Game with Asymmetric Information." *American Economic Review*, vol. 86(3), 502-523.
- Ben-Ner, A. & Gui, B. (eds.) 1993. *The Nonprofit Sector in the Mixed Economy*. Ann Arbor: University of Michigan Press.
- Ben-Ner, A., Montias, J.M. and Neuberger, E. 1993 "Basic Issues in Organizations: A Comparative Perspective." *Journal of Comparative Economics*, vol. 17(2), 207-242.
- Ben-Ner, A. & Putterman, L. (in press) "Trust in the New Economy." *Handbook of Economics in the Electronic Age* (Derek C. Jones, ed.), Academic Press.
- Ben-Ner, A. & Putterman, L. 2001. "Trusting and Trustworthiness." *Boston Law Review*, vol. 81(3), June, 523-551.
- Ben-Ner, A. & Putterman, L. 2000. "Values Matter," *World Economics*, vol. 1(1), January, 1-23.
- Ben-Ner, A. & Putterman, L. 1998/2001. "Values and Institutions in Economic Analysis," in *Economics, Values, and Organization* (Ben-Ner, A. & Putterman, L., eds., preface by Amartya Sen), Cambridge University Press, 3-72. An abbreviated Spanish translation appeared as "Valores e instituciones en el analisis economico," *Revista de Economia Publica, Social y Cooperativa*, December 1999, vol. 33, 43-78.
- Ben-Ner, A. & Van Hoomissen, T. 1993. "A Portrait of the Nonprofit Sector in the Mixed Economy: New York, 1981-1987." *The Nonprofit Sector in the Mixed Economy* (Ben-Ner, A. and Gui, B., eds.), University of Michigan Press, 1993, 243-266.
- Ben-Ner, A. & Van Hoomissen, T. 1992. "An Empirical Investigation of the Joint Determination of the Size of For-Profit, Nonprofit and Government Sectors." *Annals of Public and Cooperative Economics*, vol. 63(3), 392-415.
- Ben-Ner, A. & Van Hoomissen, T. 1991. "Nonprofit Organizations in the Mixed Economy: A Demand and Supply Analysis." *Annals of Public and Cooperative Economics*, vol. 62(4), 519-550. Reprinted in *The Nonprofit Sector in the Mixed Economy* (Ben-Ner, A. and Gui, B., eds.), University of Michigan Press, 1993, 27-58; reprinted in *The Economics of Nonprofit Enterprises* (R. Steinberg, editor), Edward Elgar Publishing Ltd., forthcoming.
- Bilodeau, M. and Slivinski A. 1996. 'Volunteering Nonprofit Entrepreneurial Services', *Journal of Economic Behavior and Organization*, vol. 31, 117-127.
- Birchall, J. 2002. "Mutual, Non-Profit or Public Interest Company? An Evaluation of Options for the Ownership and Control of Water Utilities." *Annals of Public and Cooperative Economics*, vol. 73(2), 181-213.

- Blumberg, P. 1989. *The Predatory Society: Deception in the American Marketplace*. New York: Oxford University Press.
- Borzaga, C. & Defourny, J. 2001. *The Emergence of Social Enterprise*. London: Routledge.
- Blomquist, S.V.C. 2003. "Is there a Case for Public Provision of Private Goods if Preferences are Heterogeneous? An Example with Day Care." Center for Economic Studies & Institute for Economic Research, vol. 3(33).
- Brody, E. 1996. "Agents without Principals: The Economic Convergence of the Nonprofit and For-profit Organizational Forms." *New York University Law School Review*, vol. 40(3), 457-536.
- Dreze, J. and Hagen, K. 1978. "Choice of Product Quality: Equilibrium and Efficiency." *Econometrica*, vol. 46(3), May, 493-513.
- Ehlermann, C.D. 1992. "European Community Competition Policy, Public Enterprise and the Cooperative, Mutual and Nonprofit Sector." *Annals of Public and Cooperative Economics*, vol. 63, no. 4, 555-71.
- Esping Andersen, G. 1999. *Social Foundations of Post-Industrial Economies*, Oxford: Oxford University Press.
- Glaeser, E. L. and Shleifer A. 2001. "Not-For-Profit Entrepreneurs," *Journal of Public Economics*, vol. 81, 99-115.
- Glaeser, E. L., & Shleifer, A. 2003. "The Rise of the Regulatory State." *Journal of Economic Literature*, vol. XLI, June, 401-425.
- Gui, B. 2000. "Beyond Transactions: On the Interpersonal Dimension of Economic Reality." *Annals of Public and Cooperative Economics*, vol. 71(2), 139-169.
- Hansmann, H.1980. "The Role of Nonprofit Enterprise." *Yale Law Journal*, vol. 89(3), 835-901.
- Hansmann, H. 1985. "The Organization of Insurance Companies: Mutual versus Stock", *Journal of Law, Economics and Organization*, Spring, pp. 125-153.
- Hansmann, H.1998. *The Ownership of Enterprise*. Cambridge, MA: Harvard University Press.
- Hansmann, H. 2003. "The Role of Trust in Nonprofit Enterprise." *The Study of Nonprofit Enterprise: Theories and Approaches* (Anheier, H. K. & Ben-Ner, A., eds.), New York: Kluwer Academic/Plenum Publishers, 115-122.
- Hanss, W. G. 2001. "Overcoming Competitive Disadvantages of Public Enterprises by Public-Private Partnerships and their Financing Models." *Annals of Public and Cooperative Economics*, vol. 72(3), 393-411.

