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*PRIVATIZATION SURVEY QUESTIONNAIRE*

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TO  
COMMISSION ON PRIVATIZATION  
C/O EXECUTIVE DIRECTOR'S OFFICE  
COLORADO DEPARTMENT OF PERSONNEL  
GENERAL SUPPORT SERVICES  
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JOB TITLE: \_\_\_\_\_

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### *Privatization Terms & Definitions*

The following definitions and terms widely describe the forms of government privatization. The terms are provided only as a point of reference to assist the survey respondents' description of specific privatization experiences. In providing these terms, there is no assumption that any of the described forms of privatization are utilized or have been utilized in Colorado state government.

**Contracting out** - Government contracts all or a portion of a public service delivery to private firms (profit or non-profit). For purposes of this survey, contracting out would include "purchased services" as defined in The Code of Colorado Regulations, P13-1-1. Classic examples include trash collection, waste water treatment and building repair and maintenance. More recent examples include human services delivery, incarceration and public transportation. Some level of performance evaluation, compliance and contract monitoring is maintained by government.

**Deregulation** - The government removes its regulations from the service it previously regulated in favor of self or no regulation of the service.

**Franchisees** - Government awards either an exclusive or nonexclusive franchise to private firms to provide a service within a certain geographical area. Under most franchise agreements the citizen pays directly for service rendered. Likely municipal franchisees include cable television and utility services. Most public franchisees are associated with regulated public utilities.

**Grants/subsidies** - The government provides a financial or in-kind contribution to a private organization or individual to encourage them to provide a service so that the government does not have to provide it. An example is private business using Enterprise Zone tax benefits.

**Leasing** - A way for governments to have the use of certain goods or services without having to own them. Examples are government leasing vehicles or office space.

**Load/Service Shedding** - The government actually gives up responsibility for an activity but works with a private agency (profit or nonprofit) willing to take over responsibility. Perhaps this would involve a one-time grant or subsidy. A local example is the privatization of some RTD routes and the University Hospital reorganization model. In other states, service shedding can be described as selling off state-owned assets like a worker's compensation fund to a private firm or giving up internal fleet maintenance by having an outside company manage the leasing and acquisition of state vehicles.

**Managed Competition** - A public agency competes with private firms for the provision of public services under a controlled or managed process with clearly defined steps to be followed and roles of all the participants.

**Partnerships (Joint public-private ventures)** - Businesses in the community and the local government join forces for a major development such as a new shopping mall, downtown revitalization or a sports stadium. Often tax policy such as special improvement, incremental and special sales taxes accompany these types of ventures. Recent examples include Coors Field and the 16<sup>th</sup> Street business improvement district.

**Procurement** - The acquisition or purchase of goods that are not wholly manufactured or produced by state government. Examples are the purchase of office or cleaning supplies, electronic and computer equipment or vehicles.

**Sale of Assets** - The government sells its assets to the private sector. Sale of assets shifts government functions and ownership to the private sector. An example is a government that sells surplus property or equipment to the private sector.

**Vouchers** - The government provides vouchers to citizens needing the service, but the citizens are free to choose the organization from which to buy the goods and services. Popular examples include housing and food vouchers and more recent examples are educational choice vouchers.

The following definitions are to be used when completing question 1.

**Quality of Performance and Service** - this refers to the quality of service from the provider.

**Service Level - Decrease or Increase** - comparison of the level of services before and after privatization.

1. List all privatized functions/services that you have used within the last three years. Respond to each category as it pertains to the activity listed. Chart continued on back if additional space is needed.

| Type of Privatization | Function or Service which was Privatized | Difficulty in finding provider |         | Length of Practice (In years) | Depth of Oversight |       | Frequency of Review |        | Quality of performance and service |           | Service level Decrease or Increase |   | Service objectives were met |       | Unsuccessful or Successful |   | Why Unsuccessful(Difficulties) or Successful (What worked)? |
|-----------------------|------------------------------------------|--------------------------------|---------|-------------------------------|--------------------|-------|---------------------|--------|------------------------------------|-----------|------------------------------------|---|-----------------------------|-------|----------------------------|---|-------------------------------------------------------------|
|                       |                                          | No Diff                        | Extreme |                               | Min                | Max   | Weekly              | Annual | Poor                               | Excellent | D                                  | I | Not Met                     | Met   | U                          | S |                                                             |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4  | 1                                  | 2 3 4     | D                                  | I | 1                           | 2 3 4 | U                          | S |                                                             |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4  | 1                                  | 2 3 4     | D                                  | I | 1                           | 2 3 4 | U                          | S |                                                             |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4  | 1                                  | 2 3 4     | D                                  | I | 1                           | 2 3 4 | U                          | S |                                                             |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4  | 1                                  | 2 3 4     | D                                  | I | 1                           | 2 3 4 | U                          | S |                                                             |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4  | 1                                  | 2 3 4     | D                                  | I | 1                           | 2 3 4 | U                          | S |                                                             |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4  | 1                                  | 2 3 4     | D                                  | I | 1                           | 2 3 4 | U                          | S |                                                             |

| Type of Privatization | Function or Service which was Privatized | Difficulty in finding provider |         | Length of Practice (in years) | Depth of Oversight |       | Frequency of Review |         | Quality of performance and service |           | Service level Decrease or Increase |   | Service objectives were met |         | Unsuccessful or Successful | Why Unsuccessful(Difficulties) or Successful (What worked)? |   |   |  |
|-----------------------|------------------------------------------|--------------------------------|---------|-------------------------------|--------------------|-------|---------------------|---------|------------------------------------|-----------|------------------------------------|---|-----------------------------|---------|----------------------------|-------------------------------------------------------------|---|---|--|
|                       |                                          | No Diff                        | Extreme |                               | Min                | Max   | Weekly              | Annual  | Poor                               | Excellent | D                                  | I | Not Met                     | Met     |                            |                                                             | U | S |  |
|                       |                                          | 1                              | 2 3 4   |                               | 1 2 3 4            |       | 1 2 3 4             | 1 2 3 4 | 1 2 3 4                            |           |                                    | D | I                           | 1 2 3 4 | U                          | S                                                           |   |   |  |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4   | 1                                  | 2 3 4     |                                    |   | D                           | I       | 1                          | 2 3 4                                                       | U | S |  |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4   | 1                                  | 2 3 4     |                                    |   | D                           | I       | 1                          | 2 3 4                                                       | U | S |  |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4   | 1                                  | 2 3 4     |                                    |   | D                           | I       | 1                          | 2 3 4                                                       | U | S |  |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4   | 1                                  | 2 3 4     |                                    |   | D                           | I       | 1                          | 2 3 4                                                       | U | S |  |
|                       |                                          | 1                              | 2 3 4   |                               | 1                  | 2 3 4 | 1                   | 2 3 4   | 1                                  | 2 3 4     |                                    |   | D                           | I       | 1                          | 2 3 4                                                       | U | S |  |



5. Assume for the moment that there were no legal, regulatory or procedural barriers to privatization. Which of your agency's activities would make the best candidates for privatization ?

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\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

6. List barriers that prevent your agency from taking advantage of the opportunities listed above. How significant are these barriers? Attach a separate sheet if more space is needed.

Table with 4 columns: Not at all Significant, Not very, Somewhat, Very Significant. Rows 1-8 with numerical ratings 1-4.

7. Has your agency used any means of obtaining customer satisfaction ratings in the past?

\_\_\_\_\_ Yes \_\_\_\_\_ No

List the methods that your agency has used or could use to measure customer satisfaction with the services or products of your organization.

\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

Thank you for completing this survey.

New England  
Privatization  
Study & Report

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*Privatization  
of Local Public Services:  
Lessons for New England*

**A**s governments consider ways to provide public services more efficiently, privatization can seem like an attractive option. Yet the subject engenders sharp controversies. As noted in a recent report by the National Governors' Association, "Proponents of privatization believe private enterprise can deliver the same services government provides for less money, with higher quality of service and increased flexibility. . . . Opponents of privatization believe that such efforts undermine the quality of services, destroy public employee unions, invite corruption, and weaken government control of services key to the public interest" (1993, p. 43). In New England, the latter concerns appear to dominate, since local governments in the region generally have not engaged in as much privatization as those in other parts of the country.

This article examines the evidence on the relative merits of privatizing public services and attempts to determine whether these costs and benefits actually appear to explain local government behavior throughout the United States. The article begins with a broad description of the mechanisms used in privatization, followed by evidence on the extent to which state and local governments have privatized service delivery. Contracting with private vendors turns out to be more common than use of vouchers or subsidies. However, the tendency to contract out varies considerably across services. The advantages and disadvantages of contracting are then discussed, followed by an empirical analysis of why some localities contract out more or less than others. Measurable advantages and disadvantages vary by community, and explain part (but only part) of the differences in contracting across communities. The limited scope of privatization by New England local governments in particular defies explanation, suggesting that communities in the region may wish to reexamine their choices of how to provide services, if they have not done so recently.

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## I. What Is Privatization?

Privatization refers to a shift from public to private production. This article focuses on privatization of traditional public services.<sup>1</sup> By definition, these are services for which purely private markets are considered inadequate (see the box). Privatization takes advantage of the perceived cost efficiencies of private firms. However, government intervention is required even after privatization in order to ensure that sufficient services are provided to residents. Privatization of public services has been largely a "bottom up" experience in the United States, with local governments in the vanguard and higher levels of government trailing behind. As a result, this article concentrates on efforts by local and, to a lesser extent, state governments.<sup>2</sup>

Under a common privatization arrangement, the government enters into an agreement specifying that a selected private entity (rather than a government agency) is responsible for producing particular services. The government chooses the service level and pays the amount specified in the contract, but leaves decisions about production methods to the private firm. Contracting may be used, for example, to privatize the disposal of hazardous waste or oper-

<sup>1</sup> In some countries, governments have privatized state-owned enterprises involved in the production of goods and services that elsewhere are commonly produced by the private sector. Western European countries, especially the United Kingdom and France, have sold off state-owned enterprises in industries such as automobiles, glassmaking, telecommunications, airlines, finance, and insurance (see Hemming and Mansoor 1988). The countries of the former Soviet bloc are now engaged in similar privatization efforts, on a more massive scale. Once enterprises have been sold, they function like any other private business. By contrast with foreign economies, the role of commercial and industrial public enterprises has been considerably more limited in the United States. Government enterprises have been estimated to account for only about 1 percent of total U.S. GDP, compared to a range of 4 to 16 percent in other OECD countries, and 65 to 97 percent in the former Soviet bloc prior to recent reforms (Schwartz 1993). Furthermore, government enterprises in the United States tend to specialize in a limited range of activities (primarily postal services, utility services, and liquor sales) rather than competing with private corporations on a broad scale. In light of the relatively limited role of the public sector in the United States, it is not surprising that only minimal sales of government enterprises or other government-owned assets have taken place. In 1990-91, for example, the share of general own-source revenue raised by selling property was only 0.45 percent for the federal government, 0.04 percent for state government, and 0.22 percent for local governments (U.S. Bureau of the Census 1993, Table 6).

<sup>2</sup> For discussion of privatization by the federal government, see Donahue (1989), especially chapter 6. Also, the article's emphasis on public services, as opposed to public goods, simply reflects the fact that governments in the United States rarely provide goods.

### Public Goods and Services

Pure public goods and services are those for which consumption is nonrival (that is, adding another consumer imposes no additional cost of providing the goods and services) and nonexcludable (that is, preventing another person from consuming the goods and services is either very expensive or impossible). Other goods and services have some degree of "public-ness," even though they are not "pure." Traditional textbook examples of public services include national defense and fire protection.

Economic theory has demonstrated that, in the absence of government intervention, the private sector would underprovide public goods and services compared to the level that society as a whole would prefer. By contrast, the private sector is the preferred provider of those goods and services for which each consumer is charged a (nonzero) price equal to the added cost of supplying the good or service to him/her, and where it is feasible costlessly to exclude anyone who does not pay.

Another, somewhat different justification for government intervention relates to distributive justice. The citizenry may object to purely private markets in cases where the prices charged would deter some individuals from consuming what are viewed as socially desirable quantities. In these cases, the government charges needy residents a price below the cost of providing the goods or services, and it funds the difference through other mechanisms, principally taxation.

ation of homeless shelters (as well as a range of other services).

Another form of privatization is the franchise, whereby a private firm or firms are awarded the right to perform a specified service within a geographic area over which the government has jurisdiction. The company charges members of the public for services (rather than receiving payment from the government, as in a contract), while the government regulates the level of service and the price charged. Examples of services for which franchises are awarded include trash collection, vehicle towing, and operation of a public utility. These are services for which governments typically charge user fees even when the service is produced internally.

A final type of privatization maintains a funding role for government (in order to maintain some level of demand for the services), but permits individual consumers to choose providers. For example, governments may issue vouchers to residents for the purchase of private day care.<sup>3</sup> Or they may provide subsidies to private service organizations, such as grants to private human services providers or capital equipment for use by citizen groups performing neighborhood improvement projects.

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*Privatization alters who produces public services, but it does not inherently alter who pays.*

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Privatization alters who produces public services, but it does not inherently alter who pays. Suppose that prior to privatization, a service was produced by government employees and funded by the government. Upon privatization, the service would be produced by private sector employees, but the government could continue its financing role. In other cases, government funds might be supplemented by user fees—both before and after privatization. To take a specific example, a contract could specify that a private company provide free bus services for riders (to be paid for totally by the contracting government), or it might allow the company to charge a fare (thereby reducing the size of the public subsidy). Similar funding options apply to government-operated transportation services: they may be paid for by taxpayers in general, by individual consumers, or by some combination of the two groups. To take another example, suppose that prior to privatization, trash is collected by public employees, but residents are charged a fee for this service. Under a franchise arrangement, residents would pay fees to a private company.

If privatization saves on overall costs, government outlays decline even if service levels and user fees remain unchanged. Governments engaging in privatization sometimes decide to cut back the share of costs covered by public funds. In these cases, government outlays decline further. Residents consuming public services pay more if the overall cost saving from privatization is less than the decrease in public funding.

## *II. The Scope of Privatization*

Although state and local governments on the whole continue to use their own employees for the majority of services provided to residents, a great variety of public services are fully or partially privatized in a large number of localities. Contracting is the most common form of privatization.

### *Privatization by Local Governments*

Methods of delivering local services vary considerably, and a locality may use a mix of different types of public and private providers for any given service. The International City Management Association (1989) conducted a poll of 1,681 cities and counties regarding 71 services that may have been available to their residents in 1988. In general, public employees were more important producers of public services than private employees. Services differed in the extent to which they were privatized. The services most likely to be performed exclusively by local government employees were street cleaning, meter maintenance and collection, cemetery administration and maintenance, inspection and code enforcement, utility meter reading, water distribution, water treatment, traffic control and parking enforcement, building security, payroll, secretarial services, personnel services, and public relations/information. For these services, three-quarters of responding localities indicated using only their own employees. Police and fire services, which are considered by many to be at the core of local government functions, were exclusively performed by local government employees in about 70 percent of cases.<sup>4</sup>

By contrast with these functions, other local government functions have been privatized to a greater extent (Table 1). The most commonly privatized service is vehicle towing and storage: 80 percent of respondents reported issuing contracts, and another 8 percent issued franchises. This may be because towing services are identical whether vehicles are towed from public or private property. Several other services that are commonly contracted out.

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<sup>3</sup> Special-purpose tax credits and deductions are equivalent to vouchers, even though they do not result in actual outlays by government. To emphasize their similarity to government spending programs, such credits and deductions often are referred to as tax expenditures.

<sup>4</sup> Some of the remaining cities and counties used employees of another level of government to supply services, in addition to their own employees. Intergovernmental arrangements were especially common in the case of health and human services.

Table 1  
*Private Provision of Public Services in a Sample of Cities and Counties, 1988*

| Percent of Respondents | Services and Method of Provision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |                                                                |                                                                                                                                                                          |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | Contract with Private Firm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Franchise   | Subsidies                                                      | Volunteers                                                                                                                                                               |
| 75 and higher          | Vehicle towing and storage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | —           | —                                                              | —                                                                                                                                                                        |
| 50 to 74               | Legal services                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Gas         | —                                                              | —                                                                                                                                                                        |
| 25 to 49               | Solid-waste collection and disposal, street repair, traffic signal installation/maintenance, tree trimming/planting, bus system operation/maintenance, paratransit system operation/maintenance, airport operation, utility billing, street light operation, hazardous materials disposal, day care facility operation, operation of mental health/retardation programs/facilities, drug/alcohol treatment programs/facilities, operation of homeless shelters, food programs for the homeless, buildings/grounds maintenance, fleet management, vehicle maintenance, labor relations | Electricity | Operation of homeless shelters, food programs for the homeless | Programs for the elderly, operation of homeless shelters, food programs for the homeless, recreation services, operation of cultural/arts programs, operation of museums |

Note: Where applicable, respondents indicated more than one method of providing a service. Fewer than 10 percent of respondents indicated using vouchers or regulatory and tax incentives for any service.

Source: International City Management Association (1989).

including legal services and maintenance of equipment and facilities, also are often purchased by the private sector. In addition, a variety of transportation-related and human services have been privatized by local governments. Localities commonly grant franchises for gas and electricity supply (though, interestingly, not for water). Compared to contracts and franchises, vouchers and subsidies were used relatively rarely. Volunteers—another way of minimizing government employment—were used in at least one-quarter of localities for certain human and recreational services, as well as by between 15 and 20 percent of fire, police, and ambulance departments.

The quinquennial Census of Governments includes information about privatization starting in 1987.<sup>5</sup> One-third of all general-purpose local governments in the United States contracted out or issued franchises for at least one service shown in Table 2.<sup>6</sup>

<sup>5</sup> Information from the 1992 Census of Governments was not yet available at the time this article was prepared.

<sup>6</sup> General-purpose governments provide a variety of services. By contrast, school districts and special districts perform a single function. In the terminology of the Census, "contracting" includes franchise agreements. Henceforth, this article will adopt the Census terminology.

In broad consistency with the results of the ICMA poll, the Census data show that gas supply, public transport, and electric power often involve private sector employees, while the services of libraries, sewerage systems, fire protection, and water supply are usually supplied by public employees. The remaining services—airports, hospitals, landfills, nursing homes, and stadiums and conference centers—are intermediate cases.

On the whole, local governments were more likely to contract out for services that commonly are offered by the private sector or other levels of government. Conversely, they tended not to contract out for services that are commonly the responsibility of local government. For example, fire protection, sewerage systems, and water—which are among the least likely services to be contracted out—were provided by more local governments than was the case for the remaining services.<sup>7</sup> Two potential explanations exist

<sup>7</sup> For all 12 services, a simple regression explaining the percentage of all governments contracting out by the percentage of all governments providing the service (using either their own or private employees) yielded a significant negative coefficient for the explanatory variable. The adjusted R-squared was 0.33.

for this behavior, the first attitudinal and the second practical. Services commonly provided by local governments may be viewed as part of their essential mission, and therefore officials may be reluctant to allow them to be performed under contract. Furthermore, for this category of services, outside contractors may be in scarce supply.

Townships were more likely to contract out than municipalities or counties.<sup>8</sup> In part, this reflects their limited size. Localities with under 10,000 in population generally were more likely to contract out than larger localities. For a variety of services, the largest local governments contracted out less often than medium-sized governments.

Contracting varies across geographic regions, with the Midwest (encompassing the West North Central and East North Central Census areas) and West South Central regions having the greatest and the South Atlantic the least tendency for private production (Table 2). New England was the second to lowest region, as only one-quarter of local governments have contracted out or issued franchises for the services indicated. Out of the nine Census regions, New England ranked seventh or lower in privatization of airports, electric power, fire protection, hospitals, landfills, libraries, and nursing homes. Only in the cases of gas supply, public transit, and water supply was New England's extent of private supply more extensive than the national average.

Local governments in New England are much more likely to provide fire protection, landfills, and libraries for their residents than is true nationwide.<sup>9</sup> For the reasons noted above, this fact may contribute to limited contracting. Conversely, gas supply and water are provided by a relatively low fraction of general-purpose local governments in New England, which may contribute to an above-average willingness among the remaining local governments to contract out for these services.<sup>10</sup> For the other seven services, however, contracting behavior in New En-

<sup>8</sup> Only 18 states, concentrated in the Northeast and Midwest, have the township form of government. In other states, the smallest units are municipal governments. Municipalities serve specific population concentrations; townships serve inhabitants of geographic areas defined without regard to population concentrations. In some states, municipalities and townships serve overlapping territories, but this is not the case in New England.

<sup>9</sup> The percentages of New England localities providing these services were 73.2, 60.7, and 54.5, respectively, compared to national averages of 50.6, 21.2, and 20.6 percent.

<sup>10</sup> Only 1.5 percent of New England localities indicated that they were responsible for supplying gas, and 28.9 percent water, to their residents. The national averages were 5.7 and 36.9 percent, respectively.

land is not explained by a simple hypothesis about the extent to which they fall within the purview of local governments. Alternative hypotheses are examined later in this article.

### *Privatization by State Governments*

According to the Council of State Governments, states have been slower to privatize services than have local governments, but their interest has accelerated sharply in the past several years (Chi 1993). Although comprehensive numerical data are not available, the New England states appear to be as active as others in privatizing a variety of services. Maine and Massachusetts are among 22 states issuing recent studies exploring the feasibility of privatization. Connecticut, Maine, Massachusetts, New Hampshire, and Vermont (along with 21 states outside New England) have reportedly privatized more than 15 percent of their mental health and mental retardation programs. Ten states (including Rhode Island and Vermont) have privatized more than 15 percent of their remaining health services programs, 14 (including New Hampshire and Vermont) social services, and 23 (including Maine, Massachusetts, and Vermont) transportation. However, no New England states were among those with high rates of privatization of general administrative services, corrections, or educational programs.<sup>11</sup>

### *III. Advantages and Disadvantages of Privatization*

Case studies have been used to evaluate particular experiences with privatization of state and local government functions. Taken as a whole, these studies do not indicate that contracting is uniformly better or worse than provision of services by public sector employees. But they do come to a consensus on the advantages and disadvantages of contracting in cases where it has been tried.

#### *Reduced Costs and Other Potential Advantages*

In a wide variety of cases, contracting has resulted in the same level of service being provided at

<sup>11</sup> Eight states report privatization of at least 15 percent of their general administrative services. Five states report privatizing 11 to 15 percent of their corrections programs and two have privatized an equivalent share of educational programs.

Table 2  
*Local Governments Contracting Selected Services as a Percent of Total Providing Services, by Type of Government, Population, Size, and Geographic Region, 1987*

|                                                      | Airports | Electric Power | Fire Protection | Gas Supply | Hospitals | Landfills | Libraries | Nursing Homes | Public Transit |
|------------------------------------------------------|----------|----------------|-----------------|------------|-----------|-----------|-----------|---------------|----------------|
| <b>Type of Government</b>                            |          |                |                 |            |           |           |           |               |                |
| Counties                                             | 31.1     | 73.5           | 23.9            | 77.8       | 35.2      | 22.2      | 15.2      | 25.5          | 39.8           |
| Municipalities                                       | 28.5     | 50.9           | 11.4            | 57.5       | 53.8      | 42.3      | 12.8      | 56.7          | 47.5           |
| Townships                                            | 47.7     | 84.9           | 52.1            | 93.6       | 71.4      | 35.7      | 23.2      | 68.4          | 59.5           |
| <b>Population</b>                                    |          |                |                 |            |           |           |           |               |                |
| 100,000 and over                                     | 15.6     | 32.7           | 13.3            | 53.3       | 27.8      | 22.8      | 7.9       | 12.8          | 40.1           |
| 50,000 to 99,999                                     | 34.0     | 35.7           | 11.3            | 60.0       | 41.0      | 20.5      | 19.7      | 20.0          | 40.3           |
| 25,000 to 49,999                                     | 35.3     | 31.9           | 10.3            | 63.9       | 41.5      | 28.1      | 7.3       | 28.3          | 37.6           |
| 10,000 to 24,999                                     | 38.5     | 33.1           | 11.3            | 55.9       | 40.9      | 29.3      | 15.4      | 44.4          | 48.8           |
| Less than 10,000                                     | 28.3     | 58.9           | 29.1            | 62.0       | 53.0      | 40.2      | 16.4      | 53.5          | 56.2           |
| <b>Geographic Region</b>                             |          |                |                 |            |           |           |           |               |                |
| New England                                          | 23.4     | 47.3           | 8.4             | 75.0       | 37.8      | 30.1      | 3.6       | 29.2          | 70.8           |
| Mid-Atlantic                                         | 45.8     | 72.9           | 35.9            | 97.0       | 61.6      | 46.0      | 26.1      | 30.2          | 54.7           |
| East North Central                                   | 38.1     | 62.6           | 35.5            | 81.9       | 51.6      | 42.2      | 21.0      | 41.2          | 48.6           |
| West North Central                                   | 23.7     | 56.0           | 36.0            | 69.2       | 39.3      | 45.4      | 11.2      | 39.1          | 44.9           |
| West South Central                                   | 24.6     | 56.2           | 36.0            | 67.8       | 38.2      | 39.9      | 11.0      | 40.2          | 48.6           |
| South Atlantic                                       | 34.6     | 42.2           | 13.1            | 40.1       | 48.1      | 26.0      | 16.9      | 44.9          | 37.5           |
| East South Central                                   | 36.5     | 45.0           | 5.7             | 26.6       | 41.7      | 33.8      | 14.4      | 51.9          | 45.6           |
| Mountain                                             | 26.1     | 49.2           | 10.3            | 71.9       | 51.3      | 31.6      | 12.2      | 50.6          | 41.3           |
| Pacific                                              | 27.5     | 42.0           | 13.5            | 67.6       | 43.8      | 37.3      | 24.6      | 52.3          | 50.2           |
| <b>All Local Governments</b>                         |          |                |                 |            |           |           |           |               |                |
|                                                      | 30.1     | 55.3           | 26.1            | 61.4       | 45.7      | 36.4      | 15.4      | 39.6          | 48.5           |
| <b>Memo: Number of Governments Providing Service</b> |          |                |                 |            |           |           |           |               |                |
|                                                      | 3,059    | 3,846          | 19,698          | 2,204      | 1,404     | 8,268     | 8,032     | 1,148         | 1,313          |

Source: U.S. Bureau of the Census (1988).

substantially lower cost, although utilities seem to be an exception. In a response to a 1987 survey, three-quarters of city and county executives with experience with contracting cited cost reductions as the primary benefit of contracting out, and most indicated that they were satisfied with the quality of the work performed by the private contractor (David 1988). Of those reporting some cost saving, 18 percent estimated it at below 10 percent, 39 percent between 10 and 19 percent, and the remaining 43 percent at 20 percent or more. In response to a survey by the Council of State Governments, many states cited savings in the range of 11 to 30 percent (Chi 1993). Transit authorities in the United States and the United Kingdom have saved in the range of 20 to 30

percent by privatizing bus services (Gómez-Ibáñez and Meyer 1993).

Econometric analyses have provided concurring evidence in some cases. One such study examined public and private suppliers of municipal services in the Los Angeles metropolitan area (Stevens, as cited in Donahue 1989). After controlling for the scale of service, the level and quality of service, and the physical conditions of the service area, the author estimated cost savings ranging from 37 percent for tree maintenance to 96 percent for asphalt overlay construction, with intermediate results for janitorial service, traffic signal maintenance, street cleaning, trash collection, and turf maintenance. Private contractors and public employees were equally efficient

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Table 2  
*Local Governments Contracting Selected Services as a Percent of Total Providing Services, by Type of Government, Population, Size, and Geographic Region, 1987*

|                                                      | Airports | Electric Power | Fire Protection | Gas Supply | Hospitals | Landfills | Libraries | Nursing Homes | Public Transit |
|------------------------------------------------------|----------|----------------|-----------------|------------|-----------|-----------|-----------|---------------|----------------|
| <b>Type of Government</b>                            |          |                |                 |            |           |           |           |               |                |
| Counties                                             | 31.1     | 73.5           | 23.9            | 77.8       | 35.2      | 22.2      | 15.2      | 25.5          | 39.8           |
| Municipalities                                       | 28.5     | 50.9           | 11.4            | 57.5       | 53.8      | 42.3      | 12.8      | 56.7          | 47.5           |
| Townships                                            | 47.7     | 84.9           | 52.1            | 93.6       | 71.4      | 35.7      | 23.2      | 68.4          | 59.5           |
| <b>Population</b>                                    |          |                |                 |            |           |           |           |               |                |
| 100,000 and over                                     | 15.6     | 32.7           | 13.3            | 53.3       | 27.8      | 22.8      | 7.9       | 12.8          | 40.1           |
| 50,000 to 99,999                                     | 34.0     | 35.7           | 11.3            | 60.0       | 41.0      | 20.5      | 19.7      | 20.0          | 40.3           |
| 25,000 to 49,999                                     | 35.3     | 31.9           | 10.3            | 63.9       | 41.5      | 28.1      | 7.3       | 28.3          | 37.6           |
| 10,000 to 24,999                                     | 38.5     | 33.1           | 11.3            | 55.9       | 40.9      | 29.3      | 15.4      | 44.4          | 48.8           |
| Less than 10,000                                     | 28.3     | 58.9           | 29.1            | 62.0       | 53.0      | 40.2      | 16.4      | 53.5          | 56.2           |
| <b>Geographic Region</b>                             |          |                |                 |            |           |           |           |               |                |
| New England                                          | 23.4     | 47.3           | 8.4             | 75.0       | 37.8      | 30.1      | 3.6       | 29.2          | 70.8           |
| Mid-Atlantic                                         | 45.8     | 72.9           | 35.9            | 97.0       | 61.6      | 46.0      | 26.1      | 30.2          | 54.7           |
| East North Central                                   | 38.1     | 62.6           | 35.5            | 81.9       | 51.6      | 42.2      | 21.0      | 41.2          | 48.6           |
| West North Central                                   | 23.7     | 56.0           | 36.0            | 69.2       | 39.3      | 45.4      | 11.2      | 39.1          | 44.9           |
| West South Central                                   | 24.6     | 56.2           | 36.0            | 67.8       | 38.2      | 39.9      | 11.0      | 40.2          | 48.6           |
| South Atlantic                                       | 34.6     | 42.2           | 13.1            | 40.1       | 48.1      | 26.0      | 16.9      | 44.9          | 37.5           |
| East South Central                                   | 36.5     | 45.0           | 5.7             | 26.6       | 41.7      | 33.8      | 14.4      | 51.9          | 45.6           |
| Mountain                                             | 26.1     | 49.2           | 10.3            | 71.9       | 51.3      | 31.6      | 12.2      | 50.6          | 41.3           |
| Pacific                                              | 27.5     | 42.0           | 13.5            | 67.6       | 43.8      | 37.3      | 24.6      | 52.3          | 50.2           |
| <b>All Local Governments</b>                         |          |                |                 |            |           |           |           |               |                |
|                                                      | 30.1     | 55.3           | 26.1            | 61.4       | 45.7      | 36.4      | 15.4      | 39.6          | 48.5           |
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| Sewerage System | Stadiums, Auditoriums, Convention Centers | Water Supply | Total | Memo: Number of Governments |
|-----------------|-------------------------------------------|--------------|-------|-----------------------------|
| 19.5            | 22.2                                      | 21.6         | 32.1  | 3,300                       |
| 6.3             | 20.4                                      | 5.8          | 25.6  | 19,910                      |
| 21.4            | 46.8                                      | 24.4         | 48.7  | 9,036                       |
| 5.7             | 16.5                                      | 7.8          | 30.2  | 771                         |
| 13.1            | 9.2                                       | 9.0          | 29.6  | 900                         |
| 14.7            | 18.9                                      | 10.6         | 29.4  | 1,598                       |
| 12.5            | 24.2                                      | 11.7         | 30.3  | 3,385                       |
| 7.2             | 30.2                                      | 7.2          | 33.4  | 25,592                      |
| 6.9             | 21.4                                      | 8.6          | 25.4  | 1,752                       |
| 17.4            | 38.0                                      | 16.7         | 34.8  | 3,925                       |
| 10.7            | 35.6                                      | 9.0          | 36.5  | 8,504                       |
| 2.8             | 26.1                                      | 5.1          | 40.6  | 7,141                       |
| 2.9             | 24.0                                      | 5.5          | 39.3  | 8,083                       |
| 9.6             | 17.9                                      | 7.3          | 24.5  | 2,998                       |
| 7.5             | 12.6                                      | 8.0          | 25.5  | 1,848                       |
| 6.2             | 16.9                                      | 4.7          | 26.8  | 1,639                       |
| 10.6            | 19.0                                      | 4.8          | 30.7  | 1,526                       |
| 8.2             | 22.8                                      | 7.8          | 32.7  | 32,246                      |
| 13,224          | 969                                       | 14,367       |       |                             |

in providing the remaining service, payroll preparation. Another econometric study found greater operating efficiency for privately owned than for publicly owned urban transit systems across the United States (Perry and Babitsky 1986).<sup>12</sup>

Studies of water and electric utilities are less decisive. Seven out of the thirteen studies cited in Donahue (1989) indicate no significant difference in costs between publicly and privately owned utilities, after controlling for other factors (such as the size of the service area) that might affect unit costs. Of the remaining six studies, all but one found publicly owned utilities to be more cost efficient than privately owned utilities.

Cost savings from using private contractors may

come from a variety of sources. Some authors contend that privatization reduces costs primarily by introducing competition into markets in which public agencies enjoyed a monopoly position (see, for example, Savas 1992 and Gómez-Ibáñez and Meyer 1993).<sup>13</sup> Under this view, governments can foster cost efficiencies by encouraging bidding by multiple entities when a contract is up for renewal and by ensuring that the current supplier does not have an unfair advantage in the contract process.<sup>14</sup> The argument also provides an explanation for the lack of cost savings from privatizing utilities. Because utilities are natural monopolies, with per customer costs falling as the service area increases, competition is not advantageous.

Additional studies point to specific cost advantages of private suppliers (see, for example, Kettl 1993a and 1993b, Dudek & Company 1988). Private firms may pay lower wages and fringe benefits (notably retirement benefits) than local governments. But they also often appear to have higher labor productivity. Private firms have more flexibility to use part-timers to meet peak loads, to fire unsatisfactory workers, and to allocate workers across a variety of tasks. In some cases, a private contractor may enjoy greater economies of scale or scope, or access to more productive capital. For example, the private contractor providing firefighting services to Scottsdale, Arizona also serves adjacent rural communities and designs its own specialized vehicles and equipment (Donahue 1989, p. 71).

While a private contractor may produce services more efficiently than public employees, governments incur new contracting and monitoring costs when they shift to private suppliers. The best studies of contracting have attempted to measure these additional costs in evaluating privatization efforts, although admittedly this is hard to do. Actions against contractors overrunning projected costs, not main-

<sup>12</sup> However, the authors found that private management of publicly owned transit systems did not result in cost savings; they attributed this result to a lack of sufficient incentives in contracts.

<sup>13</sup> In a similar vein, Boardman and Vining (1989) concluded that previous studies comparing public and private enterprises failed to find greater efficiencies on the part of the latter largely because they examined markets with limited possibilities for competition. Their own study, which is limited to industrial markets where competition exists, finds greater efficiencies for private firms.

<sup>14</sup> The United Kingdom introduced mandatory competitive bidding for local services starting in 1988. This provision covers refuse collection, street cleaning, and maintenance of vehicles and grounds, among others (Lauder 1992). However, Donahue (1989, p. 64) notes that open competition is an expensive option if it results in a loss of economies of contiguity.

taining quality standards, or perhaps even engaging in fraud are likely to engage multiple departments of government.

### *Burdens for Public Employees and Other Potential Disadvantages*

The burdens of contracting are concentrated on the public sector work force. In some cases, privatization results in layoffs of public sector employees, although governments often lower the burdens on employees by reassigning them to other government jobs, placing them with private contractors, or offering early retirement programs. One study proposes that governments link the pace of privatization to the rate of public employee attrition, in order to avoid

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*The burdens of contracting out are concentrated on the public sector work force, and public employee unions oppose privatization.*

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disruptions for workers (Cox and Love 1992). Still, because burdens on civil servants often are not eliminated entirely, public employee unions oppose privatization. Surveys have indicated that, where present, this opposition lowers the likelihood that public services will be contracted out (Dudek & Company 1988; The Mercer Group 1990, 1992).<sup>15</sup>

On the whole, consumers do not appear to be hurt by contracting, and in some cases they actually benefit. For example, privately operated prisons have been found to result in higher satisfaction for inmates and guards, lower escape rates, and fewer disturbances (Thomas and Logan 1993). Studies of transit have found better maintenance, greater safety, and more innovations in the private sector (Perry and Babitsky 1986; Cromwell 1991; Gómez-Ibáñez and Meyer 1993).

Even though consumers as a whole may not suffer from privatization, certain subsets may be at risk. For example, contracting can be used to mask decisions to reduce services (Donahue 1989, p. 136). Contracting can be especially risky in human ser-

vices. Elderly residents and those with infirmities tend to be sensitive to the way services are provided, and government may have very imperfect measures of quality with which to measure performance by the contractor (see especially Kettl 1993a and Schlesinger, Dorwart, and Pulice 1986). Furthermore, part of what advocates of privatization call waste on the part of the public sector may be the inevitable consequence of a conscious effort to redistribute resources to particular parts of the population (Borcherding and Pommerhne 1982). Despite these natural obstacles to privatization of human services, many examples of contracting exist—in part because of legislative mandates that governments seek bids from outside vendors.<sup>16</sup>

Finally, scattered examples exist of contractors who failed to live up to expectations, even though the average experience does not appear to be negative. As a consequence, elected officials may feel they can more readily avoid political risks by having public services operated by public employees.

### *IV. Determinants of Contracting*

The previous section suggests that contracting can result in savings if private sector firms are more cost-effective suppliers of services than the public sector, and if markets for contracted services are sufficiently competitive. On the other hand, public sector employees have an incentive to block privatization because their jobs and incomes are at risk. Public sector unionization may increase the effectiveness of opposition to privatization. This section tests whether these factors actually appear to explain contracting patterns among local governments in the United States.<sup>17</sup>

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<sup>15</sup> Unions may lobby for legislation that limits the potential cost savings from privatization, as well as directly opposing particular moves to privatize. For example, Chi (1992) reports that New York state has a law requiring government contractors to pay prevailing union wage rates.

<sup>16</sup> For example, Schlesinger, Dorwart, and Pulice (1986) cite a Massachusetts law requiring all new contracts for mental health patient services valued in excess of \$40,000 to be competitively bid and all renewal contracts to be subject to competitive bidding at least once every three years. Before the enactment of the law, contracting existed but often was limited to designated private nonprofit organizations staffed at least in part by state employees.

<sup>17</sup> By way of comparison, Abraham and Taylor (1993) found multiple explanations for contracting by private firms. These included a desire to reduce labor costs, make use of specialized skills, and meet volatile demands.

### Potential Explanations for Contracting

This section describes how the extent of contracting and potential explanations for contracting are measured. Appendix Table I provides additional details.

*Extent of Contracting.* The data on contracting are taken from the 1987 Census of Governments.<sup>18</sup> The sample consists of 655 municipalities and townships with population of at least 25,000 that provide at least four of the 12 services covered in the Census questionnaire.<sup>19</sup> The extent of contracting is measured as follows. For each service  $j$  that it provides, locality  $i$  is assigned a contracting dummy  $d_{ij}$ , equal to 1 if the service is contracted out and 0 if it is not contracted out. Let  $\mu_j$  equal the fraction of all localities that contract out for service  $j$  (in other words, the average value of  $d_{ij}$ ). The overall contracting index for locality  $i$  is measured as the sum of the deviations of its contracting dummies from their average values for all localities:

$$C_i = \sum_{j \in J_i} (d_{ij} - \mu_j)$$

where  $J_i$  represents the set of services provided by locality  $i$ . A positive value of the contracting index indicates that the locality contracts out more than average, adjusting for the mix of services provided to its residents and the fact that not all services are equally likely to be contracted out. A negative value indicates below-average contracting.

It is important to bear in mind that  $C_i$  provides a somewhat imprecise measure of the extent of contracting. The Census data indicate that a community contracts out for a service whether or not the service is entirely provided by outside contractors. Frequently, only some aspects of a given service are contracted out. For example, a town may contract out for hookup of new water customers while using its own employees to read meters. Or it may operate a general public transit system while it contracts out for shuttle services for senior citizens. In the extreme

<sup>18</sup> Note again that the Census of Governments uses "contracts" to encompass both contracts and franchises.

<sup>19</sup> Counties are omitted from the study and are a relatively unimportant level of government in New England. The omission of municipalities and townships with population below 25,000 reduced the total sample size from 28,946 to 1,662. The sample was further reduced to 1,196 because some communities did not report on the manner in which they provide the services covered in the Census questionnaire. Omitting localities that provide fewer than four services and those that lacked some of the explanatory variables further reduces the sample to 655.

case, a single private sector manager may be hired to supervise civil servants. All these examples yield a contracting dummy equal to 1 in the Census survey, even though they represent different degrees of privatization. Unfortunately, no estimates of the dollar value of contracts or the number of contract employees exist for a broad sample of governments.

A potential problem with interpreting the Census data is that measured contracting includes cases when governments contract with other governments or quasi-governmental agencies. Therefore Census-measured contracting is not necessarily equivalent to privatization. The results of a small, informal survey confirm that the reported percentages of contracting for library and water services, though relatively low, indeed may overstate the degree of privatization.<sup>20</sup>

*Costs of Providing Services.* All else equal, a community should be more likely to hire private contractors the higher the costs of providing services by public employees relative to the cost of providing them using workers from the private sector. Average monthly earnings of local government noneducational workers are used to measure costs in the public sector. Average revenues per employee in the business services industry are used as an indicator of the costs of hiring private contractors.<sup>21</sup> Unfortunately, measures of non-wage cost differentials, which some studies find to be substantial, were not available.<sup>22</sup>

As the literature summary indicated, in the absence of competition among contractors, the community may not achieve potential cost savings from privatization because contractors are able to earn monopoly profits. Small, remote localities are especially likely to encounter this problem. The regressions include a dummy variable indicating whether or not the community is located in a metropolitan area as a proxy for the availability of contractors.<sup>23</sup>

<sup>20</sup> In connection with the current study, 22 communities in Massachusetts and Michigan were called in order to ascertain the nature of their contracts. All three communities contracting for library services, two (out of four) contracting for water supply, one (out of one) contracting for sewerage treatment, and one (out of four) contracting for transit did so with another government or public authority. Also, one administrator believed that the 1987 response to the Census of Governments regarding contracting for water was erroneous. In the cases of airports, hospitals, and landfills, the respondents confirmed that the contracts were with private firms.

<sup>21</sup> This measure was used by Good (1992).

<sup>22</sup> For example, Gómez-Ibáñez and Meyer (1993) note that more than one-half of the savings associated with transport privatization come from sources other than wages.

<sup>23</sup> Abraham and Taylor (1993) found this variable to be significant in explaining contracting behavior for two of the four private industries they studied.

Finally, abstracting from location issues, smaller localities may incur relatively high unit costs if they operate their own services as a result of not being able to achieve economies of scale. They may benefit from turning to a contractor that serves multiple communities. This hypothesis is tested by including the population of the locality among the explanatory variables.

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*Privatization may be more acceptable in fast-growing communities, where services are being expanded and contractors are less likely to displace public employees.*

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*Opposition to Privatization.* The study evaluates whether public employees may provide more effective opposition to privatization where they are unionized. In the regressions, the unionized percentage of local noneducational public employees varies by state, and is measured separately for municipalities and townships in cases where a state has these two forms of local government.<sup>24</sup> On the other hand, privatization may be more acceptable in fast-growing communities. If services are being expanded to cover new residents, contractors are less likely to displace existing public sector employees. The regressions use each locality's population growth rate over a six-year period.

*Sensitivity to Costs.* Even if two communities face identical cost differentials between private contractors and public employees, one may be more likely than the other to economize because its residents are less willing to pay for services. Per capita income provides one indication of the community's ability to pay. Income tends to be positively related to the value of property, which in turn is the major tax base for many communities. Furthermore, for a given value of property, a community will find it easier to raise revenues the higher the monetary income of its residents.<sup>25</sup>

Another measure of sensitivity to costs relates to the number of local governments in a given geographic area. Where government density is higher, each locality will be under greater pressure to minimize the costs of providing a given bundle of services

(or to maximize the services it provides per dollar of revenue collected locally) in order to attract households and businesses. Eberts and Gronberg (1988) have shown that, all else equal, per capita government spending falls as the number of local general-purpose governments rises, a result they attribute to competition among governments.

Finally, contracting may vary with the number of services provided to residents. As the number of services increases, differences in the cost and effectiveness with which they are provided become more apparent. Prevailing pay scales or work rules may limit the possibilities for altering how public employees deliver services. Therefore, all else equal, localities providing diverse services may be more open to exploring private-sector alternatives than those localities where services are more limited.<sup>26</sup> The regressions include as an explanatory variable the total number of services covered by the Census questionnaire that are provided in the locality, whether by government employees or private contractors.

*Other Determinants.* The receptivity of a community to contracting may also depend on how residents view the role of their government. If citizens believe that local government should emphasize a narrow range of essential services, they might be relatively comfortable with using contractors in order to minimize the number of public employees. On the other hand, in places where the local government has a broader mandate to redistribute income, citizens may be less likely to support privatization. The first measure tested in the regressions is the percentage of the

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<sup>24</sup> Information on the extent of unionization for individual municipalities and townships is not publicly available. For private firms, Abraham and Taylor (1993) found no systematic association between unionization and contracting out.