- Hart, O., Shleifer, A., & Vishny, R. 1997. "The Proper Scope of Government." *Quarterly Journal of Economics*, 112(4), 1127-1161.
- Héritier, A. 2002. "Public Interest Services Revisited." Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, Working Paper 2002/10.
- Holmstrom, B. & Milgrom, P. 1994. "The Firm as an Incentive System." *American Economic Review*, vol. LXXXIV, 972-991.
- James, E. 1993. "Why Do Different Countries Choose a Different Public-Private Mix of Educational Services?" *Journal of Human Resources*, vol. 28(3), 571-592.
- Kaul, I. 2003. "Public Goods: A Positive Analysis," Office of Development Studies, New York: United Nations.
- Landes, W. M. & Posner, R. A. 1975. "The Private Enforcement of Law." *Journal of Legal Studies*, vol. 4, 1-46.
- Manne, G. 1999. "Agency Costs and the Oversight of Charitable Organizations" *Wisconsin Law Review* (2): 227-272.
- Matsunaga, Y. and Yamauchi, N. 2002. "Is the Government Failure Theory Still Relevant?: A Panel Analysis Using U.S. State Level Data," Working Paper, Osaka School of International Public Policy, Osaka University.
- Minow, M. 2003. "Public and Private Partnerships: Accounting for the New Religion," *Harvard Law Review*, 116(5):1229-1270.
- Montias, J. M., A. Ben-Ner, and E. Neuberger. 1994. *Comparative Economics*, in the "Fundamentals of Pure and Applied Economics" series, Chur, Switzerland: Harwood Academic Publishers.
- Ortmann, A. & Schlesinger, M. 2003. "Trust, Repute, and the Role of Nonprofit Enterprise." *The Study of Nonprofit Enterprise: Theories and Approaches* (Anheier, H. K. & Ben-Ner, A., eds.), New York: Kluwer Academic/Plenum Publishers, 77-114.
- Polinsky, M. A. & Shavell, S. 2000. "The Economic Theory of Public Enforcement of Law." *Journal of Economic Literature*, March 2000, vol. 38(1).
- Salamon, L. M., Anheier, H. K., List, R., Toepler, S., Sokolowski, W. & Associates. 1999. *Global Civil Society: Dimensions of the Nonprofit Sector*, Baltimore, MD: Johns Hopkins Center for Civil Society Studies.
- Sandmo, A. 2003. "Public Provision and Private Incentives," *Nordic Journal of Political Economy*,

- Singer, P. W. 2003. *Corporate Warriors: The Rise of the Privatized Military Industry*.
- Steinberg, R. (editor). In press. *The Economics of Nonprofit Enterprises*, Edward Elgar Publishing Ltd., forthcoming.
- Steinberg, R. 2003. "Economic Theories of Nonprofit Organizations: An Evaluation," *The Study of Nonprofit Enterprise: Theories and Approaches* (Anheier, H. K. & Ben-Ner, A., eds.), New York: Kluwer Academic/Plenum Publishers, 277-309.
- Stiglitz, J. 1974. "Incentives and Risk Sharing in Sharecropping." *Review of Economic Studies*, vol. 41, 219-255.
- Vickers, J. & Yarrow, G. 1988. *Privatization: An Economic Analysis*. Cambridge, MA: MIT Press.
- Weisbrod, B. A. 1975. "Toward a Theory of the Voluntary Non-Profit Sector in a Three-Sector Economy." *Altruism, Morality, and Economic Theory* (E. Phelps, ed.), New York: Russell Sage, 171-95.
- Weisbrod, B. A. 1988. *The Nonprofit Economy*, Cambridge, MA: Harvard University Press.
- Young, D. R. in press. "Introduction." *Effective Economic Decision Making by Nonprofit Organizations* (D. Young, ed.) New York: The Foundation Center.
- Young, D. R. 2003. "Entrepreneurs, Managers and the Nonprofit Enterprise." *The Study of Nonprofit Enterprise: Theories and Approaches* (Anheier, H. K. & Ben-Ner, A., eds.), New York: Kluwer Academic/Plenum Publishers, 161-168.