<sup>25</sup> Because information on contracting is available only for 1987, this study cannot distinguish factors that originally lead locality to contract out for services from those factors that continue to play a role. For this reason, the study does not examine direct measures of fiscal health or fiscal stress, since they tend to fluctuate with business cycles. Alm, McKee, and Skidmore (1993) found, for example, that in the earlier years of their sample, fiscal stress contributed to states' decisions to adopt lotteries. More recently, decisions have been more influenced by practices in neighboring states.

<sup>26</sup> Somewhat analogously, Abraham and Taylor (1993) find that firms requiring diverse skills are more likely to contract out for work that pays wages that lie outside company norms. Specifically: "Our finding that high-wage establishments are more likely to contract out for janitorial services suggests that these establishments cannot easily pay low wages to janitors on their own payrolls. Similarly, the finding that low-wage establishments are more likely to contract out for certain types of high-skill services suggests that these establishments cannot easily pay high wages to workers in selected occupational groups."

locality's general noneducational expenditures allocated to core services, here measured as police and fire protection. The other is the percentage spent on human services, measured as public welfare plus health and hospitals. Because these indicators are negatively correlated with each other, they are entered sequentially rather than simultaneously.<sup>27</sup> Finally, regional dummies are used to test for attitudes or other unspecified influences that may be widespread in a region rather than being specific to any given community.

### *Regression Results*

The regressions reveal that, in deciding how to provide services, smaller localities respond more to economic variables than do larger localities. In both cases, attitudinal variables also matter, as do additional factors not taken into account in the regressions. Table 3 presents the most satisfactory regression results, while Appendix Table 2 presents results using a more comprehensive set of explanatory variables.<sup>28</sup>

Costs are highly significant determinants of contracting for localities with a population under 50,000 (columns 1 to 3). These localities were more likely to contract out if the average wage in the public sector was high, if they were located in a metropolitan area, and if they were small. Costs mattered both for non-utility services and for utilities, though they mattered more for the former category.<sup>29</sup> Private sector revenues per employee were not significant (Appendix Table 2). Unionization and population growth were significant at the 10 percent level for non-utility services; they entered with the expected signs (negative and positive, respectively) for utility services, but were not significant. The number of services provided was a strong predictor of the likelihood of contracting. The performance of the other measures of sensitivity to costs—per capita income and the density of governments—was disappointing; often they were insignificant or entered with the wrong sign. As expected, localities where government expenditures are highly concentrated on health and human services were less likely to contract out. Conversely, places where the government concentrates on providing "core" services are more likely to contract out, although the significance of this variable was somewhat lower than the health and human services variable. (This latter version of the regression is not shown in the tables.)

Columns 4 to 6 report on regressions with se-

lected regional dummies.<sup>30</sup> The New England dummy enters with a negative coefficient that is significantly different from zero in the "All Services" equation. With the regional dummy variables, the unionization and population growth variables lose significance, which suggests that the exact causes of objections to or acceptance of privatization are hard to pin down. Finally, adjusted R-squared values in the range of 0.2 to 0.3 confirm that localities are strongly guided by factors that are not measured in the regressions—including perhaps the presence or absence of political leaders who support privatization, the reputation of local contractors, or differences in costs of providing fringe benefits or in productivity between the public and private sectors.

A smaller set of explanatory factors mattered for localities with population of 50,000 or more (columns 7 to 9). The larger localities in this group were a little less likely to contract out than localities with population under 50,000. Higher public sector wages contributed to contracting, but the coefficients were not as significant and were smaller than for communities with population of less than 50,000. Since all places with population of at least 50,000 are located in a metropolitan area, the availability of contractors was not an issue. Contracting was more prevalent in localities providing a greater number of services (among the 12 covered) or concentrating a greater share of expenditures on core services, and among those located in the Middle Atlantic states. Unionization and population growth were insignificant (even in the absence of regional dummies), and the explanatory power of the regressions was less than in the case of smaller communities.

<sup>27</sup> The omitted category of expenditures largely represents public infrastructure. It includes roads, recreational facilities, and community development.

<sup>28</sup> A separate set of regressions (not shown) used a probit model to examine privatization with respect to individual services. Variables generally entered with the same signs as in the regressions measuring the total extent of contracting, but the coefficients were less likely to be significantly different from zero. In another set of alternative regressions, contracting indexes were defined separately for localities with population under and over 50,000, based on each group's average contracting experiences. In other words, the values of  $\mu_i$  were allowed to differ between the two groups. These regressions yielded results very similar to the ones reported, which used averages from the entire sample.

<sup>29</sup> The non-utility regressions are estimated for those localities providing at least four (out of nine) non-utility services. The utility regressions include localities providing at least two of the following three services: electricity, gas, and water. As a result of these criteria, the number of observations is much smaller for the utility equation than the other equations.

<sup>30</sup> Omitted dummies were rarely (if ever) significant in any regression.

Table 3  
*Contracting Regressions*

| Independent Variable                       | Population Between 25,000 and 49,999 |                          |                      |                       |                          |                      | Population 50,000 and Over |                          |                      |
|--------------------------------------------|--------------------------------------|--------------------------|----------------------|-----------------------|--------------------------|----------------------|----------------------------|--------------------------|----------------------|
|                                            | Without Regional Dummies             |                          |                      | With Regional Dummies |                          |                      | All Services (7)           | Non-Utility Services (8) | Utilities (9)        |
|                                            | All Services (1)                     | Non-Utility Services (2) | Utilities (3)        | All Services (4)      | Non-Utility Services (5) | Utilities (6)        |                            |                          |                      |
| <b>Costs</b>                               |                                      |                          |                      |                       |                          |                      |                            |                          |                      |
| Average wage in public sector              | .8123***<br>(.1942)                  | .9780***<br>(.2148)      | .5268**<br>(.2446)   | .7761***<br>(.1987)   | .9646***<br>(.2218)      | .5031**<br>(.2354)   | .3410*<br>(.1859)          | .2164<br>(.1676)         | .0593<br>(.2554)     |
| Location in metropolitan area              | .6659***<br>(.1774)                  | .4445***<br>(.1649)      | .4521**<br>(.2248)   | .6729***<br>(.1766)   | .4613***<br>(.1656)      | .4075**<br>(.2348)   |                            |                          |                      |
| Population                                 | -.0195**<br>(.0097)                  | -.0218**<br>(.0102)      | -.0146<br>(.0125)    | -.0212**<br>(.0097)   | -.0223**<br>(.0102)      | -.0125<br>(.0129)    | -.0004**<br>(.0001)        | -.0003***<br>(.0001)     | -.0002<br>(.0002)    |
| <b>Opposition to Contracting</b>           |                                      |                          |                      |                       |                          |                      |                            |                          |                      |
| Unionization                               | -.0053<br>(.0041)                    | -.0078*<br>(.0043)       | -.0057<br>(.0047)    | -.0037<br>(.0047)     | -.0073<br>(.0051)        | -.0042<br>(.0057)    | .0020<br>(.0053)           | .0016<br>(.0046)         | .0082<br>(.0087)     |
| Population growth                          | .0033<br>(.0039)                     | .0107*<br>(.0055)        | .0040<br>(.0043)     | .0023<br>(.0039)      | .0093<br>(.0056)         | .0031<br>(.0044)     | .0037<br>(.0050)           | .0037<br>(.0045)         | .0021<br>(.0068)     |
| <b>Sensitivity to Costs</b>                |                                      |                          |                      |                       |                          |                      |                            |                          |                      |
| Number of services                         | .3034***<br>(.0432)                  | .2580***<br>(.0447)      | .2424***<br>(.0423)  | .3148***<br>(.0433)   | .2534***<br>(.0444)      | .2431***<br>(.0427)  | .2224***<br>(.0384)        | .1568***<br>(.0354)      | .1825***<br>(.0468)  |
| <b>Other</b>                               |                                      |                          |                      |                       |                          |                      |                            |                          |                      |
| Concentration on core functions            |                                      |                          |                      |                       |                          |                      | .0186**<br>(.0094)         | .0171**<br>(.0087)       | .0133<br>(.0129)     |
| Concentration on health and human services | -.0139***<br>(.0051)                 | -.0096*<br>(.0053)       | -.0061<br>(.0054)    | -.0134***<br>(.0051)  | -.0094*<br>(.0052)       | -.0053<br>(.0056)    |                            |                          |                      |
| New England dummy                          |                                      |                          |                      | -.4835**<br>(.2255)   | -.3081<br>(.2262)        | -.3324<br>(.2986)    | -.0481<br>(.3059)          | -.0999<br>(.2621)        | .3868<br>(.9377)     |
| Middle Atlantic dummy                      |                                      |                          |                      | .1364<br>(.2584)      | .3758<br>(.3677)         | .0488<br>(.4140)     | .8450***<br>(.2743)        | .9106***<br>(.2656)      | 1.442***<br>(.3968)  |
| West North Central dummy                   |                                      |                          |                      | -.4492*<br>(.2558)    | -.3555<br>(.2409)        | -.3121<br>(.3724)    | -.4801*<br>(.2698)         | -.3888*<br>(.2260)       | -.0362<br>(.3191)    |
| Constant                                   | -2.855***<br>(.5317)                 | -2.742***<br>(.5379)     | -2.318***<br>(.6916) | -2.756***<br>(.5354)  | -2.628***<br>(.5427)     | -2.366***<br>(.7071) | -2.747***<br>(.5015)       | -2.063***<br>(.4473)     | -2.170***<br>(.7175) |
| Adjusted R-squared                         | .200                                 | .240                     | .298                 | .215                  | .252                     | .291                 | .119                       | .128                     | .255                 |
| Number of observations                     | 316                                  | 213                      | 89                   | 316                   | 213                      | 89                   | 339                        | 269                      | 86                   |

\*\*\*Significant at 1 percent level.

\*\*Significant at 5 percent level.

\*Significant at 10 percent level.

### *Contracting Decisions in the New England States*

The equations including regional dummies fit the New England averages very closely.<sup>31</sup> Without the dummies, New England contracting is overpredicted. For example, for localities with population under 50,000, the regression excluding regional dummies

predicts the overall New England contracting index to be close to, rather than substantially below, the

<sup>31</sup> For localities with population under 50,000, the nine regional values of the overall contracting index ranged from -0.32 to +0.60; New England's value of -0.26 was the second lowest (Table 4). For localities with population of at least 50,000, New England had the third to lowest value.

Table 4  
*Regression Variables*

| Variable                                         | Population<br>Between 25,000<br>and 49,999 |                | Population<br>50,000 and Over |                |
|--------------------------------------------------|--------------------------------------------|----------------|-------------------------------|----------------|
|                                                  | United<br>States                           | New<br>England | United<br>States              | New<br>England |
| Contracting Index                                |                                            |                |                               |                |
| Overall                                          | .09                                        | -.26           | -.12                          | -.24           |
| Non-utility<br>services                          | .08                                        | -.24           | -.12                          | -.30           |
| Utilities                                        | .07                                        | -.14           | .07                           | .              |
| Average wage in<br>public sector                 | 2.00                                       | 2.03           | 2.19                          | 2.05           |
| Location in<br>metropolitan<br>area              | .81                                        | .90            | 1.00                          | 1.00           |
| Population                                       | 34.54                                      | 33.87          | 197.23                        | 97.24          |
| Unionization                                     | 35.49                                      | 53.80          | 36.78                         | 64.39          |
| Population growth                                | 8.55                                       | 1.40           | 8.65                          | -.35           |
| Number of<br>services                            | 5.52                                       | 5.73           | 6.10                          | 5.97           |
| Concentration on<br>core functions               | 24.50                                      | 24.57          | 24.70                         | 23.52          |
| Concentration on<br>health and<br>human services | 4.71                                       | 6.62           | 4.51                          | 9.92           |

Note: The values shown for the independent variables are average values for localities providing at least four (of the twelve) services.  
\*Only one local government in New England was included in the utilities regression.

national average. In other words, the region's low contracting tendency remains a mystery.

Table 4 indicates the role of measurable influences on privatization. Given their cost factors, New England localities with population under 50,000 would be expected to contract out more than their counterparts in other parts of the country. Ninety percent are located in a metropolitan area, compared to 81 percent nationally. Also, the average New England locality pays slightly higher wages and is slightly smaller than the average included community in the nation. For localities with population over 50,000, cost factors are mixed.

Factors other than costs partly explain low privatization in New England. In other states, on average only about one-third of public sector employees are unionized, compared to over one-half in New England. Population growth has been minimal in the region, which means that there is little need for

expansion of public services. Therefore, private contractors would be likely to displace public employees. Finally, a relatively high share of government non-education spending is devoted to health and human services, which the regressions showed was a negative indicator of contracting.<sup>32</sup>

## V. Conclusions

Surveys and other analyses confirm that state and local governments can achieve savings, without sacrificing quality, by privatizing the delivery of services through judicious use of private contractors. Regressions indicate that localities do in fact tend to contract out to avoid paying high public sector wages. They also are more likely to contract out if they provide multiple services. A wide range of functions apparently makes cost comparisons across programs more feasible, while making it less likely that civil service rules produce desirable results for all programs. Local governments are more likely to contract out when they serve a small population and when they are located in a metropolitan area. In such circumstances, they may find it difficult to achieve sufficient scale economies on their own, but have access to a number of contractors to ensure competition.

These factors, while significant, do not explain much of the observed variation in the degree of contracting across localities. Attitudes are important. Places where government concentrates a greater share of resources on provision of basic public services such as police and fire protection are more likely to contract out than places where the government is charged with more active redistribution of resources. Unobservable factors—including perhaps the views of local politicians or relative non-wage costs between the public and private sectors—also affect government decisions.

In addition to this variation across localities, some services are less likely to be contracted out than others. In particular, basic public services such as fire protection are contracted out far less often than services that are commonly purchased individually by private businesses. The reason for this discrep-

<sup>32</sup> A study by Tannenwald (1990) had found that New England's high priority on collective services and redistributive expenditures limited the extent to which the region could rely on user fees to finance public expenditures. An interesting extension of the work in that article and the current study would be to consider in a simultaneous model the effects of preferences for public services on methods of service delivery and financing.

ancy may be partly economic (the relative abundance or scarcity of private contractors for some services) and partly attitudinal (whether or not the service is viewed as the responsibility of local governments). For electric power and gas supply, contracting rates are relatively high, despite evidence that public utilities often can produce services at costs that are no higher, and may even be lower, than those of private utilities.

Cities and towns in New England have shown less willingness to privatize public services than their national counterparts. This discrepancy could not be explained. Despite historical opposition, however, there is reason to believe that contracting out and

other forms of privatization will become more popular in the future. A general move to improve cost efficiency and productivity in government has created considerable interest in privatization efforts, and some state officials in the region are actively exploring further use of this option. Equally important, New England's local governments serve communities that on average are smaller, but more likely to be located close to concentrations of population, than is true for the nation as a whole. Access to multiple service providers increases the likelihood of being able to produce meaningful competition among contractors, which is an important prerequisite to achieving cost savings.

Appendix Table 1  
*Variable Definitions, Sources, Means, Minimums, and Maximums*

| Variable                                   | More Detailed Definition                                                                                                                                    | Data Source | Mean (Observations for 1196 Localities) | Minimum | Maximum  |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------|---------|----------|
| Contracting Index                          | See text.                                                                                                                                                   | a           | 3.86e-10                                | -2.43   | 6.97     |
| Average wage in public sector              | Average October 1987 earnings of full-time employees, thousands of dollars.                                                                                 | b           | 2.15                                    | .94     | 4.63     |
| Location in metropolitan area              | Dummy = 1 if the municipality or township is located in a metropolitan statistical area.                                                                    | a           | .94                                     | 0       | 1        |
| Population                                 | 1986 population, thousands.                                                                                                                                 | a           | 91.41                                   | 25.02   | 7,262.75 |
| Unionization                               | Percent of public noneducational employees that are organized, by state. Computed separately for municipalities and townships.                              | b           | 37.73                                   | 1.31    | 93.67    |
| Population growth                          | Population growth rate from 1980 to 1986.                                                                                                                   | a           | 9.85                                    | -24.21  | 497.86   |
| Government density                         | The number of county, municipal and township governments per square mile, by state. Computed separately for metropolitan statistical areas and other areas. | b & d       | .03                                     | .00     | .08      |
| Revenues per employee                      | Annual receipts for firms providing business services relative to the number of paid employees.                                                             | a           | 3,005.5                                 | 350.0   | 11,070.6 |
| 1987 income per capita                     | Per capita money income, thousands of dollars.                                                                                                              | c           | 12.89                                   | 1.39    | 36.69    |
| Number of services                         | Sum of the number of services operated and the number of services contracted.                                                                               | a           | 4.43                                    | 0       | 12       |
| Concentration on core functions            | Expenditures on police and fire protection as a percent of total expenditures less education.                                                               | b           | 25.6                                    | 0       | 57.5     |
| Concentration on health and human services | Expenditures on public welfare and health and hospitals as a percent of total expenditures less education.                                                  | b           | 3.4                                     | 0       | 79.8     |
| New England dummy                          | Dummy = 1 if state = CT, MA, ME, NH, RI, or VT.                                                                                                             | a           | .1                                      | 0       | 1        |
| Middle Atlantic dummy                      | Dummy = 1 if state = NJ, NY, or PA.                                                                                                                         | a           | .17                                     | 0       | 1        |
| East North Central dummy                   | Dummy = 1 if state = IL, IN, MI, OH, or WI.                                                                                                                 | a           | .17                                     | 0       | 1        |
| West North Central dummy                   | Dummy = 1 if state = IA, KS, MN, MO, NE, ND, or SD.                                                                                                         | a           | .07                                     | 0       | 1        |
| South Atlantic dummy                       | Dummy = 1 if state = DE, DC, FL, GA, MD, NC, SC, VA, or WV.                                                                                                 | a           | .11                                     | 0       | 1        |
| East South Central dummy                   | Dummy = 1 if state = AL, KY, MS, or TN.                                                                                                                     | a           | .04                                     | 0       | 1        |
| West South Central dummy                   | Dummy = 1 if state = AR, LA, OK, or TX.                                                                                                                     | a           | .09                                     | 0       | 1        |
| Mountain dummy                             | Dummy = 1 if state = AZ, CO, ID, MT, NV, NM, UT, or WY.                                                                                                     | a           | .08                                     | 0       | 1        |
| Pacific dummy                              | Dummy = 1 if state = AK, CA, HI, OR, or WA.                                                                                                                 | a           | .19                                     | 0       | 1        |

Source: U.S. Bureau of the Census: <sup>a</sup>machine readable data, 1988; <sup>b</sup>(1988); <sup>c</sup>(1993); <sup>d</sup>unpublished data.

Appendix Table 2  
*Contracting Regressions with a Comprehensive Set of Independent Variables*

| Independent Variable                             | Population Between 25,000 and 49,999 |                             |                      |                       |                             |                      |                            |                             |                      |
|--------------------------------------------------|--------------------------------------|-----------------------------|----------------------|-----------------------|-----------------------------|----------------------|----------------------------|-----------------------------|----------------------|
|                                                  | Without Regional Dummies             |                             |                      | With Regional Dummies |                             |                      | Population 50,000 and Over |                             |                      |
|                                                  | All Services<br>(1)                  | Non-Utility Services<br>(2) | Utilities<br>(3)     | All Services<br>(4)   | Non-Utility Services<br>(5) | Utilities<br>(6)     | All Services<br>(7)        | Non-Utility Services<br>(8) | Utilities<br>(9)     |
| <b>Costs</b>                                     |                                      |                             |                      |                       |                             |                      |                            |                             |                      |
| Average wage in public sector                    | .6534***<br>(.2199)                  | .8660***<br>(.2558)         | .4186*<br>(.2510)    | .5064**<br>(.2305)    | .7845***<br>(.2737)         | .2933<br>(.2743)     | -.0797<br>(.2326)          | -.0856<br>(.2091)           | -.2763<br>(.2928)    |
| Revenues per employee in private services sector | .0473<br>(.0756)                     | -.0237<br>(.0926)           | .0082<br>(.1134)     | .0355<br>(.0748)      | -.0448<br>(.0921)           | -.0070<br>(.1133)    | .0070<br>(.0812)           | -.0277<br>(.0734)           | .0866<br>(.0906)     |
| Location in metropolitan area                    | .5595***<br>(.1970)                  | .3983**<br>(.1842)          | .3205<br>(.2644)     | .5437***<br>(.1950)   | .4185**<br>(.1836)          | .3104<br>(.2740)     |                            |                             |                      |
| Population                                       | -.0138<br>(.0104)                    | -.0172<br>(.0111)           | -.0134<br>(.0133)    | -.0159<br>(.0103)     | -.0176<br>(.0110)           | -.0108<br>(.0134)    | -.0004**<br>(.0001)        | -.0003**<br>(.0001)         | -.0001<br>(.0002)    |
| <b>Opposition to Contracting</b>                 |                                      |                             |                      |                       |                             |                      |                            |                             |                      |
| Unionization                                     | -.0061<br>(.0044)                    | -.0083*<br>(.0047)          | -.0077<br>(.0053)    | -.0028<br>(.0050)     | -.0068<br>(.0055)           | -.0033<br>(.0065)    | .0066<br>(.0057)           | .0055<br>(.0050)            | .0073<br>(.0094)     |
| Population growth                                | .0033<br>(.0042)                     | .0103<br>(.0064)            | .0060<br>(.0046)     | .0030<br>(.0041)      | .0102<br>(.0063)            | .0048<br>(.0047)     | .0049<br>(.0053)           | .0048<br>(.0047)            | -.0017<br>(.0073)    |
| <b>Sensitivity to Costs</b>                      |                                      |                             |                      |                       |                             |                      |                            |                             |                      |
| Number of services                               | .3185***<br>(.0449)                  | .2706***<br>(.0459)         | .2457***<br>(.0447)  | .3323***<br>(.0446)   | .2664***<br>(.0455)         | .2473***<br>(.0441)  | .2345***<br>(.0395)        | .1608***<br>(.0364)         | .1730***<br>(.0494)  |
| Per capita income                                | .0302<br>(.0231)                     | .0252<br>(.0237)            | .0430<br>(.0364)     | .0505**<br>(.0240)    | .0369<br>(.0248)            | .0670*<br>(.0394)    | .0821***<br>(.0282)        | .0710***<br>(.0269)         | .0616<br>(.0395)     |
| Government density                               | -.3232<br>(3.821)                    | -.7637<br>(4.528)           | 6.715<br>(5.723)     | 1.634<br>(4.056)      | 1.285<br>(4.749)            | 7.281<br>(5.661)     | .9190<br>(4.215)           | .1050<br>(4.202)            | -4.423<br>(6.380)    |
| <b>Other</b>                                     |                                      |                             |                      |                       |                             |                      |                            |                             |                      |
| Concentration on core functions                  |                                      |                             |                      |                       |                             |                      | .0215**<br>(.0098)         | .0181**<br>(.0091)          | .0178<br>(.0136)     |
| Concentration on health and human services       | -.0147***<br>(.0054)                 | -.0099*<br>(.0054)          | -.0064<br>(.0058)    | -.0137***<br>(.0053)  | -.0092*<br>(.0054)          | -.0046<br>(.0060)    |                            |                             |                      |
| New England dummy                                |                                      |                             |                      | -.6974***<br>(.2489)  | -.4454*<br>(.2550)          | -.6012*<br>(.3203)   | -.4719<br>(.3342)          | -.4410<br>(.2940)           | .7034<br>(.9613)     |
| Middle Atlantic dummy                            |                                      |                             |                      | -.0019<br>(.2809)     | .3082<br>(.3846)            | .2980<br>(.4440)     | .6046**<br>(.3131)         | .7869**<br>(.3070)          | 1.409***<br>(.5114)  |
| West North Central dummy                         |                                      |                             |                      | -.4525<br>(.2820)     | -.3651<br>(.2743)           | -.5339<br>(.4255)    | -.4762*<br>(.2870)         | -.4049*<br>(.2444)          | .0013<br>(.3525)     |
| Constant                                         | -3.171***<br>(.5854)                 | -2.907***<br>(.6026)        | -2.697***<br>(.7682) | -3.132***<br>(.5788)  | -2.824***<br>(.5981)        | -2.820***<br>(.7685) | -3.133***<br>(.5525)       | -2.355***<br>(.4951)        | -2.322***<br>(.8127) |
| Adjusted R-squared                               | .198                                 | .236                        | .292                 | .220                  | .251                        | .310                 | .146                       | .149                        | .279                 |
| Number of observations                           | 303                                  | 202                         | 85                   | 303                   | 202                         | 85                   | 321                        | 252                         | 60                   |

\*\*\*Significant at 1 percent level.

\*\*Significant at 5 percent level.

\*Significant at 10 percent level.

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Factors Important In  
Local Government's  
Privatization Decisions

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## FACTORS IMPORTANT IN LOCAL GOVERNMENTS' PRIVATIZATION DECISIONS

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In this article, the author builds a model of local governments' decisions to contract out residential solid waste disposal services and empirically tests this model by using a new dependent variable—proportion of expenditures on a service that goes to expenses other than payroll. The important factors affecting the contracting-out decision are scale economies, nonproperty taxes, difference in private- and public-sector unionization rates, and income and bond rating, in that order. Political and ideological factors appear to be less determinative than economic considerations.

Privatization, in general, and contracting out, in particular, were popularized by such national leaders as President Ronald Reagan and Prime Minister Margaret Thatcher. Since then, many local governments have also been considering privatization. But what considerations enter into local government's decision to contract out a particular service? An examination of the privatization decision can draw on an extensive literature regarding the "make-or-buy" decision of private firms; Coase (1937), Alchian and Demsetz (1972), and Williamson (1979) provided early contributions. In this article's theoretical part, I will build on this literature and adapt it to the make-or-buy decision of local governments—that is, whether to contract out a service to a private firm. The objective of this article, thus, is to contribute to the privatization literature by presenting theories about the major considerations that enter local governments' privatization decisions, particularly contracting out. First, I will review some of the existing literature and indicate where this article fits in. Then I will build a model and subsequently test it empirically in relation to the decisions to contract out residential solid waste disposal services.

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### PREVIOUS STUDIES

Studies in which scholars have examined factors that can affect local officials' decision to contract out services fall into two main categories: those in which mainly one privatization factor is examined (e.g., cost effects of contracting out) and those in which the emphasis is on building and empirically testing a comprehensive framework and a model with which to explain the contracting decisions and test them empirically. Many studies of the first type exist, but few of the second exist; this article is designed to be an addition to the second type.

### SPECIFIC FACTOR STUDIES

Stevens (1984) studied the relative costs of service provision in 121 cities in Southern California and found that out of the eight services studied, seven exhibited significantly lower costs when produced by private firms. The highest savings of 96% were found in asphalt overlay construction, and there were 42% savings in refuse collection. She attributed these cost differentials to more efficient production techniques used by private firms rather than to wage differences and concluded that "on the average, these differences in cost were not associated with differences in the quality of service delivery" (p. 401).

A number of studies have provided reasons to interpret cost studies such as Stevens' (1984) with caution. In a study of nursing homes in New York, Gertler and Waldman (1992) found considerable variability in the quality of care across nursing homes of different sizes and specifically reported that "When quality is ignored, the estimates [of a quality-adjusted cost function] . . . suggest large economies of scale. However, estimates of a quality-adjusted cost function show diseconomies of scale for high-quality homes" (p. 1251).

Sullivan (1987) focused on the loss of control and social accountability concomitant with privatization and expressed concern that "By turning 'production' of public services over to private groups, governments can effectively evade constitutional restraints" (p. 462). This would imply an additional social cost not captured in simple accounting measures.

Ferris and Graddy (1991) and Prager (1993) focused on the fact that direct measurement of the cost of private production tends to understate the social cost. Ferris and Graddy found that additional costs related to monitoring the private service producer—that is, *transaction costs* of contracting—are found to influence the choice between private and public production. Prager

investigated the same issue under the label *external monitoring cost*, as opposed to *internal monitoring necessary* with in-house government production. He also distinguished between micro- and macrocontracting—for example, contracting out individual tasks rather than entire services—asserting that the macrocontracting is more difficult to monitor and, hence, is more costly than microcontracting.

A summary of studies of major services that have been contracted out in the United States is presented in Hirsch (1991). The services include solid waste disposal, management and operation of facilities and programs, security services, parks and recreation services, road services, vehicle maintenance and repair, and day-care services. For each service, there is a review of productivity comparisons, extent of contracting, and switching. The resulting picture shows mixed productivity results and not insignificant switching in and out of contracting.

#### COMPREHENSIVE MODELS OF THE CONTRACTING DECISION

Ferris (1986) developed a model designed to test conditions under which urban governments contract out. He focused on supply—that is, production cost and fiscal and political determinants. He constructed an index of overall privatization by adding the number of services contracted and analyzed how this index varied across 433 cities. This method effectively highlighted interjurisdictional variations while necessarily obscuring variation across services (e.g., certain services might be privatized in small cities but not in large cities or may be privatized to varying degrees). He found that in terms of supply factors, privatization is less common in cities with lower relative public-sector wages and in those that are neither metropolitan nor within the standard metropolitan statistical area with other large cities (indicating fewer competitive private suppliers of service). Within the fiscal category, a higher per capita tax burden, a higher level of intergovernmental grant revenue, and statutory fiscal limitation are found to increase the proportion of services privatized. Finally, among political variables, Ferris found less privatization as a city's proportion of residents aged 65 years or older, of public employees, and of residents aged 30 years or younger increased.

A second comprehensive model was constructed and implemented by McGuire, Ohsfeldt, and Van Cott (1987), who focused on school transportation. They found that privatization was more likely in cities in which strike activity, wage rates, and unionization rates in the public sector were higher and in which the government's proclivity to tax and spend was lower. The

line between political and economic determinants appears to be blurred. For example, political conditions within a jurisdiction may allow for higher taxes that will reduce the urgency of cost-cutting measures for school administrators. The authors interpreted their results as finding that "non-monetary constraints are an important factor affecting this choice of production modes" (p. 212).

Another model was built by Dubin and Navarro (1988). They used a choice-theoretic framework, focusing on economies of density as an economic determinant and on the power of rent-seeking interest groups and ideology as political determinants. By using solid waste disposal as their service, they could point to differences among private and public collectors concerning the exclusivity of territorial rights. In the case of private firm collectors, there can and does exist much competition for business in the same geographical area; governmental collectors have exclusive territorial rights and can significantly benefit from scale economies. Private firms may also benefit from scale economies if they win a contract for a large city. As to the role of ideological preferences, they found that privatization decisions were likely to diverge in both Democratic and Republican communities from the cost-minimizing alternative and impose real costs on the community (p. 236).

A theoretical model was presented in Hirsch (1991) that hypothesized that the decision to contract out a service is affected by accountability, cost and efficiency, and distributional considerations. No steps were taken to implement the model empirically.

#### THE MODEL

The privatization model that will be developed and empirically implemented in this article is in some sense a fusion and extension of my earlier theoretical model (Hirsch 1991) and the model implemented by Ferris (1986). The model is based on the assumption that the decision of local governments to contract out a given service depends on four sets of factors:

- Accountability
- Production, efficiency, and cost
- Political, institutional, and legal considerations
- Fiscal pressures facing the government unit

These four factors will be discussed in turn.

### ACCOUNTABILITY

Accountability refers to the responsibility of ensuring that a service highly valued and/or deemed crucial by society is provided at an acceptable minimum level, particularly when the private sector's profit motive would involve extremely high transaction costs. Thus accountability is affected by the extent to which a service can be monitored and its providers punished. In relation to services from which society demands a high degree of accountability, privatization tends to be ruled out. Services for which accountability is an important consideration include those provided by judges, especially in criminal proceedings; by officials who must ensure the rights of minorities in law enforcement and incarceration; by planning officials; and by zoning officials. In short, before efficiency and other characteristics associated with a service are considered, those who are to decide on the efficacy of contracting out must determine whether accountability is a major issue. If it is, no examination of further factors may be needed.

### PRODUCTION, EFFICIENCY, AND COST

Productivity enhancement and cost savings, which have been the overarching privatization determinants in the past, can be analyzed in terms of a number of major factors, scale economies being one of the most significant. They can result, for example, when a government service is provided by a large firm that contracts with many departments or with many governments rather than by a relatively small government department. Bulk purchases become possible, as does spreading relatively fixed management costs over a larger output. Econometric studies of urban government cost and production functions provide some partial confirmation of this proposition.<sup>1</sup>

A second factor involves *economies of scope*, a term that refers to the increased efficiency that can result when several complementary services are under the direction of the same entity. Although economies of scope are less common than economies of scale, they arise, for example, when there are significant gains from complementary relations.<sup>2</sup> Although it may be inefficient to contract out certain services separately, it can become cost-effective to do so when some are bundled together to benefit from economies of scope. For example, rather than privatizing fire services alone, a government might privatize many or all emergency services.

Market competition is another factor. It must be remembered that markets for local public services are apt to be imperfectly competitive. Yet the more competitive the market, the greater the likely efficiency gains from contracting out. When privatization merely replaces the public monopoly with a

private one, the bidding process may fail to force the asking price of the winning firm down close to its opportunity cost. The relationship between the extent of competition and the final equilibrium bidding strategies depends on the structure of the auction and, in particular, on the possibility of collusion between bidders.<sup>3</sup> In addition, if the service in question is not competitively provided, the equilibrium costs will include monopoly profits, and the cost advantages of privatization would thus be minimal.

### INSTITUTIONAL POLITICAL AND LEGAL FACTORS

The institutional environment within which the privatization decision is made and which seriously affects privatization is complex and multifaceted. One of the circumstances that bears on the contracting-out decision is labor-management relations; often, legislatures prescribe restrictive hiring practices, work rules, and costly compensation patterns for public employees and, sometimes, for the employees of private firms that bid on public contracts. As a result, firms and governments face constraints on factor ratios and wages paid. In the case of unionized labor, these constraints can be given either explicitly through union contracts or implicitly by the fear of union political strength. In either case, the government faces a *de facto* technology in which the possibilities for input substitution can be more limited than in the actual technology.<sup>4</sup> Because public unions are more powerful than those in the private sector, they tend to exert greater pressure on employers.<sup>5</sup> Thus unionization may prove to be a barrier to contracting out for local governments that find the political pressures applied by unions difficult to resist. This condition can be looked upon as an additional cost of contracting out that is revealed not in factor ratios or wages but as a cost incurred by politicians when contracting out occurs.

Restrictive labor laws can be a further impediment to privatization, and much of the earlier analysis can be applied to such labor laws as prevailing wage laws, which compel governments to pay wages at least equal to those paid by the private sector for similar work, and residency laws, which restrict hiring of workers to those who are residents of the jurisdiction. These laws can impose serious constraints on the input mix of governments.

Furthermore, the dominant party affiliation of a community's residents can affect privatization as can the general income level. By and large, relatively well-off communities with conservative values tend to favor privatization; communities that have many residents who belong to unions and that have a large minority population tend to oppose privatization.

### FISCAL PRESSURES

Financial exigencies are likely to exert pressure on local government to consider contracting out some services in an effort to reduce costs. A number of possible signals of the presence of such pressures can be identified. One such signal is the rating given bonds by major bond-rating firms, which testifies to the general fiscal health of the particular government as perceived by experts. Jurisdictions with a low rating usually are, or in the recent past have been, experiencing financial difficulties, which, in turn, can stimulate their exploration of such measures as contracting out to reduce cost.

Another indication can be the level of subsidies given to a local government by federal and state governments. If such subsidies make local officials feel less pressured to seek cost-reducing arrangements, the incentive to consider contracting out will have diminished. (Yet high subsidies may suggest strong fiscal pressures.)

Finally, when the responsibility to pay per capita taxes to local, state, and federal governments falls on residents and the taxes are relatively high and visible, citizens tend to pressure their government officials to explore ways to reduce costs so that their tax burden can be reduced. Such a scenario can prompt serious consideration regarding the contracting out of certain services.

### IMPLEMENTATION OF THE MODEL

In the following empirical analysis, I will focus on a single service, residential solid waste disposal, which tends to be the third or fourth largest budget item of most municipal governments. It involves few accountability problems and is one of the most common of privately produced local government services.

#### MODEL SPECIFICATION

In the preceding section, a model of the determinants of the contracting-out decision was developed that can be stated as follows:

$$\text{PRIV} = f(\text{ACC}, \text{PROD}, \text{IPLE}, \text{FISC}),$$

where

PRIV = extent to which a local government contracts out a service,  
ACC = accountability,  
PROD = production efficiency and cost,

TABLE 1: Descriptive Statistics, 1980

| Variable<br>Abbreviation | Definition                                                                                                          |
|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| PRIV                     | Proportion of residential solid waste disposal nonpayroll expenditures <sup>a</sup>                                 |
| POP                      | Population (1,000s) <sup>b</sup>                                                                                    |
| POPSQ                    | POP squared/100,000 <sup>b</sup>                                                                                    |
| DENS                     | Density—1000/sq. mile <sup>b</sup>                                                                                  |
| METRO                    | 1 if city is located in a metropolitan area of 50,000 or more, 0 otherwise <sup>b</sup>                             |
| UND                      | Difference between public employees' unionization and private employees' unionization rates (by state) <sup>c</sup> |
| INCO                     | City's median household income <sup>b</sup>                                                                         |
| OWNER                    | Percentage of owner-occupied housing <sup>b</sup>                                                                   |
| BOND                     | Moody's bond rating: A, Aa, or Aaa = 0; Bb or Baa = 1 <sup>d</sup>                                                  |
| SUBS                     | Per capita intergovernmental revenue transfers <sup>b</sup>                                                         |
| PTAX                     | Per capita city property tax <sup>b</sup>                                                                           |
| OTAX                     | Per capita city nonproperty taxes <sup>b</sup>                                                                      |
| STAX                     | State sales tax rate <sup>b</sup>                                                                                   |

a. U.S. Bureau of the Census (1981a, 1981b).

b. U.S. Bureau of the Census (1983).

c. Troy and Shefflin (1985).

d. Moody's Bond Rating (September 1982).

IPLE = institutional, political, and legal environment, ar:1  
FISC = fiscal pressures on governments.

Table 1 summarizes the variables that are included in the empirical analysis. Each of the variables will be discussed in the following sections.

#### Extent to Which a Local Government Contracts Out Residential Solid Waste Disposal with Firms (PRIV)

Data to directly measure PRIV do not exist. In previous research, Ferris (1986) and Ferris and Graddy (1991) used survey data to determine whether a service is or is not privatized. Such data have serious shortcomings because they are binary for any one service—that is, a given service is considered either privatized or not. In reality, privatization occurs along a continuum between total and no privatization.

An alternative measure, for which data are collected and published by the U.S. Bureau of the Census for cities with populations greater than 50,000, is

the proportion of expenditures on a particular service that goes to expenses other than payroll. There is good reason to conclude that cities for which this proportion is small compared to that of the average city (e.g., close to 0) privatize less than those for which the ratio is large (e.g., close to 1). (Thus, if a city completely contracts out a service, this ratio would be 1 because payroll expense on this service would be 0.)

Residential solid waste disposal is a service that lends itself well to empirical analysis. Its extent of privatization varies greatly across cities, from 0% to 100%, and government expenditure data are generally available.

It is conceded that the proposed measure of the degree of privatization (PRIV) has some flaws. Efficiency, possibly resulting from differential use of capital equipment, may affect this ratio.<sup>6</sup> Moreover, the ratio may be influenced by a number of institutional arrangements altogether unrelated to the extent of contracting out. For example, both involvement of county governments in solid waste disposal within a city and the actual classification of spending by service vary across cities. Advantages of the proposed measure are, however, that it is not artificially constrained to be discrete and that a uniform and consistent source of data exists across cities. Its conceptual clarity is another advantage.

#### Production Efficiency and Cost (PROD)

Although a cost function is not directly estimated, four variables related to efficiency and cost are included in the equation: POP, POPSQ, DENS, and METRO. These variables are described as follows.

*POP = City's population size.* If a U-shaped cost curve for city service provision is hypothesized, as is theoretically plausible and has been empirically verified (Ladd 1992), population size is likely to affect the degree of privatization. Large cities with large sanitation departments will face diseconomies; smaller ones will experience economies in government provision of solid waste disposal. To test for a parabolic relationship between city size and privatization, I included population (POP) and population squared (POPSQ) variables (Hirsch 1965). If a U-shaped unit cost function does exist, a negative coefficient on POP and a positive coefficient on POPSQ should be found, suggesting economies of scale for smaller cities and diseconomies for large ones.

*DENS = Density of population within city.* Negative externalities or external effects are likely to assume greater importance as density increases. If city governments are better able to internalize negative externalities

associated with solid waste disposal, then a negative relation between density and private-sector provision seems likely.

*METRO = City situated in metropolitan area.* A dummy variable equal to 1 is used if the city is located in a metropolitan area with a population greater than 500,000 inhabitants, and 0 is used if it is not. Private-sector competition for contracts tends to be greater within large metropolitan areas than it is in small ones; therefore, more privatization can be expected in large areas, with firms likely to be of sufficient size to enjoy economies of scale. Competition among bidders should lead to lower cost contracts.

#### Institutional, Political and Legal Environment (IPLE)

Three variables reflecting IPLE are included in the analysis; UND, INCO, and OWNER. These are described as follows.

*UND = Difference between state's public and private unionization rates.<sup>7</sup>* Unions are often a vocal and powerful political force in the decision to privatize city services. However, public and private unions have different interests; those in the public sector generally oppose privatization, and those in the private sector generally support it. Consequently, cities with large and influential public-sector unions and relatively little unionization in the private sector are likely to contract out relatively little of their solid waste disposal services, even though they are likely to have incentives to do so, and vice versa.

*INCO: City's median household income.* Because higher-income individuals tend to be politically more conservative than lower-income individuals and, therefore, are likely to be more ideologically opposed to large government, they can be expected to be also more favorably disposed to contracting out government services.

*OWNER: Percentage of owner-occupied dwellings within a city.* Home owners may be more concerned with the level of externalities associated with provision of government service than are renters. For example, they may be more likely to complain to local government about solid waste disposal noise, dirt, and smell and more likely to demand closer supervision to reduce those nuisances. They are likely to seek action, because reducing negative externalities may increase home values and, therefore, benefit even those owners personally not complaining about the externalities. Running counter to this effect, however, is that home owners tend to be more conservative and, hence,

more apt to support privatization than are tenants. Moreover, because they pay taxes directly to government, they are likely to be more concerned with cost of government services than are renters who pay taxes indirectly as part of their rent. A priori, it is, therefore, difficult to predict the direction in which home ownership will affect privatization.

### Fiscal Pressures (FISC)

Five variables reflecting FISC are included in the analysis: BOND, SUBS, PTAX, OTAX, and STAX. These are described as follows.

*BOND = City bond rating.* A dummy variable equal to 1 is used if Moody's rating is low (i.e., Ba or Baa), and a dummy variable equal to 0 is used if the rating is high (i.e., A, Aa, or Aaa).<sup>8</sup> The lower a city's bond rating, the more difficult and costly it is for the city to borrow and, hence, the greater the fiscal pressures it faces. Because privatization is often the result of cost-cutting measures in the wake of such pressures, a low bond rating is hypothesized to affect efforts to contract out positively and vice versa.

*SUBS = Per capita intergovernmental revenue transfers.* Cities able to obtain large subventions from other levels of government will often have their fiscal pressures alleviated and, therefore, usually have a less urgent need to attempt to reduce costs by contracting out.

*PTAX = Per capita city property tax.* Greater fiscal pressures to reduce costs through privatization may occur in cities that have relatively high per capita taxes than do those with low taxes, and vice versa. Because property taxes tend to be directly rather than indirectly paid by residents who own property, they tend to be better informed about their property tax payments than they are about other tax payments, particularly income taxes. As property taxes become relatively high, it is likely that the incentive to contract out, in the hope of reducing costs, will increase.

*OTAX = Per capita city nonproperty taxes.* Although, as stated earlier, residents who own property tend to know their property tax bills, nonproperty taxes, such as city sales, excise, hotel room, and income taxes, tend to be rather invisible and, indeed, are often paid by individuals and firms not located in the city. It is, therefore, possible for a city to collect relatively large amounts from these sources without causing major political pressure for privatization. Cities that provide a relatively large amount of services and

levy relatively high nonproperty taxes may show a negative relation between nonproperty taxes and contracting out.

*STAX = State sales tax rate.* Although local governments may levy their own sales taxes, by far the greatest source of variability in sales tax rates across cities results from differences in the state rates. If higher state sales tax rates are coincident with greater concern about the cost of government, these tax rates would be expected to be positively related with the extent of contracting out.

Six additional variables were considered but proved not to be significantly related to the privatization proxy. Because, purely on the basis of ideology, privatization might seem to be favored more by Republicans than by Democrats, two measures of party affiliation were included. One was a variable measuring the percentage of those who had voted for Ronald Reagan in the 1980 presidential election. The second was party affiliation of the state's governor, using a dummy variable that was given the value 1 if the governor of the state in 1980 was a Republican and 0 if not. The initial hypothesis that both variables would be positively related to privatization was not supported by the data. Similarly, because one may hypothesize that conservatives generally see privatization in a more favorable light than do liberals, a discrete variable testifying to the presence or absence of a right-to-work law in the state (such laws are generally antiunion and are thus favored more by conservatives in both parties) was introduced; it also was found to be statistically insignificant. Because conservative states are more likely than liberal ones to enact state tax limitations, a variable testifying to the existence of such a limitation was included; it also was found to be statistically insignificant. The fact that all four of these variables associated with political ideology and party affiliation were not found to be significant suggests that ideology and politics may not be a major determinant in the decision to privatize solid waste disposal.<sup>9</sup>

Finally, the percentage of city population that is nonwhite and whether the city had a manager- or mayor-type government were found to be statistically insignificant.