Table 1: The Extent of Violation by For-profit Firms of the Optimality Conditions for Consumer Well-being, in Selected Industries

Product (examples)	Conditions					
	No Market Power	Information	Rivalry	Excludability	Anonymity/Identity	No Externalities
Bottled water	■	■	■	■	■	■
Tap water	■	■	■	■	■	■
Electricity distribution	■	■	■	■	■	■
Electricity production	■	■	■	■	■	■
Automobile production	■	■	■	■	■	■
Air transport	■	■	■	■	■	■
Railroads	■	■	■	■	■	■
Culture and arts	■	■	■	■	■	■
Entertainment (mass)	■	■	■	■	■	■
National defense	■	■	■	■	■	■
Public safety	■	■	■	■	■	■
Home security	■	■	■	■	■	■
Prisons	■	■	■	■	■	■
Telecom	■	■	■	■	■	■
Post & delivery	■	■	■	■	■	■
Social insurance	■	■	■	■	■	■
Medical insurance	■	■	■	■	■	■
Physician care	■	■	■	■	■	■
Hospital care	■	■	■	■	■	■
Medical drugs	■	■	■	■	■	■
Garbage collection	■	■	■	■	■	■
Research - basic	■	■	■	■	■	■
Research - applied	■	■	■	■	■	■
Financial services	■	■	■	■	■	■
Libraries	■	■	■	■	■	■
Child care centers	■	■	■	■	■	■
Elementary education	■	■	■	■	■	■
Higher education	■	■	■	■	■	■
Vocational training	■	■	■	■	■	■
Advocacy and lobbying	■	■	■	■	■	■
Ethnic clubs	■	■	■	■	■	■
Participant sports clubs	■	■	■	■	■	■
Professional sports clubs	■	■	■	■	■	■

Key: ■ Little or no violation
 ■ Moderate violation
 ■ Substantial violation

Table 2: How Government and Nonprofit Organizations Perform in Comparison to FPFs that Violate Optimality Conditions

Violated condition	<i>Government Regulation</i>	<i>Government Provision</i>	<i>Nonprofit Organizations</i>
No Market Power	+	+	+
Information	+	+	+
Rivalry	O/+	O/+	+
Excludability	O/+	+	O/+
Anonymity/Identity	O	O/+	+
No Externalities	+	+	+

Note: + means improvement over provision by for-profit firms

O means comparable provision to for-profit firms

Table 3: Governance, Agency, and Access to Capital in Government and Nonprofit Organizations Relative to For-Profit Firms

Condition for efficient operation	<i>Government Regulation</i>	<i>Government Provision</i>	<i>Nonprofit Organizations</i>
Clarity of Objectives	~	~	~
Management Compliance	~	~	~
Employee Compliance	~	~	~
Access to Capital	0	~/0	~

Note: ~ means lower efficiency than in for-profit firms

0 means efficiency comparable to for-profit firms

Table 4: Proposed Allocation of Economic Activities among the Three Sectors, in Various Industries

Product (examples)	Sectors		
	For-Profit	Government	Nonprofit
Bottled water	P1	R1	R2
Tap water	P2	P1	P3
Electricity distribution	P3	P1	P3
Electricity production	P1	P2, R1	P3
Automobile production	P1, R2	R1	0
Air transport	P1, R2	R1	0
Railroads	P1, R2	P2, R1	0
Culture and arts	P3	P2	P1
Entertainment (mass)	P1	0	P2
National defense	0	P1	0
Public safety	0	P1	P2
Home security	P1, R1	R2	0
Prisons	0	P1	0
Telecom	P1	R1	P3, R2
Post & delivery	P1	P2, R1	0
Social insurance	0	P1	0
Medical insurance	P2	P1, R1	P3
Physician care	P1	P2, R2	P3
Hospital care	P1	P1, R1	P1
Medical drugs	P1, R3	R1	R2
Garbage collection	P1	R1	P2
Research - basic	P3	P2	P1
Research - applied	P1	P2	P3
Financial services	P1, R3	R1	P2, R2
Libraries	P3	P1	P2
Child care centers	P3	R1, P2	P1, R2
Elementary education	0	P1, R1	P2
Higher education	P3	P2	P1
Vocational training	P1	P3	P2
Advocacy and lobbying	P3	0	P1
Ethnic clubs	P3	0	P1
Participant sports clubs	P3	P2	P1
Professional sports clubs	P1, R1	R2	P3

Key: P = Provision
R = Regulation
1 = Primary role
2 = Secondary role
3 = Tertiary role
0 = No involvement