### Data

All U.S. cities with populations in excess of 300,000 in 1980 were included in the sample.<sup>10</sup> To gain insight regarding the importance of city size for privatization, it was considered desirable to include also some smaller cities. Toward this end, a random sample of cities across states with a population of between 75,000 and 300,000 was also included. The intent was

TABLE 2: Contracting Out (ordinary least squares) Regression (dependent variable is PRIV)

| Regressor <sup>a</sup> | Coefficient | Standard Error | T Ratio  | Beta Coefficient |
|------------------------|-------------|----------------|----------|------------------|
| INTERCEPT              | .5541       | .2024          | 2.74***  |                  |
| PROD                   |             |                |          |                  |
| POP                    | -.0001      | .0000715       | -2.01**  | -.5432           |
| POPSQ                  | .0023       | .001111        | 2.10**   | .5549            |
| DENS                   | -.0167      | .009215        | -1.82*   | -.2818           |
| METRO                  | .1094       | .0499          | 2.19**   | .2276            |
| IPLE                   |             |                |          |                  |
| UND                    | -.0087      | .003003        | -2.88*** | -.4101           |
| INCO                   | .0205       | .007426        | 2.77***  | .3093            |
| OWNER                  | -.0040      | .002963        | -1.34    | -.1923           |
| FISC                   |             |                |          |                  |
| BOND                   | .1739       | .0691          | 2.52***  | .2946            |
| SUBS                   | -.0002      | .0001272       | -1.84*   | -.2497           |
| PTAX                   | .0002       | .0002168       | 1.12     | .1679            |
| OTAX                   | -.0006      | .0001822       | -3.18*** | -.4126           |
| STAX                   | .0218       | .0166          | 1.31     | .1343            |

$$R^2 = .3702$$

$$\frac{R^2}{n} = .2757$$

Residual sum of squares = 2.9084  
SD of dependent variable = .2240  
Durbin-Watson statistic = 1.9590

F statistic  $F(12, 80) = 3.9180$   
SE of regression = .1907  
Mean of dependent variable = .5828  
Maximum of log-likelihood = 29.1609

a. For definitions, see Table 1.

\*statistically significant at the 90% level. \*\*statistically significant at the 95% level. \*\*\*statistically significant at the 99% level.

to include one city of this size range from each state.<sup>11</sup> Data for 1980-1982 were used because this was the period for which the richest data set existed when the empirical work commenced and which coincided with the period pertinent to Ferris's (1986) study.<sup>12</sup> As a result, the two studies can be readily compared.

## RESULTS

Table 2 presents the contracting-out equation. The adjusted  $R^2$  is .2757, which can be considered reasonably high for cross-sectional data with a sample of 93 observations.<sup>13</sup> The presence of linear heteroscedasticity was tested for and rejected at the 95% confidence level, because a regression with

the log of the sum of the squared residuals on all right-hand side variables yielded an  $F$  statistic of 1.6, far below the critical value. As previously mentioned, several alternative specifications were examined with the general result that additional variables, usually political in nature, were not statistically significant and did not improve the overall fit of the regression.<sup>14</sup>

With regard to variables that relate to production efficiency and cost, a parabolic relationship was found between contracting out and population size. Both POP and its square value, POPSQ, were statistically significant at a 95% level and have the expected signs. The negative coefficient on POP and the positive coefficient on POPSQ are likely to be associated with the existence of a U-shaped average cost function for residential solid waste disposal services.<sup>15</sup>

The coefficient of  $-.0167$  on density, DENS, has a  $T$  ratio of  $-1.82$  and is significant only at the 90% confidence level. Its negative sign is consistent with the earlier hypothesis that the larger the density, the less privatization of solid waste disposal. (The coefficient  $-.0167$  implies that all else being constant, a city with 1,000 more people per square mile on average will privatize 1.7% more than one with 1,000 fewer.) The coefficient of  $.1094$  on METRO (significant at the 95% level) has the expected sign. It indicates that, ceteris paribus, cities that lie within a metropolitan area with more than 500,000 inhabitants will privatize on average 10.9% more than a city not in such a metropolitan area.

A coefficient of  $-.0087$  was estimated for UND and found to be significant at the 99% level. Its sign is consistent with the hypothesis that cities with a large difference between the rate of unionization of public- and private-sector employees (the number of public-sector employees minus the number of private-sector employees—generally positive) tend to privatize less than cities in which the difference is small or even negative. (The regression coefficient suggests that a city with a 1% difference between the rate of public- and private-sector unionization, holding other city characteristics constant, has on average .87% less privatization than one without a difference.) For the median household income variable, INCO, a coefficient of  $.0205$  is estimated and found to be significant at the 99% level. Its sign is consistent with the hypothesis that cities with a higher median household income are likely to privatize more than those with a lower income. (Specifically, cities with \$1,000 higher household income will privatize on average 2.0% more than cities without this higher income.) A coefficient of  $-.0040$  on the percentage of owner-occupied houses, OWNER, has a  $T$  ratio of  $-1.34$  and is not statistically significant.

The variable that represents the city's Moody's bond rating, BOND (1 when the rating is Baa or Ba and 0 when the rating is A, Aa, or Aaa), is statistically significant at about the 99% level and has the expected positive sign. (Specifically, cities with bond ratings of Baa or below are estimated to have on average 17% more privatization than those with ratings of A or better.) The estimated coefficient on per capita intergovernmental revenue, SUBS, is  $-.0002$  and, with a *T* ratio of  $-1.84$ , is statistically significant at the 90% level; it has the expected sign. The coefficient implies that a city receiving \$100 more in intergovernmental revenue privatizes on average 2.3% less than a city receiving \$100 less in per capita transfers. Per capita property tax, PTAX, has a coefficient of  $.0002$ , which, with a *T* ratio of  $1.12$ , is statistically not significant. Per capita city nonproperty taxes, OTAX, have a coefficient of  $-.0006$ , which is statistically significant at the 99% level and has the expected sign. (The coefficient suggests that a city that collects \$100 more from nonproperty taxes will on average have 5.8% less privatization than one with \$100 less.) Finally, the state sales tax rate, STAX, has a coefficient of  $.0218$  but, with a *T* ratio of  $1.31$ , is not statistically significant.

The importance of the different explanatory variables can be assessed through the construction of beta coefficients, which are included in Table 2. Such coefficients render the regression coefficients more readily comparable by subtracting their means and dividing them by their respective standard deviation. Their relative magnitude suggests that population, per capita nonproperty taxes, and difference between public- and private-sector unionization rates, in that order, are the most important explanatory variables of the decision to contract out solid waste disposal. Next in importance are income and bond rating.

The regression equation with an  $R^2$  of  $.3702$  (and  $\bar{R}^2$  of  $.2757$ ) is quite robust and has relatively high explanatory value for a sample of 93 cities. For policy makers, the following results of the contracting-out equation should be of interest: The population variable, which relates to scale economies and has a parabolic relationship with contracting out, was the most important factor influencing the decision, followed by nonproperty taxes, differences in private- and public-sector unionization rates, income, and bond rating variables, in that order. The finding that efficiency and cost are the most important decision considerations but that institutional factors as well as fiscal-pressure-related factors are also important in contracting-out decisions is consistent with conclusions of studies reviewed earlier.

Public officials facing a decision whether to privatize solid waste disposal thus might assess the position of their city with regard to the aforementioned factors. They are likely to be favorably disposed to an affirmative decision if their jurisdiction is small or middle-sized, levies relatively low per capita

nonproperty taxes, and has a low bond rating. At the same time, however, such officials face a confusing situation with regard to unions; although communities in which public-sector unions are stronger than private-sector unions tend to have a significant incentive to privatize, powerful union resistance will seek to prevent it.

## NOTES

1. In studies of fire services (Hirsch 1959) and high schools (Riew 1966), some scale economies for populations up to 100,000 were found. In relation to hospitals, Ro (1968) also found some scale economies. Dolan (1990) found that fragmentation of government entities in Illinois increased service costs, and Ladd (1992) found a U-shaped relation between per capita spending on government services and population density. Finally, there is evidence of economies of scale in street cleaning, traffic signal maintenance, and asphalt overlay construction, as well as in janitorial services, payroll preparation, and turf and tree maintenance (Stevens 1984).
2. Prager (1993) gave as examples of economies of scope "street maintenance crews . . . trained to drive snow plows . . . and even to handle infrequent calls for rescue or first aid services" and "hospital-based social workers (who) . . . can handle . . . dysfunctional families, home-based senior citizens, drug-addicted teenagers, alcoholics and so on" (p. 20).
3. Theory indicates that first-bid, sealed-bid auctions, which are most common in contracting auctions, yield the best solution from the government's perspective for any number of bidders greater than one, but with only one bidder, the government does much worse (Milgrom 1989).
4. An example of a restriction on government's technological possibilities is found in mass transit. Because mass transit has a peak-hour demand pattern, severe constraints in its use of labor are often encountered. For example, the 1985 Agreement Between the Southern California Rapid Transit District and the Amalgamated Transit Union, Division 1277, prohibited subcontracting except under unusual circumstances. The agreement also stated that "regular operators shall be guaranteed eight hours' pay time per day within a spread of ten hours from the initial sign-on time" (p. 5).
5. In 1987, the percentage of local government employees working full-time in the United States was as follows: fire protection, 64.9%; teaching, 58.1%; police protection, 53.7%; sanitation, 50.2%; public welfare, 48.4%; and highway repair, 44.4% (U.S. Bureau of the Census 1991). Hospital and noninstructional education employees had somewhat lower rates—38.6% and 34.5%, respectively.
6. PRIV can also be influenced by the capital-labor ratio applicable to a particular solid waste disposal operation. A highly automated collection process would tend to have a high PRIV value and vice versa. However, it could be argued that the purchase of capital equipment is a form of privatization, because the equipment is produced in the private sector. The focus, thus, would shift more to public employment of labor rather than to either private employment of labor or private production of capital goods. A further issue is that what usually is referred to as waste disposal is actually waste management composed of waste collection and disposal, and the costs of disposal are likely to be little affected by contracting out.
7. Corresponding data on a city level are not available.
8. No city in the sample had a bond rating below Ba.
9. Admittedly, the absence of city data, which made it necessary to use state data, might also be responsible for the results.

10. Because most urbanites live in the very largest cities of the United States and because I wanted that fact reflected in the sample, I decided to include all cities with populations in excess of 300,000. Moreover, for these large cities, I had information on all the right-hand variables of interest to me, which I did not have for the smaller cities.

11. There were two reasons why this proved impossible. First, some states had no cities with populations between 75,000 and 300,000 for which a complete set of the required data was available. These included Delaware, Hawaii, Maine, Maryland, Montana, New Mexico, North Dakota, Vermont, and West Virginia. To maintain a sufficient number of small-city observations, one additional randomly selected small city was chosen from Florida, Illinois, Louisiana, Nevada, Ohio, Virginia, and Washington, and two additional observations from Massachusetts were selected. Second, the following cities were deleted because of incomplete data: Tulsa, Oklahoma; Honolulu, Hawaii; Macon, Georgia; Boise City, Idaho; Cary, Indiana; and Yonkers, New York. Following these deletions and adjustments, the sample size was 93, with 48 of the cities having populations of more than 300,000 and 47 having between 75,000 and 300,000 in 1980.

12. For example, the most recent unionization data for the public and private sectors that could be found were for 1982.

13. Admittedly, as happens so often, the available data lack some of the ideal properties one would like them to have to justify all aspects of the regression analysis performed. For example, the dependent variable is restricted to values between 0 and 1; hence, the assumption of normality for the true error term is not valid. To test for the severity of this problem, a log-odds ratio of the dependent variable was formed, which transformed its possible ranges of values to between positive and negative infinity. Although the standard errors of the coefficients were affected, not one of the signs of the coefficients was altered. Heteroscedasticity was tested for and found not to be a significant problem. In addition, correlations between the explanatory variables were not large enough to require corrective measures.

14. Also, in recognition of the fact that each city in the small-city sample represented many cities of similar size, a weighted least squares regression was run that resulted in only minor differences from findings in Table 2.

15. The bottom of the U-shaped contracting-out curve relative to population occurs at 3.07 million inhabitants. Thus the declining portion covers most U.S. cities. Using the two coefficients, one can estimate the net effect on contracting out (PRIV) when a city's population increases.

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and Martha N. Ozawa, "Family Allowances for the United States: An Analysis and a Proposal," *Social Work* 16, no. 4 (October 1971): 72-84.

29. U.S. House Committee on Ways and Means, *1993 Green Book* (n. 6 above), p. 1052.

30. National Commission on Children, *Beyond Rhetoric: A New American Agenda for Children and Families* (Washington, D.C.: National Commission on Children, 1991), p. xxi.

31. A child living in a family of three (parent and two children) with a head of household who works full-time at the minimum wage will be assured of the income security of \$2,371 a year (\$1,685 from the EITC plus \$686 from the refundable tax credit).  $\$1,685 = \$3,370$  (the maximum EITC)  $\div 2$  (the number of children). In the case of a child living in a comparable family of two (parent and one child), the income security for the child will be \$2,726 a year (\$2,040 from the EITC plus \$686 from the refundable tax credit).

32. Scholz (n. 9 above), p. 2.

33. Michael W. Horrigan and Ronald B. Mincy, "The Minimum Wage and Earnings and Income Inequality," in Danziger and Gottschalk, eds. (n. 3 above), p. 272.

34. Thomas Gabe, *The Earned Income Tax Credit (EITC) Current Law and the Clinton Proposal: Characteristics of Eligible Families*, CRS report for Congress no. 95-546 EPW (Washington, D.C.: Congressional Research Service, May 25, 1995), p. CRS-8.

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## Child Welfare Contracting: Market Forces and Leverage

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In this article, we examine patterns of privatization in the Illinois child welfare system using data from state payment records and a survey of organizational providers. We describe the state contract system and show which providers are active in it and how important they are to the state agency involved. We hypothesize (1) that market forces will favor those providers that match most closely the needs of the state agency for specific expertise and (2) that power and leverage will operate to favor those who can bring the most resources to bear on contract negotiations. Multiple regression analysis shows support for both hypotheses.

Social scientists have long examined the nature and extent of public mandates, addressing such issues as how much the public sector spends for welfare in comparison to defense, what accounts for differences in spending patterns across nations (or states), and how and why spending changes over time. These are important issues, but they fail to consider the interorganizational structures under which the mandates are executed.

Two of these structural features are particularly important: intergovernmental funding relations and privatization of services by contracting with nonpublic organizations to deliver publicly financed services.<sup>1</sup> Both features are of long standing in the United States. They

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also share some common attributes in that they require effective cooperative arrangements among independent organizations. The role of intergovernmental funding structures has attracted considerable attention in the face of continuing efforts to curtail growth in social spending since the mid-1970s. As Martha Derthick showed almost 20 years ago in her pioneering work on social services grants, certain forms of intergovernmental transfers may result in uncontrollable public spending.<sup>2</sup> Others have emphasized the special problems of control and accountability that may occur when one level of government depends on another to execute its mandates.<sup>3</sup>

The subcontracting of public services has also received more attention in recent years. It was an integral part of the Reagan administration's efforts to redefine the role of the federal government, just as it is central to the new Republican "Contract with America" platform. Political enthusiasm notwithstanding, the empirical question of whether subcontracting promotes more effective and efficient services is still unresolved.<sup>4</sup> Certainly, studies on negotiating processes and transaction costs involved show the complexity of establishing and operating public-private contract systems.<sup>5</sup> From an organizational perspective, these latter findings suggest that the contract system provides important opportunities to analyze patterns of resource dependency among organizations involved in the system.

In this article, we examine the pattern of subcontracted service provision in the child welfare field in Illinois.<sup>6</sup> The field is characterized by a complex system of intergovernmental relationships in which the state plays a key role. There is also long-standing, extensive reliance on nonprofit agencies to deliver key services, dating back in some form to the latter part of the nineteenth century.<sup>7</sup> Consequently, our analysis is of a mature, fully institutionalized contract system, not one that has only recently come into existence or been subject to major renegotiations. This means that resource relations are likely to be stable and well developed, features that make these relations attractive to subcontractors because they lower uncertainties and reduce transaction costs as providers are able to affirm their expertise and management experience over time. At the same time, it raises the question of which characteristics are associated with success in this particular market, that is, what kinds of organizations receive the largest volume of subcontract dollars—those that provide services in greatest demand or those with well-established clout and influence?

We draw on a unique body of data that allows us to examine these questions in greater detail than is usually the case. Where most previous research has surveyed state contracting administrators or recipient organizations about their attitudes toward and assessments of the contract experience, we analyze the actual flow of dollars in the contract system. We then link this flow to characteristics of the provider organi-

zations in order to determine which subcontractor features are most strongly associated with success in the contract market. Because we present only cross-sectional data for a subsector of a particular contract system and do not have data on all relevant aspects of the contract relationship, we cannot provide a definitive test of our hypotheses. However, the patterns of association that we observe are revealing and certainly suggestive for further research.

Our data come from the Illinois Department of Children and Family Services (DCFS) and the system of providers that delivers the bulk of its services. We first answer two key descriptive questions: who is involved in the provider system, and how important are they to DCFS, that is, how much funding do they receive? We then examine differences in the amount of funding received by a subset of key providers.

We hypothesize that two processes operate to determine the amount of funding levels. First, we argue that market forces—the provider's competitive market strengths—favor those that match most closely DCFS's demand for particular types of expertise and specialized services. Second, we suggest that organizational power and leverage favor those providers that can bring the most resources to bear on contract negotiations. A better understanding of how these dynamic processes operate is important for assessing the costs and benefits of privatization and for addressing questions of whether and how privatization serves to control public spending.

### The Child Welfare Contract Market in Context

The child welfare field ranks low on the national agenda, if the volume of public spending is any indication. All social services combined (not just child welfare) account for only 3 percent of combined federal, state, and local spending for social welfare purposes. However, child welfare is important in other respects. An increasing number of children and youth experience conditions that threaten their ability to build strong foundations for adulthood. Abused, neglected, or "just" poor, they lack the physical, emotional, or social support that would allow them to develop into healthy, productive adults.

In Illinois, DCFS is the primary state agency responsible for addressing the needs of troubled children and their families. Its mission statement declares that it, "in partnership with others, will provide services to children and families to protect and advocate on behalf of children and youth who are, or who are at risk of, being abused, neglected, or removed from their families." The phrase "in partnership with others" acknowledges that DCFS does not render these services alone, nor does the state finance all the services from its own funds. In fact, throughout the 1980s, DCFS consistently received close to half of its revenues from the federal government and used

two-thirds of its annual budget appropriations to purchase services from individuals and organizations through its grants and contracts system.

This pattern of state responsibility for and control over services, substantial dependence on federal funds, and significant reliance on other service providers is typical of the social service field in Illinois. In 1984, the state provided only 35 percent of all public spending on social services for the Chicago and Cook County area from its own revenue base, with the federal government providing 59 percent and local government, the remaining 5 percent. However, the state dispersed 64 percent (including some of the federal funding) and controlled 76 percent of the spending (including funds passed on to local governments and dispersed by them).<sup>8</sup> Almost half (47%) of the public spending for social services was subcontracted to nonprofit agencies and another 4 percent to for-profit organizations, leaving public agencies with less than half of the spending for direct service delivery.

Public spending for other service fields differs notably from the social service pattern (and that of DCFS) on one or more of these four dimensions, that is, the fields show different combinations of revenue origins, levels of government at which funds are dispersed, extent to which various levels of government exercise control over the funding, and composition of the service delivery system.<sup>9</sup> Child welfare systems in other states may differ from the Illinois pattern on some or all of these dimensions as well.

In Illinois, DCFS is responsible for licensing all day-care agencies in the state, for diverting children and youth from the criminal justice system, and for investigating and responding to all reports of child abuse and neglect (currently more than 100,000 reports per year). To provide adequate care on a continuing basis for abused or neglected children and their families, DCFS must insure that a full range of services is available, including substitute care, counseling, family support, adoption, outreach, prevention, and so forth.

The child abuse and neglect mandate is especially important to the department. By law, DCFS must respond in a timely manner (within 24 hours) to all reports, insure that children do not come to any further harm, and accept responsibility for the future development of children who become wards of the state. Increases in the number of child abuse and neglect reports and in the serious nature of families' problems pose major challenges to DCFS. The need to respond immediately to crisis situations means that DCFS must have ongoing access to certain critical services (e.g., substitute care). However, solving immediate crises and finding appropriate substitutes for the natural family are tasks fraught with difficulties. Mistakes or errors in judgment may harm children and subject DCFS to highly emotional and troublesome public criticism (including court cases).

The high risk and human cost of failure mean that controlling the delivery of services is extremely important for DCFS. But this is difficult to do. The recipients of service (and, by extension, DCFS and its providers) have little objective basis for assessing the quality of services. The service market, therefore, represents a classic case of transactions under conditions of "contract failure," where trust and reputation, rather than agreed-on and easily assessed standards of performance, are paramount.<sup>10</sup>

The service context in which DCFS operates, therefore, leads to our two hypotheses, as noted above. First, the need for ready access to particular types of services suggests that possession of relevant expertise should be closely related to the level of contract funding private providers receive from DCFS. If, as this hypothesis predicts, the DCFS contract system favors providers that exhibit the most pertinent expertise, then competition and straight market factors are at work. This should keep transaction costs low because providers can perform their specialties and do not need to learn difficult new activities. Correspondingly, DCFS can reduce monitoring efforts aimed at insuring that it gets what it pays for.

Indeed, the entire free market economy is based on the underlying assumption that the unrestricted operation of market forces will minimize overall transaction costs and promote the efficient production of goods and services. In many respects, then, this first hypothesis is so obvious that findings that run contrary to it would deserve attention.

Second, difficulties in objectively judging the quality of services mean that DCFS operates under conditions of contract failure as discussed above. When expertise is difficult to assess, nonmarket characteristics may come to rival or overshadow pure market advantages. Providers that appear legitimate or trustworthy, are politically powerful, or otherwise are able to exert leverage over DCFS can bring a wide range of organizational resources and strategies to bear on the contract relationship. As a result, these types of providers may come to dominate the contract system and obtain larger payments from DCFS than would be expected if only market forces operated.

The providers have strong incentives for developing contractual relationships with DCFS. Not only is public funding a major source of revenue to many social service agencies, but public grants and contracts for these types of services appear to be remarkably stable and predictable sources of revenues. Case studies of public grants and contracts received by social service agencies show that most such contracts are in the form of new or continuing awards. Very few contracts are terminated, although the levels of funding may fluctuate.<sup>11</sup>

The DCFS system constitutes an especially attractive market to provider agencies because DCFS rarely opens up the contracts to open

bidding, and then only in some service categories, in some regions, and in some years. That makes the DCFS funding system fairly difficult for contractors to enter, but it is predictable and ongoing once they obtain access to it. The need to provide vulnerable children with continuity of care justifies the closed funding system, just as the need to protect national security does in the case of defense contractors.

### Methods

The sheer volume of efforts and transactions in which DCFS is engaged is impressive. During the fiscal year of 1989, DCFS contracted with almost 19,000 providers to deliver services on behalf of the department. Simply describing the provider system is a monumental task. As we discovered, developing an appropriate database to describe and analyze this system presents formidable technical challenges as well.

Our analysis of the DCFS provider system combined two sources of data: administrative data from the department's financial payment system and a mail survey of human service and day-care facilities listed in the DCFS provider database. The financial payment database allowed us to describe how the DCFS service market is structured and to assess the sample and response rates of the mail survey. The survey provided a wide range of data about the organizations themselves. We merged the two databases in order to test the two hypotheses outlined above.

We used the DCFS board and voucher payment systems for the 1989 fiscal year (July 1, 1988–June 30, 1989). The board system tracks monthly payments to service providers caring for clients in residential placement (e.g., foster homes and group homes). The voucher system records payments (usually monthly) for all other services, including administrative activities (e.g., printing and staff travel) and client services (e.g., day care and counseling). The payment records contain a separate record for each check issued (if no client is involved) or, in the case of client services, a separate record for each client every time a check is issued for services to that client. In the latter case, the records include information on the type, cost, dates, and recipient of the service.<sup>12</sup>

The combined board and voucher payment files totaled over 600,000 records for 1989. We first eliminated payment records for purely administrative services. Then, to use service providers (rather than each client-related payment) as the unit of analysis, we undertook an extensive series of aggregations and recodes to create a record for each service provider.<sup>13</sup> As a result of these efforts, we obtained data on the amount of client-related payments by DCFS to a total of 18,778 providers in 1989.<sup>14</sup>

In the winter of 1990–91, we also conducted a mail survey of the social service and day-care program units included in the DCFS pro-

vider database, a cumulative list of individuals or program units that DCFS has authorized payments to over several years, licensed (in the case of day-care centers), or otherwise recognized as relevant service providers.<sup>15</sup> The 180,528 records in the provider database include entries for DCFS staff members, commercial vendors (for office supplies, travel, etc.), individual foster parents, lawyers, doctors, as well as organizations providing direct services to DCFS clients.

To identify organizations involved in client services, we undertook an extensive review process that resulted in a listing of 2,669 eligible providers, including 1,871 day-care centers.<sup>16</sup> Because of the large number of day-care centers, we drew a stratified random sample of them, but included all the remaining 798 service units in the survey for a total sample of 1,091.<sup>17</sup> After eliminating those that appeared to be out of business (123), inappropriate (19), or duplicates (207), we received usable responses from 465 organizations, about 63 percent of the valid sample. The response rate was significantly lower for the two day-care samples (50%–53%) than for all other organizations (71%).

As a final step, we merged the financial payment and mail survey data in order to examine links between a provider's experience in the DCFS service system and the organization's characteristics.<sup>18</sup> Of the organizations originally included in the sample, 516 (or 70% of the valid sample) could be matched to the financial payment database.<sup>19</sup> Of this initial pool of 516 matches, 63 percent (354) responded to the survey, including 63 organizations that did not receive DCFS payments in 1989 but had done so at some point over the 1985–88 period. The analysis presented here is based on the 291 matched organizations that received DCFS funding in 1989.

These 291 matched survey respondents represent 11 percent of the 2,631 organizations from which DCFS purchased client-related services in 1989. However, they account for 61 percent of DCFS funding to provider organizations in that year. The remaining 39 percent of the funding is split between organizations included in the sample that failed to respond to the survey (24%)<sup>20</sup> and those excluded from the original sample because they were nonsampled day-care organizations (6%) or because we did not believe our questionnaire items would be relevant to them (e.g., businesses and schools, 9%). Our survey data thus capture information about most of the organizations with the largest stake in the DCFS provider system.

### The DCFS Provider Markets

There are two distinctive markets in the DCFS system: the market of individual service providers and the market of organizational providers. In the former market, DCFS competes with other social service

agencies for qualified foster parents, homemakers, counselors, and so forth. The department assumes direct responsibility for supervising the services these individuals provide. They are like part-time staff or consultants whom DCFS uses on a more or less continuing basis.

In the organizational provider market, DCFS competes with other state and local government agencies for access to particular types of service infrastructures, for example, group homes, counseling agencies, and day-care centers. In this part of the system, DCFS has transferred responsibility for direct supervision of staff, foster parents, and so forth, to the provider agencies. The direct management responsibilities of DCFS itself are limited to client referral and efforts to maintain and monitor the contract relationship. We review both markets but pay most attention to the latter because it bears directly on our survey findings.

Of the 18,778 providers from which DCFS purchased services during fiscal year 1989, the vast majority (86%) were individuals and only 2,631 (14%) were organizations.<sup>21</sup> However, the latter received the lion's share (78%) of the \$244 million that DCFS paid to providers in 1989, reflecting the greater service capacity of organizations in comparison to individuals. The provider system, then, is one in which DCFS purchases small amounts of service from a large number of individuals and a large volume of service from a modest number of organizations.

To examine the individual and organizational provider markets in greater detail, we looked at the volume of services that DCFS purchases in different service fields and the types of providers that are most heavily involved in these fields. To facilitate the analysis, we grouped the 268 detailed service codes from the financial payment systems into 13 major service categories.<sup>22</sup>

*The Individual Provider Market*

The Department of Children and Family Services purchases services from a variety of individuals—foster parents, adoptive parents, homemakers, counselors, advocates, day-care workers, doctors, psychologists, lawyers, and the like—people with special motivations or skills to assist families and children in trouble. Table 1 shows the distribution of individual providers and payments to them across the 13 service categories. The table shows that the individual provider market is dominated by foster care, accounting for 60 percent (9,657) of the individual providers (col. 1) and 72 percent of all payments to individual providers (col. 3). This is also the service field with the greatest interpenetration of individual and organizational markets. Roughly half (52%) of all spending for foster care goes to foster parents who worked as individual providers, as shown in column 5. The remaining

Table 1  
INDIVIDUAL PROVIDERS: NUMBER AND FUNDING BY TYPE OF SERVICE, FISCAL YEAR 1989

| Type of Service              | Number of Individual Providers (1) | Total Dollars to Individual Providers (\$) (2) | Percentage of All Individual Provider Dollars (%) (3) | Total Dollars to All Providers (\$) (4) | Percentage of All Dollars to Individual Providers (%) (5) |
|------------------------------|------------------------------------|------------------------------------------------|-------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------|
| Foster care                  | 9,657                              | 38,588,000                                     | 72                                                    | 75,918,000                              | 52                                                        |
| Institutions/group home      | ...                                | ...                                            | ...                                                   | 55,284,000                              | ...                                                       |
| Youth in transition          | 501                                | 531,000                                        | 1                                                     | 4,923,000                               | 11                                                        |
| Adoption                     | 3,142                              | 9,443,000                                      | 18                                                    | 10,568,000                              | 91                                                        |
| Counseling                   | 253                                | 843,000                                        | 2                                                     | 12,235,000                              | 7                                                         |
| Homemaker services           | 132                                | 530,000                                        | 1                                                     | 5,722,000                               | 9                                                         |
| Day care                     | 2,525                              | 2,743,000                                      | 5                                                     | 47,716,000                              | 6                                                         |
| Unmarried mothers services   | ...                                | ...                                            | ...                                                   | 122,000                                 | ...                                                       |
| Protective services          | ...                                | ...                                            | ...                                                   | 567,000                                 | ...                                                       |
| Youth services               | 3                                  | 27,000                                         | ...                                                   | 14,646,000                              | ...                                                       |
| Children's personal/physical | 5,378                              | 417,000                                        | 1                                                     | 2,999,000                               | ...                                                       |
| Support services             | 654                                | 650,000                                        | 1                                                     | 14,468,000                              | 14                                                        |
| Other services               | ...                                | ...                                            | ...                                                   | 1,387,000                               | 4                                                         |
| Total                        | 16,147*                            | 53,772,000                                     | 100                                                   | 244,164,000                             | 22                                                        |

\* Column sum is greater than total indicated because some individuals provide more than one service.

48 percent goes to agency providers who supervise their own foster families.

Column 5 of table 1 also shows that individual providers (i.e., adoptive parents) dominate the market for adoption services, receiving 91 percent of all spending for these services. Adoptive parents also account for the second largest proportion (18%) of all dollars to individual providers, as shown in column 3. Jointly, foster parents and adoptive parents account for 79 percent of all individual providers and receive 89 percent of all payments to individual providers and 20 percent of all provider dollars. In all remaining service fields, individual providers receive only a small fraction of DCFS payment for services rendered (col. 5).

*The Agency Provider Market*

The Department of Children and Family Services also purchases services from social service agencies, day-care centers, schools, health-mental health facilities, commercial businesses, schools, and various other organizations. Some of these specifically target the children and families for whom DCFS is responsible. Others (e.g., commercial businesses) have objectives that overlap only indirectly with the DCFS client population. Some 595 social service agencies in the provider system (most of which were included in our sample list) clearly overshadow all other types of organizations in their importance to DCFS.<sup>23</sup> Although they account for only 23 percent of the organizations with DCFS payments in 1989, they received \$163.5 million, or about 86 percent of what DCFS paid to all organizations and 67 percent of payments to all providers.

As table 2 shows, social service agencies dominate most service fields, absorbing more than 85 percent of spending in eight of the 13 service categories and about half or more of total funding in 11 of the 13 categories (col. 5). Adoption services and children's personal and physical maintenance services are the only exceptions to these patterns. The social service agency market is less concentrated than the individual provider market. No single service field accounts for the bulk of funding, although institutions and group homes come closest, with a 33 percent share (col. 3).

The remaining types of provider organizations, that is, the 587 day-care centers, 375 schools, 202 health-mental health facilities, 618 commercial businesses, and 254 miscellaneous other organizations, play only a peripheral role in the DCFS provider system. They received only 11 percent of the fiscal year 1989 contract dollars, with the majority (68%) of this funding paying for day-care services.

From this analysis, it is clear that social service agencies are the principal service providers in the DCFS grants and contracts system.

Table 2

SOCIAL SERVICE AGENCIES: NUMBER AND FUNDING BY TYPE OF SERVICE, FISCAL YEAR 1989

| Type of Service              | Number of Social Service Agencies (1) | Total Dollars to Social Service Agencies (\$) (2) | Percentage of All Social Service Agency Dollars (%) (3) | Total Dollars to All Service Providers (\$) (4) | Percentage of All Dollars to Social Service Agencies (%) (5) |
|------------------------------|---------------------------------------|---------------------------------------------------|---------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------|
| Foster care                  | 82                                    | 35,143,000                                        | 21                                                      | 73,918,000                                      | 47                                                           |
| Institutions/group home      | 126                                   | 54,612,000                                        | 33                                                      | 55,284,000                                      | 99                                                           |
| Youth in transition          | 36                                    | 4,379,000                                         | 3                                                       | 4,923,000                                       | 89                                                           |
| Adoption                     | 121                                   | 450,000                                           | 7                                                       | 10,368,000                                      | 4                                                            |
| Counseling                   | 169                                   | 10,805,000                                        | 3                                                       | 12,235,000                                      | 88                                                           |
| Homemaker services           | 36                                    | 5,186,000                                         | 3                                                       | 5,722,000                                       | 91                                                           |
| Day care                     | 74                                    | 26,818,000                                        | 16                                                      | 47,716,000                                      | 56                                                           |
| Unmarried mothers services   | 4                                     | 114,000                                           | ...                                                     | 192,000                                         | 56                                                           |
| Protective services          | 4                                     | 367,000                                           | ...                                                     | 367,000                                         | 86                                                           |
| Youth services               | 111                                   | 13,198,000                                        | 8                                                       | 14,646,000                                      | 100                                                          |
| Children's personal/physical | 166                                   | 770,000                                           | ...                                                     | 2,999,000                                       | 90                                                           |
| Support services             | 135                                   | 10,269,000                                        | 6                                                       | 14,468,000                                      | 26                                                           |
| Other services               | 20                                    | 1,385,000                                         | 1                                                       | 1,387,000                                       | 71                                                           |
| Total                        | 595*                                  | 163,496,000                                       | 100                                                     | 244,164,000                                     | 100                                                          |

\* Actual sum is greater than total indicated because many social service agencies provide more than one service.

To a lesser degree, day-care centers and foster parents play a significant role, but mainly because of their large numbers and not the amount of funding each of them receives. Yet, these aggregate patterns do not fully demonstrate another crucial point: some providers are much more important to DCFS than others. Some 34 social service agencies received at least \$1 million each from DCFS in 1989. These top 34 social service agencies jointly accounted for \$108 million in fiscal year 1989. This is equivalent to 66 percent of the funding to social service agencies, 57 percent of the funding to organizations, and 44 percent of the funding to all service providers.

Figure 1 displays the skewed distribution of DCFS funding to social service agencies.<sup>24</sup> Two-fifths (41%) received less than \$10,000, and 70 percent received less than \$100,000. Thus, the bulk of DCFS funding is directed to a very small percentage of providers. These findings raise several critical questions: What are the characteristics of provider organizations that are most pivotal to DCFS—the social service and day-care agencies? And what factors account for the spectacular success of some of these providers in the DCFS contracting system?

### Hypothesized Effects of Market Forces and Leverage

As discussed earlier, we hypothesize that two sets of factors account for the differential success of provider organizations in the DCFS funding system: (1) market forces, which favor those that match most closely

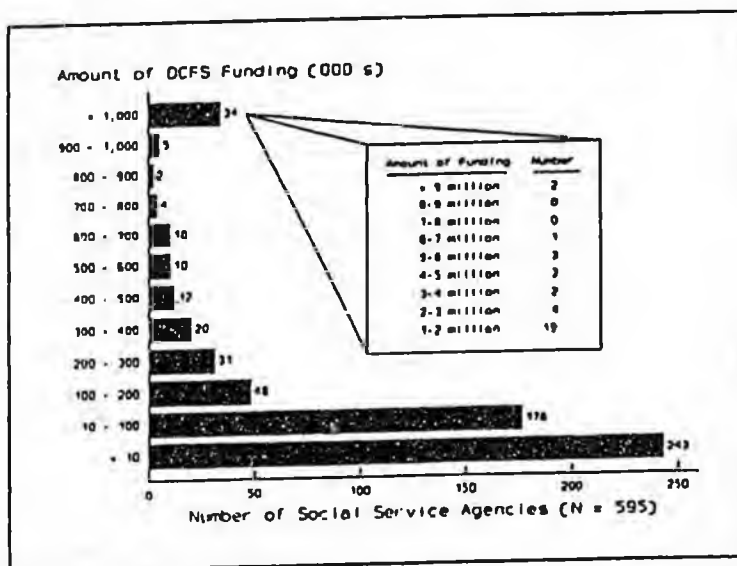


FIG. 1.—Fiscal year 1989 distribution of Illinois DCFS funding to social service agencies.

the needs of DCFS for particular types of expertise in terms of services (e.g., residential services) or approaches (e.g., focus on children and youth or minorities), and (2) leverage or influence factors, which favor providers that can bring more resources (e.g., legitimacy) to bear on their negotiations with DCFS. To address these hypotheses, we rely on the mail survey for information about the types of services agencies provide, the clients they target, the service approaches they use, their finances and contractual relations, and their involvement with other nonprofit organizations.<sup>25</sup> Several survey measures relate directly to the two broad concepts of market forces and leverage in the DCFS grants and contract market.<sup>26</sup>

### Market Forces: Attractiveness to DCFS

Interviews with DCFS grants and contract staff, as well as findings from the broader Children's Policy Project, suggest that several criteria are likely to make providers especially attractive to DCFS: service expertise, comprehensiveness of services, appropriateness of target population, and accessibility of services. Appendix A lists these attractiveness-market forces, the independent variables we used to measure them, and the hypothesized relationship between each variable and the amount of DCFS funding received by the organization. We explain each criterion below.

*Expertise.*—The Department of Children and Family Services spends most of its contract dollars on a few key services. Substitute care for children (e.g., residential services and foster care) and day care receive the most funding, with smaller shares for youth services, counseling, and support services. Organizations that specialize in these well-funded services should have greater opportunities to obtain a significant share of DCFS contracts than those with little or no expertise in these fields. The department's confidence in the experience and skills of providers allows it to reduce its own monitoring efforts correspondingly. We use information on the primary mission of the organization and the extent to which its major services are of particular interest to DCFS.

The major purpose or mission of an organization dictates a long list of important organizational decisions: the primary services to offer, the expertise of staff members to be hired, the variety of facilities to secure, the clients to serve, and even the types and volume of resources to which it should seek access.<sup>27</sup> We coded an open-ended question about the organization's major purpose or mission using the National Taxonomy for Exempt Entities, a hierarchical, highly detailed coding system organized into major service groups.<sup>28</sup> We then combined the categories into six major groupings (MISSION): residential and institutional care organizations (23% of the matched organizations), other social service agencies (18%), day-care and preschool agencies (18%), child and youth service organizations (14%), nonresidential mental

health organizations (20%), and miscellaneous other types of organizations (8%).

The DCFS should also favor providers that can deliver several core services within one agency. This minimizes the number of providers with which DCFS must establish relationships, negotiate contracts, and train. We asked survey respondents to indicate which of 52 different types of services (spanning nine major fields) they provide and which six are their major or most important services.<sup>29</sup> We designated 18 of the 52 services as core services of particular relevance for the DCFS service system (e.g., counseling, foster care, adoption, group home, and day care), noting the number of these services in which each provider was engaged (ALL\_CORE). The average was 5.7 core services, but some listed as many as 17.

We also noted the number of core DCFS services that the provider defined as among its own "major" services (MAJ\_CORE). The larger the number for a given provider, the closer the fit between DCFS service needs and provider expertise. Some providers reported no DCFS core services among their own major services; others as many as nine. The average was 2.4.

*Comprehensiveness of services.*—Although DCFS may fund only certain types of services, its clients are likely to need help with a full range of other problems, including literacy, employment, housing, drug abuse, and so on.<sup>30</sup> Organizations that provide a broad range of services should, therefore, be attractive to DCFS because they can more easily insure that clients receive the necessary range of services without having to resort to difficult and fragile referral systems with other organizations.<sup>31</sup> We defined organizations that checked a large number of the 52 services (ALL\_SERV) as providing more comprehensive services than those that provide only a few services. Only counseling, parent education, support groups, and information and referral were checked by half or more of the organizations. The average number of services was 11.6, ranging from one to 39. We also asked whether providers believe that they provide directly most of the services that are needed by those of their clients who are children, youths, or families (SELFSERV). The great majority (81%) said they did.<sup>32</sup>

*Target population.*—In addition to particular services, DCFS needs providers that have experience with the types of clients that come to its attention.<sup>33</sup> Providers whose primary client commitments match DCFS client types should be attractive to DCFS because they are likely to have expertise in serving such clients and to devote their own resources to meeting the needs of these clients.

Expertise with children, youths, and their families and with racial and ethnic minorities are especially important to DCFS.<sup>34</sup> We asked those providers that indicated that they target some client or population group to describe the most important target group. We followed

with two additional questions about the extent to which this target group was composed of children, youths, and their families (CHLDTARG) and members of racial or ethnic minorities, such as African Americans, Hispanics, Asian Americans, or Native Americans (RACETARG). The great majority (78%) did target children, youths, and their families. However, although racial and ethnic minorities made up about 75 percent of children in publicly supported substitute care under the guardianship of DCFS in 1991, only 31 percent of the providers reported that their primary target group is mainly or entirely composed of minorities.<sup>35</sup>

*Outreach and accessibility of services.*—Accessibility of services is also important, especially for clients who are young, not fully informed about available services, or not assertive in insisting on the services they want and need. Most DCFS clients have one or more of these characteristics. We used several indicators of this concept. Everything else being equal, organizations that have multiple sites (MUL\_SITE) make themselves accessible to more clients than those that maintain only one location. About half of the organizations had multiple sites.

We also asked organizations to indicate the best description of their geographic service focus from among several statements provided. Organizations that view themselves as "entirely community-based and community-organized" may develop close relationships with local clients, reducing cultural and social barriers to accessing services. About one-third (35%) of the organizations defined themselves in this manner (COM\_BASE).<sup>36</sup> Finally, we asked respondents to indicate the extent to which most, some, or only few of their in-person contacts with clients normally took place in a variety of different settings. We categorized the settings as being more or less external to the organization (SERV\_SET).<sup>37</sup> Only 27 percent of the organizations provided most or all of their services in external settings.

Given the closed nature of the DCFS contract market described above, one might expect that this list of market factors would constitute a minimum set of qualifications that all DCFS contractors would meet to have entered the contract system in the first place. Such is not the case. As noted above, substantial proportions of the providers fail the criteria in full or in part—their major services include only a few core DCFS services, and most do not target minority groups or engage in extensive outreach. We can therefore examine whether some market factors are more important than others in differentiating among more or less successful providers in the DCFS contract system.

#### *Leverage: Agencies' Capacity to Exert Influence over DCFS*

A second set of forces that shapes the relationship between DCFS and its service providers is the influence or power that providers are able

to wield in their ongoing relationship with the department. Large organizations with proven staying power, those well established in the public funding market, with recognized legitimacy, and active participation in networks of like-minded organizations may have sufficient power and legitimacy to resist DCFS initiatives that they define as contrary to their interests.<sup>38</sup> These types of organizational resources may even allow them to become active participants in shaping the initiatives themselves. These expectations derive mainly from the literature on resource dependency and institutional theory.<sup>39</sup> Appendix B lists these forces, describes how we measure them, and indicates the hypothesized relationship with amount of DCFS funding.

*Resource strength.*—We used two measures of resource strength: size of revenue and the age of the organization. We expect that larger (and older) organizations will find it easier to obtain public funding than smaller (and younger) organizations. Large organizations have more staff and can develop higher degrees of specialization, including expertise in fund raising or contract negotiations.<sup>40</sup> They have more organizational slack or resilience and are less likely to be affected by staff turnover or loss of a single contract (even if it is large). Size confers visibility, legitimacy, and access to external resources. Similarly, organizations that have survived a minimum number of years have overcome the liability of being a new organization, struggling for survival. Over time, they develop experience and expertise; obtain visibility, contacts, and recognition; become established in their fields; and institutionalize their external funding relationships.

Size of revenues gives broad indications of the capacity and amount of infrastructure that an organization controls. We asked organizations to report their total revenues for the most recently completed fiscal year (usually 1990) and also to indicate the number of full-time (FT\_STAFF) and part-time staff members as of July 1, 1990. Because of the highly skewed distribution of revenues, we used the log value (LOG\_SIZE) in all subsequent analysis (as we did for total DCFS payments). Data on the year of establishment (YEARESTB) show the average year of founding to be 1951, but half the agencies were established in 1970 or later.

Revenues, of course, have a built-in relationship with DCFS funding because total revenues include what the provider receives from DCFS. However, we cannot easily resolve the confounding because the two measures come from different years (1989 for DCFS funding, 1990 for total revenues), and we are reluctant to assume that revenues are stable over time.<sup>41</sup> Although this is an important conceptual issue, the zero-order correlation between the log values of total revenues and of DCFS funding is only  $r = .16$ , suggesting that the confounding is not of major practical import.<sup>42</sup>

*Access to competing funding sources.*—Providers may have well-established relationships with public funders other than DCFS that also

desire access to their services. Such providers are likely to be less dependent on DCFS since they will find it easier to replace DCFS funding with other public funding sources than those without immediate access to such alternative relationships. Their competitive position is strengthened further because they can point to their role in providing important services for the public sector. They are also likely to be skilled in negotiating the public funding market and managing the grants and contract system, with all of the restrictions it imposes on recipient organizations.<sup>43</sup> We have information on the distribution of revenues by five major categories for 1990 as well as on the number of different public agencies from which organizations receive funding. We hypothesize that the larger the proportion of funding from public agencies and the larger the number of public funding sources, the more DCFS funding agencies obtain.

The types of revenues on which providers depend are important because funding relationships become institutionalized over time. Organizations become familiar with and skilled in managing the contingencies associated with major funding sources and their respective degrees of flexibility, discretion, external control, and predictability. We use the proportion of total 1990 revenues from government funding (PCT\_GOV), fees (PCT\_FEE), or donations (PCT\_DON).<sup>44</sup> As in the case of total revenues (and for the same reasons), we cannot disentangle any built-in relationship between the dollar amount of DCFS funding and the percentage of revenues from all public sources combined. Fortunately, the relationship is not very direct in this case because a provider may receive a small dollar amount of funding from DCFS, yet it may constitute a large proportion of its total revenues.<sup>45</sup> We have information on whether the organization reports DCFS as a major funder in 1990 (providing 10% or more of total revenues). Almost half (45%) did. We use this variable (DCFS\_MAJ) as a control on the assumption that it is a relatively stable indicator of degree of involvement with DCFS.

The larger the number of public funding sources, the more likely the organization is to have access to alternative funding and to use its connections with such sources to influence decisions made by DCFS. We asked the organizations to indicate whether, during the most recently completed fiscal year, they received any grants, contracts, or reimbursements directly from any of 16 different state agencies.<sup>46</sup> We then summed the number of such funding contracts (STAT\_CON). Some received funding from all 16, but the average number was only 2.5. Funding relationships with a core group of state human service agencies are especially important because these state agencies also provide extensive services to children and youth and rely extensively on other organizations to deliver mandated services.<sup>47</sup> We summed the number of such relationships reported by the service providers (STAT\_CORE). The average was 2.1 and went as high as seven.

We also asked providers to report the total number of local governments (LOC\_CON) and federal agencies (FED\_CON) from which they received funding during that year. More than half (59%) reported no funding from local governments, and the average was only 1.5, but the maximum was funding from 32 different local governments. Only 18 percent had any direct federal funding, including some with funding from six different federal agencies. Finally, we computed the total number of governmental units involved (GOV\_CON). The number of public funding links range from one to 36, with a mean of 4.4.

*Legitimacy.*—Rendering services under contract with public funding sources involves provider organizations directly in the production of public goods. That is itself an important source of legitimacy. However, some organizations have their own built-in sources of legitimacy, which they can use as leverage in negotiations with public funders. Nonprofit organizations receive official recognition as contributing to the public good when their revenues and contributions are exempted from taxes (within certain limits). Their claim to serve the best interests of the community and clients is not easily rejected by public authorities.<sup>48</sup> The great majority (78%) of the organizations operate under nonprofit auspices (NP\_AUSP). Some nonprofit organizations are also affiliated with religious institutions (RELAFFIL). For the 17 percent with such affiliations, that may not only confer additional legitimacy but may also secure access to other external resources in the form of funding and influence.<sup>49</sup>

*Nonprofit networks.*—In addition to maintaining direct and extensive relationships with public agencies, public subcontractors also have a broad range of affiliations with each other. Some of these involve formal agreements about resource relationships, whereas others are more political in nature. We have data on the number of contractual relationships that organizations maintain with other nonpublic agencies and that involve public funding.<sup>50</sup> We asked whether the organization subcontracted any of its public funding to other nonpublic organizations and whether it received public funding indirectly by means of subcontracts with other nonpublic agencies. If the answer was yes, we asked with how many different organizations the agency had each of these types of subcontractual relationships. We assume, but do not know for sure, that most of these subcontracts occur among nonprofit organizations rather than for-profit ones. Overall, 39 percent engage in some form of subcontracting of public funding to or from other nonpublic organizations (NP\_CONTR), involving as many as 16 other organizations, but the average was only 1.2.

We also asked the organizations to indicate whether they belonged to, or received funds on a regular basis from, any United Way organization, religious federations, or any other federated charity. We counted the total number of such funding sources (NPFNDFED). More than

half (58%) belonged to federations, mainly United Way (54%) rather than religious federations (19%). The survey also listed five major statewide associations or coalitions active in services for children and youth and asked the organizations to indicate whether they belonged to any or all of them (CHLDCOAL).<sup>51</sup> Almost two-thirds (53%) had such connections, and some belonged to all five. Finally, we measured the overall degree of involvement in nonprofit networks (NPNETWRK) by adding the number of subcontractual relationships with other nonpublic agencies, memberships in funding federations, and affiliations with statewide coalitions. Only 17 percent had no such network connections, but some had as many as 18, and the average was 2.9.

## Findings

Column 1 in table 3 reports on the zero-order correlations between the log value of amount of funding from DCFS (dependent value) and the two sets of measures of market forces and leverage (independent variables). These correlations show that both market and leverage variables are significantly related to the amount of funding received by agencies. All but three of the 29 zero-order correlations are significant. Only self-defined comprehensiveness, degree of community base, and number of funding relations with units of local government fail to reach significance. A fourth variable (reliance on donations) has only borderline significance ( $p < .10$ ) and is in the opposite direction to what we expected.

To understand more fully the factors related to success in the DCFS provider market, we undertook multiple regression analyses using the two sets of independent variables to predict the amount of funding providers receive from DCFS (log value). Four pairs of independent variables are highly correlated with one another and, therefore, present a problem of multicollinearity in the multiple regressions.<sup>52</sup> We dropped one variable from each of these four pairs based on the relative clarity or importance of its conceptual link to the dependent variable. In two of the four pairs, the application of this criterion eliminated the variable with the lowest correlation with the dependent variable. For one pair, the eliminated variable (COR\_SERV) has a stronger correlation with the dependent variable than the one we kept (ALL\_SERV) but has a more tenuous conceptual link to service comprehensiveness. For the final pair (PCT\_FEE and PCT\_GOV), there is no clear conceptual basis for distinguishing between their relationship to the dependent variable. We therefore display results from separate analyses to examine whether the inclusion of one as opposed to the other affects the overall findings.

Columns 2-5 in table 3 present the results of our multiple regression analyses. Column 2 shows the results of a multiple regression

Table 3

REGRESSION RESULTS ON AMOUNT OF DCFS FUNDING IN FISCAL YEAR 1989 (Log Value)

| VARIABLE NAME AND TYPE        | ZERO-ORDER CORRELATIONS | STANDARDIZED REGRESSION COEFFICIENTS IN MULTIPLE REGRESSION |             |                                  |             |
|-------------------------------|-------------------------|-------------------------------------------------------------|-------------|----------------------------------|-------------|
|                               |                         | Without Control for DCFS Dependence                         |             | With Control for DCFS Dependence |             |
|                               |                         | With % Government Funding                                   | With % Fees | With % Government Funding        | With % Fees |
| <b>Market forces:</b>         |                         |                                                             |             |                                  |             |
| Expertise:                    |                         |                                                             |             |                                  |             |
| + RESID .....                 | .16**                   | .14                                                         | .14         | (.11)                            | (.12)       |
| + SOCIAL .....                | .23***                  | (.12)                                                       | (.12)       | (.10)                            | (.10)       |
| + DAYCARE .....               | -.21***                 | ...                                                         | ...         | ...                              | ...         |
| + YOUTH .....                 | .11*                    | ...                                                         | ...         | ...                              | ...         |
| - MENTAL .....                | -.15**                  | ...                                                         | ...         | ...                              | ...         |
| - MISC .....                  | -.18***                 | (-.09)                                                      | (-.09)      | ...                              | ...         |
| + MAJ_CORE .....              | .30***                  | (.08)                                                       | (.08)       | ...                              | ...         |
| Comprehensiveness:            |                         |                                                             |             |                                  |             |
| + ALL_SERV .....              | .26***                  | ...                                                         | ...         | ...                              | ...         |
| + SELFSERV .....              | .02                     | (-.07)                                                      | ...         | ...                              | ...         |
| Target focus:                 |                         |                                                             |             |                                  |             |
| + CHLDTARG .....              | .25***                  | .19**                                                       | .20**       | .12*                             | .12*        |
| + RACETARG .....              | .21***                  | (.07)                                                       | (.08)       | (.07)                            | (.07)       |
| Outreach:                     |                         |                                                             |             |                                  |             |
| + MUL_SITE .....              | .16**                   | (.07)                                                       | ...         | .09                              | .09         |
| + COM_BASE .....              | -.04                    | ...                                                         | ...         | ...                              | ...         |
| + SERV_SET .....              | .22***                  | ...                                                         | ...         | ...                              | ...         |
| <b>Leverage:</b>              |                         |                                                             |             |                                  |             |
| Resource capacity:            |                         |                                                             |             |                                  |             |
| + LOG_SIZE .....              | .16**                   | ...                                                         | ...         | ...                              | ...         |
| - YEARESTB .....              | -.51***                 | -.12                                                        | (-.10)      | -.13*                            | -.12*       |
| + FT_STAFF .....              | .13*                    | ...                                                         | ...         | ...                              | (.07)       |
| Funding mix:                  |                         |                                                             |             |                                  |             |
| + PCT_COV .....               | .31***                  | .21**                                                       | N.A.        | .16**                            | N.A.        |
| - PCT_FEE .....               | -.36***                 | N.A.                                                        | -.18**      | N.A.                             | -.13*       |
| - PCT_DON .....               | .08                     | ...                                                         | -.15**      | ...                              | -.12*       |
| Alternative sources:          |                         |                                                             |             |                                  |             |
| + GOV_CON .....               | .13*                    | ...                                                         | ...         | ...                              | ...         |
| + STAT_CORE .....             | .18***                  | ...                                                         | ...         | ...                              | ...         |
| + FED_CON .....               | .16**                   | ...                                                         | ...         | ...                              | ...         |
| + LOC_CON .....               | .05                     | ...                                                         | ...         | ...                              | ...         |
| Legitimacy:                   |                         |                                                             |             |                                  |             |
| + NP_AUSP .....               | .33***                  | .12                                                         | .11         | (.08)                            | (.08)       |
| + RELAFFIL .....              | .16**                   | ...                                                         | ...         | ...                              | ...         |
| Nonprofit networks:           |                         |                                                             |             |                                  |             |
| + NPFNDFED .....              | .30***                  | ...                                                         | ...         | ...                              | ...         |
| + CHLDCOAL .....              | .37***                  | .12*                                                        | .12*        | ...                              | ...         |
| + NPNETWRK .....              | .40***                  | .11                                                         | .12         | (.09)                            | (.09)       |
| Control:                      |                         |                                                             |             |                                  |             |
| + DCFS_MAJ .....              | .54***                  | N.A.                                                        | N.A.        | .33***                           | .33***      |
| Multiple r .....              |                         | .65***                                                      | .64***      | .70***                           | .70***      |
| Adjusted R <sup>2</sup> ..... |                         | .36                                                         | .35         | .44                              | .43         |

NOTE.—Sign in front of variable name indicates hypothesized relationship with amount of Department of Children and Family Services (DCFS) funding (dependent variable). Only standardized regression coefficients significant at .20 level of significance or better are included. Coefficients with significance levels between .20 and .10 are shown in parentheses, those with significance levels between .05 and .10 are shown without notation, otherwise, \* =  $p < .05$ , \*\* =  $p < .01$ , and \*\*\* =  $p < .001$ . In cols. 2 and 4, PCT\_FEE is excluded from the analysis. In cols. 3 and 5, PCT\_GOV is excluded. N.A. = not available.

analysis including reliance on public funding (PCT\_GOV) but not reliance on fees (PCT\_FEE). Column 3 displays results when including reliance on fees but not public funding. Columns 4 and 5 show the results when also controlling for relative dependence on DCFS funding (DCFS\_MAJ). For the sake of clarity, standardized regression coefficients that fail to reach the .20 level of significance are not presented.

We draw three conclusions from these analyses. First, market forces and leverage together account for a relatively large proportion of the variance in the amount of DCFS funding. As shown in column 2, the 29 independent variables have a multiple correlation coefficient of  $r = .65$  and explain 36 percent of the variance. The coefficients and amount of variance explained are slightly smaller if reliance on fees, rather than reliance on government funding, is included in the analysis (col. 3). If we control for the relative importance of DCFS funding to the organizations (cols. 4 and 5), we explain an additional 8 percent of the variance (43%–44%).

Second, in each case, three or four variables are significantly related to funding (at the .05 level or better): whether the agency targets children and families (CHLDTARG), the year the agency was established (YEARESTB), funding mix (PCT\_GOV or PCT\_FEE and PCT\_DON), and the number of memberships in child welfare coalitions (CHLDCOAL). Several more variables approach significance at the .10 level or better (numbers not in parentheses). The number of relevant variables increases only slightly if we consider those with significance levels of .20 or better as well (numbers in parentheses). All significant relationships are in the hypothesized directions and in the same directions as the zero-order correlations. That is also the case for all regression coefficients of borderline significance.

Third, the leverage variables appear very important in accounting for differences in the amount of DCFS funding received. They account for seven of the eight zero-order correlations with  $r > .30$  and all the significant variables in the multiple regression except for one measure of target focus (CHLDTARG). Fourth, the overall patterns do not change substantially if we allow stepwise regression techniques to select the best set of predictor variables, whether or not we include DCFS as a major funding source (DCFS\_MAJ), overall size (LOGSIZE), or the organization's primary purpose (MISSION).<sup>53</sup>

## Discussion

We found support for both our hypotheses. The success of providers in the DCFS funding market (as measured by the amount they received from DCFS in 1989) does have some relationship to the type of expertise they have and therefore how well they match the needs of

DCFS for certain types of providers (market factors). Their success is also related to the legitimacy to which they can lay claim and the amount of influence or resources to which they have access (leverage factors).

But, as our findings show, some of these factors are more important than others. The amount of DCFS funding providers receive is related mainly to whether they target children, youths, and their families; whether they are old, established agencies; whether they have expertise with public funding (or alternatively avoid fees); and how extensively they are involved in coalitions focusing on children and youth.<sup>54</sup> We speculate that the importance of involvement in statewide coalitions reflects at least in part how the policy arena itself is structured, that is, in Illinois, state government plays a major role in controlling and administering expenditures in the child welfare field.

These are important findings. Although market factor variables are related to the amount of DCFS funding that providers receive, their contributions are weakened when leverage variables are included as well.<sup>55</sup> The pattern is consistent with what we would expect, given DCFS's long-standing and extensive reliance on external (mainly nonprofit) providers to deliver complex services that are difficult to evaluate. These are ideal conditions for allowing reputation and legitimacy to take on a major role in negotiating grants and contractual relationships. The findings suggest that contractual relations in the child welfare system (as least as structured in Illinois) are likely to be very stable over time and to respond only imperfectly to shifts in market forces.

We acknowledge, however, that this is also a tentative argument. We do not know the extent to which our findings would be modified if we had been able to incorporate a more complete set of variables in our analysis, especially measures of provider performance. Nor do we have time-series data that would allow us to test the causal direction of relationships. Our cross-sectional analysis allows us only to confirm that there are strong associations between provider success in the DCFS contract system and the various independent variables we have included in the analysis, especially leverage and influence factors.

However, our argument about the greater importance of leverage rather than market forces gains plausibility from the substantial barriers that providers must overcome to enter the system in the first place. Moreover, according to our informants among agency providers and DCFS staff, a series of events that took place in 1987 reveals in some detail the power and leverage that existing providers are able to exercise over DCFS.

The occasion was a first-ever decision by the Cook County regional office of DCFS to invite new providers to submit bids for counseling contracts and allow them to compete on par with providers with cur-

rent contracts. When several current providers, whose bids were ranked lower than new providers on the evaluation criteria, were notified that their contracts would not be renewed, they protested the decision. Eventually, they took their case to the governor's office and succeeded in having the contracts that had already been awarded to new providers cancelled on the day before the new providers were to begin to deliver services. Protests by the new providers, many of whom had hired staff and rented space to accommodate the contract work, fell on deaf ears. Although such open displays of raw political power are rare, their occurrence highlights the importance of paying careful attention to leverage and its various sources.

Of course, in spite of tendencies toward inertia in the contract system and reliance on incremental budgeting processes, the DCFS grants and contracting system is not immutable. Client needs, provider capacities, department financial resources, and service monitoring are just some of the conditions that exert and promote change in the provider contract system. A 1-year snapshot of the service provider system may or may not accurately reflect what the system looks like over a period of time. Nor is it certain that the factors that account for the amount of funding a provider received in 1 year necessarily explain that provider's success or failure over time.

Future work in this area should explore more long-term measures of organizational success in the public grants and contracts system. We plan to do so by (1) examining the number of years providers participate in the funding system over the 5 years for which we have data,<sup>56</sup> and, for those that are continuous providers, (2) examining the growth or decline in the amount of DCFS funding a provider has received over that period of time, and (3) exploring the extent to which providers have diversified or specialized their base in the DCFS funding system by adding or dropping funded services.

Analysis of data from financial payments systems can make an important contribution to understanding the composition of a provider market. These systems present valuable tools for revealing the operation of public bureaucracies by making it possible to track trends in the numbers and types of providers over time; identify patterns of continuity, exit, and entrance; and understand how narrow, specialized, or diverse is a set of services a given provider may deliver to the public agency.

It is our impression that this type of analysis is rarely done and that our data set is unique. While most public agencies and other human service organizations keep track of their expenditures and contract relationships, they rarely employ a longer time perspective than 2 or 3 fiscal years (last, current, or next) or address the types of broader policy and planning concerns outlined in this article. Of course, human service organizations (whether public or private) often lack the internal

resources to perform an extended financial analysis. Nor do policy researchers use this resource to its full potential, perhaps because of the difficulty in obtaining and reorganizing financial data.

Efforts to describe both the provider funding systems and the characteristics of the organizations that participate in a system have implications beyond the set of organizational issues identified in this article. Empirical evidence of the role of market forces and leverage in privatized systems can help policy makers assess the benefits and the problems of such systems and move to improve the ways in which they function. Without careful attention to the interplay of these forces, policy makers are likely to face unexpected obstacles in their efforts to formulate new resource development strategies, improve service coordination and monitoring, develop cost-effective services, streamline the contract and grant process, and improve licensing processes.

### Appendix A

Table A1

DESCRIPTION OF ATTRACTIVENESS/MARKET FORCES VARIABLES INCLUDED IN ANALYSIS

| Variable Name             | Description and Type of Variable                                                                                                                                                                |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Expertise:</b>         |                                                                                                                                                                                                 |
| MISSION .....             | Primary purpose of organization: residential services (+), other social services (+), day care (+), child/youth services (+), nonresidential mental health (-), other miscellaneous (-) (dummy) |
| + ALL_CORE*               | Total number of core DCFS services provided (numeric)                                                                                                                                           |
| + MAJ_CORE .....          | Number of core DCFS services also defined as provider's major services (numeric)                                                                                                                |
| <b>Comprehensiveness:</b> |                                                                                                                                                                                                 |
| + ALL_SERV .....          | Total number of different services provided (numeric)                                                                                                                                           |
| + SELF_SERV .....         | Self-assessment of service comprehensiveness (dummy)                                                                                                                                            |
| <b>Target focus:</b>      |                                                                                                                                                                                                 |
| + CHLD_TARG .....         | Major target group composed entirely/mainly of children, youth, and their families (dummy)                                                                                                      |
| + RACE_TARG .....         | Major target group composed entirely/mainly of racial or ethnic minorities (dummy)                                                                                                              |
| <b>Outreach:</b>          |                                                                                                                                                                                                 |
| + MUL_SITE .....          | Operates in multiple sites (dummy)                                                                                                                                                              |
| + COM_BASE .....          | Extent to which organization is community focused (ordinal)                                                                                                                                     |
| + SERV_SET .....          | Extent to which organization operates in accessible service settings (ordinal)                                                                                                                  |

NOTE.—Sign in front of variable name indicates hypothesized relationship with amount of Department of Children and Family Services (DCFS) funding (dependent variable).

\* Dropped from the analysis because of potential problems of multicollinearity (see text).

## Appendix B

Table B1

## DESCRIPTION OF LEVERAGE/POWER VARIABLES INCLUDED IN ANALYSIS

| Variable Name               | Description and Type of Variable                                                         |
|-----------------------------|------------------------------------------------------------------------------------------|
| <b>Resource capacity:</b>   |                                                                                          |
| + LOG_SIZE .....            | Log value of total revenues in 1990 (numeric)                                            |
| + FT_STAFF .....            | Number of full-time staff (numeric)                                                      |
| - YEARESTB .....            | Year established (numeric)                                                               |
| <b>Funding mix:</b>         |                                                                                          |
| + PCT_GOV* .....            | Percentage of 1990 revenues from public sources (numeric)                                |
| - PCT_FEE* .....            | Percentage of 1990 revenues from fees (numeric)                                          |
| - PCT_DON .....             | Percentage of 1990 revenues from donations (numeric)                                     |
| <b>Alternative sources:</b> |                                                                                          |
| + GOV_CON .....             | Number of all public agencies with which organization contracted in 1990 (numeric)       |
| + STAT_CON* .....           | Number of all state agencies with which organization contracted in 1990 (numeric)        |
| + FED_CON .....             | Number of federal agencies with which organization contracted in 1990 (numeric)          |
| + LOC_CON .....             | Number of units of local government with which organization contracted in 1990 (numeric) |
| + STAT_CORE .....           | Number of core state agencies with which organization contracted in 1990 (numeric)       |
| <b>Legitimacy:</b>          |                                                                                          |
| + NP_AUSP .....             | Nonprofit auspices (dummy)                                                               |
| + RELAFFIL .....            | Religious affiliation (dummy)                                                            |
| <b>Nonprofit networks:</b>  |                                                                                          |
| + NP_CONTR* .....           | Number of subcontractual relationships with other nonprofits (numeric)                   |
| + NPFNDFED .....            | Number of nonprofit funding federations in which organization has a membership (numeric) |
| + CHLDLCOAL .....           | Number of child welfare coalitions in which organization has a membership (numeric)      |
| + NPNETWRK .....            | Size of nonprofit network in which organization is active (numeric)                      |

NOTE.—Sign in front of variable name indicates hypothesized relationship with amount of Department of Children and Family Services (DCFS) funding (dependent variable).

\* Dropped from the analysis because of potential problems of multicollinearity (see text).

## Notes

The views expressed are those of the authors and do not necessarily reflect the views of the U.S. Department of Health and Human Services or the John D. and Catherine T. MacArthur Foundation.

1. A second form of privatization not considered in this article—load shedding—involves transferring public services entirely to private providers.

2. Martha Derthick, *Uncontrollable Spending for Social Service Grants* (Washington, D.C.: Brookings Institution, 1975).

3. T. Field Benton and R. Millar, *Social Services: Federal Legislation vs. State Implementation* (Washington, D.C.: Urban Institute, 1978); Walter Williams, *Government by Agency: Lessons from the Social Program Grants-in-Aid Experience* (New York: Academic Press, 1980).

4. James T. Bennett and Thomas J. DiLorenzo, *Unfair Competition: The Profits of Nonprofits* (Lanham, Md.: Hamilton Press, 1989); E. S. Savas, *Privatizing the Public Service: How to Shrink Government* (Chatham, N.J.: Chatham House, 1982); John Rehfuss, *Contracting Out in Government: A Guide to Working with Outside Contractors to Supply Public Services* (San Francisco: Jossey-Bass, 1989); H. Orlans, ed., *Nonprofit Organizations: A Government Management Tool* (New York: Praeger, 1980).

5. Susan R. Bernstein, *Managing Contracted Services in the Nonprofit Agency: Administrative, Ethical, and Political Issues* (Philadelphia: Temple University Press, 1991); Ruth H. DeHoog, *Contracting Out for Human Services: Economic, Political, and Organization Perspectives* (Albany: State University of New York, 1984); Donald F. Kettl, ed., *Third Party Government and the Public Manager: The Changing Forms of Government Action* (Washington, D.C.: National Academy of Public Administration, 1987); Robert R. Nakamura and Frank Smallwood, *The Politics of Policy Implementation* (New York: St. Martin's Press, 1980); Philip J. Cooper, "Government Contracts in Public Administration: The Role and Environment of the Contracting Officer," *Public Administration Review* 50 (September–October 1990): 459–68; Nelly Hartoge, Nelly Weber, and Joseph Weber, *Impact of Government Funding on the Management of Voluntary Agencies* (New York: Greater New York Fund/United Way, 1978); Kirsten A. Grønberg, *Understanding Nonprofit Funding: Managing Revenues in Social Service and Community Development Organizations* (San Francisco: Jossey-Bass, 1993).

6. The analysis builds on and further extends the work conducted for the Children's Policy Project, a comprehensive reassessment of the Illinois Department of Children and Family Services (DCFS) conducted by the Chapin Hall Center for Children at the University of Chicago. See Matthew Stagner, "Re-thinking Child Welfare Services in Illinois: A Summary of Findings from the Children's Policy Project" (report prepared for Chapin Hall Center for Children, Chicago, 1993). For a more detailed description of the data used in this analysis, see Ted H. Chen, Kirsten A. Grønberg, and Matthew W. Stagner, "An Analysis of Financial Payments to Service Providers of the Illinois Department of Children and Family Services" (report prepared for Chapin Hall Center for Children, Chicago, 1992); Kirsten A. Grønberg and Matthew W. Stagner, "Meeting the Needs of Children and Youth in Illinois: The Role of Direct Service Providers" (report prepared for Chapin Hall Center for Children, Chicago, 1992). Support for the project was provided by the Spencer Foundation, the Chicago Community Trust, the Field Foundation of Illinois, the Helen V. Brach Foundation, the McCormick Tribune Foundation, the Ford Foundation, and the Illinois DCFS. Neither these funders nor the Chapin Hall Center for Children bears any responsibility for the analysis and interpretation presented in this article.

7. Arlien Johnson, *Public Policies and Private Charities: A Study of Legislation in the United States and of Administration in Illinois* (Chicago: University of Chicago Press, 1931); James Brown, *The History of Public Assistance in Chicago, 1833 to 1893* (Chicago: University of Chicago Press, 1941).

8. Grønberg, *Understanding Nonprofit Funding* (n. 5 above), p. 171.

9. *Ibid.*

10. Henry Hansmann, "The Role of Nonprofit Enterprise," *Yale Law Journal* 89 (1980): 835–901, and "Economic Theories of Nonprofit Organizations," in *The Nonprofit Sector: A Research Handbook*, ed. Walter W. Powell (New Haven, Conn.: Yale University Press, 1987), pp. 27–42; Burton Weisbrod, *The Voluntary Nonprofit Sector* (Lexington, Mass.: Lexington Books, 1977), and *The Nonprofit Economy* (Cambridge, Mass.: Harvard University Press, 1968).

11. Grønberg, *Understanding Nonprofit Funding* (n. 5 above).

12. Chen, Grønberg, and Stagner (n. 6 above).

13. We retained only payments to providers involved in any of 268 different client service codes and regrouped these into 13 major categories. Then, using a social security number for individuals or a federal employer identification number (FEIN) for organizations, we aggregated the payments into one annual payment record per service provider. Finally, we categorized each service provider as either an individual or an organization and distinguished among different types of individuals (e.g., foster parents, adoptive parents, day-care workers, counselors, and homemakers) and organizations (e.g., social service agencies, day-care centers, schools, health facilities, commercial businesses, and other organizations) based on the detailed set of services each provided and the pro-

vider's name. We found some inconsistency among these criteria, e.g., individual providers being paid to deliver agency-based foster care.

14. We undertook this process for each of the 5 years over the 1985-89 period and merged the 5 years into a single data set of some 58,000 providers engaged in contractual services for DCFS clients at some point during the 5 years. We present only data from 1989 in this article.

15. Grønberg and Stagner (n. 6 above).

16. We eliminated duplicate listings, individuals, schools, townships, commercial vendors, medical and legal professionals, or units not in Illinois. We included 12 social service organizations that serve only administrative purposes for DCFS (e.g., the Salvation Army). Because of problems in identifying headquarters, we included all distinctive program units under a given FEIN, but eliminated responses (30) that were duplicates. An additional 177 program units screened themselves out on the same basis.

17. We drew a 10 percent random sample (161) of the 1,607 single-site day-care organizations and a 50 percent random sample (132) of the 264 multiple-site day-care organizations. Many of the day-care organizations in the provider database have no contractual relationship with DCFS but are included in the database because they must be licensed by DCFS in order to operate. At the time we conducted the survey, we had not completed our analysis of the payment database and were, therefore, unable to distinguish between licensed-only day-care organizations and those with DCFS payments. By sampling only a portion of the day-care organizations, smaller organizations are underrepresented in the survey. We considered, but rejected, the possibility of weighing survey responses to compensate for this undersampling because it would have been difficult to establish valid weighing factors, given the lack of detailed information about providers in the payment database and complexity in dealing with different response rates to the survey.

§ 18. We matched the two data sets by FEINs and compared the names as recorded in each data set to verify the matches. We redefined two cases as "unmatched" because the names clearly denoted different organizations. We defined one case as a "match" because the same name was associated with FEIN numbers that differed only by a reversal of the first two digits. We matched three survey respondents without FEIN numbers on the basis of name but could not do so for another three.

19. We assume, but do not know for sure, that the remaining organizations in the sample are licensed day-care centers that had no DCFS funding, organizations that had DCFS funding only prior to 1985, or were among those that we deleted from the financial payment database because their DCFS payments were not related to direct client services. We were unable to eliminate these organizations from the sample prior to conducting the survey because technical problems delayed our ability to match the sampling frame and the financial payment database and because the sampling frame contained insufficient information about DCFS service activities. To avoid eliminating appropriate organizations from our sample, we decided to err on the side of inclusiveness in drawing the sample.

20. Including, unfortunately, the single largest recipient of DCFS funding, the Chicago Department of Human Services, which received about \$18.5 million in day-care funds in 1989, most of which are redistributed to private day-care programs.

21. Service providers with multiple last names—"Smith and Smith" or "Smith and Associates"—were counted as organizations; those with a single name—"Smith"—were coded as individuals.

22. A full description of service categories is available on request.

23. All 595 social service agencies should have been included in our sample list, but 35 percent were not. The missing organizations appear to be those with sufficiently ambiguous names that we did not recognize them as social service agencies when we screened the provider database for appropriate organizations to include in the survey. These erroneously excluded agencies accounted for 3 percent of all dollars to social service agencies and 4 percent of dollars to all provider organizations in 1989.

24. In order to compress the figure into a reasonable format, the two ends of the distribution have different y-axis scaling.

25. The survey also included questions designed to measure the extent and nature of changes experienced by providers over the past 3-5 years, i.e., revenues and funding sources in 1985, changes in service mix over the previous 3 years, and changes in affiliations with key nonprofit funding federations.

26. We use statistical tests of significance to indicate whether there is a substantial association between the amount of funding received from DCFS and a particular characteristic of the provider. As noted above, we do not have a genuine random sample of the DCFS providers, and significance tests may not be fully appropriate. However, we have most of the important DCFS providers in our survey, and the tests describe the strengths of existing patterns.

27. In fact, "mission" turned out to be one of the key variables that explained most other differences among the responding organizations. See Grønberg and Stagner (n. 6 above).

28. National Center for Charitable Statistics, "NTEE: Mapping the Nonprofit Sector: The National Taxonomy of Exempt Entities" (Washington, D.C.: The Independent Sector, 1990).

29. The nine major service fields are social services, institutional/residential care, mental health, health, employment/income support, education/research, housing/community development, legal/advocacy services, and recreation/culture/arts.

30. Irving Spergel and Mary Ann Hartnett, *Evaluation of the DCFS Comprehensive Community Based Youth Service System: Final Report* (report prepared for Chapin Hall Center for Children, Chicago, 1990).

31. Mark Jacobs, *Screwing the System and Making It Work: Juvenile Justice in the No-Fault Society* (Chicago: University of Chicago Press, 1990).

32. We view this claim with some skepticism, reflecting either self-delusion or limited attention to client needs beyond those the provider has any interest in addressing.

33. The two are closely related. Certain services are entirely directed at particular client groups.

34. We have some data on the extent to which the organizations voluntarily identify other special target groups of particular interest to DCFS: low-income, victims of crime or abuse, mentally ill or substance abusers, etc. However, very small proportions identified these target groups, and all organizations may not have reported on them because we used an open-ended question. Even so, the proportions are consistent with other survey data that explicitly asked about these groups. See Kirsten A. Grønberg, Aml Nagle, Lauree Garvin, and Lori Wingate, *Nonprofit Human Service Facilities in Illinois: Structure, Adequacy, and Management* (report prepared for the Illinois Facilities Fund, Chicago, 1992).

35. Most likely, providers located in the Chicago metropolitan area are more likely to target minority populations than those in downstate Illinois. We do not have sufficiently detailed information on the geographic service area of providers to allow for a test of this hypothesis. Although only 31 percent of DCFS providers target minority groups, this is a substantially higher percentage than the 6 percent of Illinois nonprofit human service organizations (broadly defined) that reportedly targeted minority groups in 1991. Among these organizations, a somewhat larger proportion of Chicago-based agencies (7%) than those located in other regions of the state (2%) reported that they targeted minority groups (*ibid.*, pp. 1'-21).

36. However, close links between service staff and community may be a problem for clients who prefer to receive certain types of services under greater conditions of anonymity than might be possible in community-based organizations.

37. We categorized organizations as operating mainly in external settings if most of their in-person contacts took place in client or foster homes, in schools, in the courts, or in such locations as streets, shops, or parks. These settings should make services more accessible to clients and indicate aggressive outreach efforts. We coded organizations as engaging in intermediary outreach if they reported that some, but not most, contacts took place in any of these settings. The remaining organizations provided most of their services in internal settings, i.e., agency offices, residential facilities, or other agencies.

38. Michael R. Sosin, "Decentralizing the Social Service System: A Reassessment," *Social Service Review* 64 (December 1990): 617-36.

39. Jeffrey Pfeffer and Anthony Leong, "Resource Allocation in United Funds: Examination of Power and Dependency," *Social Forces* 55 (March 1978): 775-90; Jeffrey Pfeffer and Gerald Salancik, *The External Control of Organizations* (New York: Harper & Row, 1977); Michael T. Hannan and John Freeman, "The Population Ecology of Organizations," *American Journal of Sociology* 82 (1977): 929-64; "Structural Inertia and Organizational Change," *American Sociological Review* 49 (1984): 149-64; Keith G.

Provan, Janice M. Beyer, and Carlos Kruytbosch, "Environmental Linkages and Power in Resource-Dependence Relations between Organizations," *Administrative Science Quarterly* 25 (1980): 200-24; John W. Meyer, John W. Scott, and Richard Scott, eds., *Organizational Environments: Ritual and Rationality* (Beverly Hills, Calif.: Sage, 1983); Carl Milofsky, ed., *Community Organizations: Studies in Resource Mobilization and Exchange* (New York: Oxford University Press, 1988); Jitesdra Singh, Robert J. House, and David J. Tucker, "Organizational Change and Organizational Mortality," *Administrative Science Quarterly* 31 (1986): 587-611; Paul J. DiMaggio and Walter W. Powell, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," *American Sociological Review* 48 (1983): 147-60.

40. Organizational size could be viewed as one of the market force variables, if one assumes that large size reflects greater organizational capacity to perform DCFS services and that DCFS will prefer to contract with large-capacity organizations in order to minimize the number of contracts it must supervise. However, given the number of providers with which DCFS contracts during a given year, we do not find this a compelling argument by itself. Moreover, anecdotal evidence and interviews with DCFS staff suggest that DCFS staff tend to view large providers as difficult to control, suggesting that provider size should be grouped with the leverage variables.

41. Year-by-year analysis shows that between one-quarter and one-third of human service organizations have annual shifts in a major funding source (e.g., government funding) that change the organization's size by at least 25 percent. See Kirsten A. Grønberg, *Responding to Community Needs: The Missions and Programs of Chicago Nonprofit Organizations* (prepared under the Urban Institute, Washington, D.C., 1986); Grønberg, *Understanding Nonprofit Funding* (n. 5 above).

42. The zero-order correlation between the raw dollar values of total revenues and total DCFS funding is  $r = .44$ , so that total revenues account for less than 20 percent of the total variance in DCFS funding amounts. We do not know how the likely underrepresentation of small agencies, especially day-care centers, affects these correlations.

43. Grønberg, *Understanding Nonprofit Funding* (n. 5 above).

44. We also asked about revenues from special events (or other fund-raising activities) and "other" sources but dropped them from the analysis because they averaged less than 4 percent of revenues.

45. The correlation between the percent of revenues from public sources (in 1990) and the log value of 1989 DCFS payments is only  $r = .31$ , suggesting that the confounding of these two variables is not very important.

46. While the amount of funding from public sources may fluctuate from year to year, social service agencies tend to have fairly persistent relationships with public agencies. See Grønberg, *Understanding Nonprofit Funding* (n. 3 above).

47. They include the Departments of Public Aid, Mental Health and Developmental Disabilities, Alcoholism and Substance Abuse, Corrections, Public Health, and the State Board of Education.

48. Sosin (n. 38 above).

49. Most major religious denominations have their own advocacy organizations and well-established links to state and local governments.

50. We asked only about subcontracting relationships that involved some level of public funding because we were interested in this particular relationship for other research purposes. Moreover, case-study data suggest that agencies find subcontracting relationships troublesome and mainly undertake them if funding sources demand that a particular complement of services be provided. Only public funding sources tend to impose such demands (see Grønberg, *Understanding Nonprofit Funding* (n. 5 above)).

51. They are the Child Care Association of Illinois, Day Care Action Council of Illinois, Illinois Action for Children, Illinois Caucus on Teen Pregnancy, and Illinois Collaboration on Youth.

52. Number of core services (ALL\_CORE) and number of total services (ALL\_SERV,  $r = .84$ ); reliance on fees (PCT\_FEE) and government funding (PCT\_GOV,  $r = -.76$ ); number of funding relationships with state agencies (STAT\_CON) and with seven core state agencies (STAT\_CORE,  $r = .88$ ); and number of nonprofit subcontract relationships (NP\_CONTR) and overall size of nonprofit network (NPNETWRK,  $r = .87$ ). All other intercorrelations are at the .50 level or less.

53. These findings are not reported in detail here.

54. One other measure of provider expertise (focusing on residential care services, or operating in multiple sites when controlling for DCFS as a major source of funding) approaches significance, as do two additional measures of leverage (operating under nonprofit auspices and size of nonprofit network in which the provider is involved).

55. When just market variables are included in the regression analysis, they account for 25 percent of the variation in DCFS funding levels.

56. We will also examine year-to-year patterns to see if service providers entered, exited, stayed, or cycled in and out of the system during the fiscal year 1985-89 period.

Privatization  
of  
Seaports

## Privatization Of Seaports?

Though hardly a recent phenomenon, "privatization" of publicly owned assets has come increasingly into vogue as a solution to perceived problems of fiscal scarcity and institutional inefficiency. The underlying assumption appears to be that private sector participation is needed both to relieve governments of burdensome financial responsibilities and to promote investment and efficiency in a manner that the public sector is inherently incapable of providing.

*by Rexford B. Sherman*

**A**mong the targets of privatization at the inter-national level have been state owned enterprises such as banks; trading companies; tele-communications; utilities; steel and petroleum companies; and transportation entities such as railroads, shipping lines, highway systems, airlines and ports. The most obvious examples have been the transition to the free enterprise system of the communist economies of Eastern Europe, the former Soviet Union, and even the remaining communist states such as Vietnam and especially China. However, it is occurring with comparable rapidity elsewhere — in Britain under the Conservative governments of Prime Ministers Thatcher and Major, Argentina under President Menem and the Mexico of former President Salinas, for example, — with the reversal of socialist policies of the past by public divestiture of previously nationalized and other state-owned companies, and the adoption of policies aimed at encouraging rather than constraining market-oriented behavior in the private sector.

Public ports have become increasingly inviting targets of opportunity for privatization over the past decade. The

first and arguably the most successful occurred in 1981 with the sale by the British government of the 21 ports controlled Transportation Board to a joint-stock company known as Associated British Ports Holdings. Other countries where port privatization is well underway are Argentina, Chile, Colombia, Malaysia, Mexico, New Zealand, the Philippines, and Venezuela. The process has accelerated within the last two years, according to the British trade journal "Port Development International", which estimates that 30 ports worldwide "will, in some way or another, be privatized in the short-term."<sup>1</sup> In total, more than 40 countries are said to be pursuing "port privatization in one form or another."<sup>2</sup>

In the United States, privatization initiatives thus far have typically entailed the contracting out of to vendors of services handled by public employees such as solid waste disposal, nursing home operation, wastewater treatment, traffic adjudication, prisons, school lunch programs, and child support services.<sup>3</sup> Even the Federal Government has not remained immune. Examples include the sale to the private sector of Federal Barge Lines and Conrall; quasi-

privatized institutions such as the U.S. Postal Service and the National Passenger Railroad Corporation (or "Amtrak"); and the recent proposal for privatizing the federal air controller service as part of the reorganization of the U.S. Department of Transportation.

Only recently, however, has the debate in this country begun to embrace the privatization of U.S. public port agencies. A 1993 study by The Reason Foundation which touts "greater private sector participation" as a solution to the "many problems" faced by U.S. public ports" such as "lack of exposure to full commercial competitive pressures .. to operate efficiently" and undue "political interference."<sup>4</sup> More specific proposals have come from the prospective Executive Director of The Port Authority of New York and New Jersey<sup>5</sup> and a reorganization plan for the Port of Los Angeles, which among other things, recommends the contracting out of certain "non-essential" port functions and the privatizing of others such as pilotage.<sup>6</sup>

The merits of these ideas can be effectively evaluated, however, only by precisely defining what is meant by privatization, actual privatization experiences elsewhere in the world, and how they relate, if at all, to the situation to public port governance in the United States.

"Privatization" simply stated means the transfer, sale, or lease of public assets, functions, or services to private sector entities. Furthermore, privatization defines not one but rather a spectrum of options ranging from the "complete" sale of public port assets on one extreme to contractual or leasing arrangements in which ownership remains in the public sector but operational control is delegated in some fashion to private sector concessionaires. A World Bank study<sup>7</sup> outlines these "progress-

sively increasing degrees of private participation:"

- (a) publicly owned and operated port
- (b) Private stevedoring in publicly owned facility
- (c) Private shore-side cargo-handling and stevedoring in public facility
- (d) Private operating concession in public facility
- (e) Privately owned and operated terminal

A more recent delineation<sup>8</sup> predicts that port privatization ventures "to the year 2000 and beyond ... will not necessarily entail a full-blooded switch from public to private ownership ... but [instead] will involve a broad based cultural change from public cost-benefit thinking to private sector commercial values." "Common strategies," beyond the "selling off [of] public ports lock stock and barrel" will include:

"Partial privatization of terminal operations where the government retains an equity stake and exerts control in line with this."

"The full privatization of terminal operations where facilities are leased on a term basis and the role of the port authority becomes a management and coordinating one without direct involvement in operations."

"The port authority may opt to contract to perform other key functions, for example, towage duties, infrastructure and plant maintenance and navigation duties."<sup>9</sup>

Other, though less likely options, include:

"The contracting of private sector management expertise to run a given facility."

## PRIVATIZATION OF SEAPORTS?

"The leasing of entire ports."<sup>10</sup>

A decision to privatize ports can be driven by a variety of forces. The most obvious is to relieve a financially strapped government by turning to the private sector for an infusion of capital required to modernize and sustain port operations — or to bolster the national treasury. Another can be to seek the economic benefits from competition by cutting labor costs, eliminating publicly sanctioned monopolies, reducing bloated port labor forces, and removing other institutional barriers that discourage innovation and isolate and indeed protect port management from the exigencies of the global market place.

Inefficient and costly port operations can seriously impair the competitiveness of a nation's export industries and artificially raise the cost and thus constrain the availability of imported goods. Thus, privatization in certain circumstances holds the promise of stimulating economic growth and higher living standards for society at large as well as those whose livelihood depends directly on port activity and trade.

However, privatization carries certain risks that must be carefully weighed before decisions are made. There is the danger, for example, as Britain's experience with certain of its "trust ports" underscores,<sup>11</sup> that the below-market sale of public assets can deprive government of the full value and thus the full financial benefit of a port asset divestiture.

Determination must be made as to what if any role should be retained by the public sector; what restrictions or limits should be placed on private operators; and, what safeguards are needed to prevent abuses. In this respect, it is important to note the recent emergence and expanding holdings on an interna-

tional scale of fewer than two dozen privately-controlled terminal operating companies whose corporate headquarters are often far removed from the port properties they own or manage.<sup>12</sup> These entities have typically been the successful bidders of late for terminal concessions in Latin America, Asia, and Europe. While these companies have much to offer in the form of capital, managerial expertise, and market acumen, their interests are global rather than local or regional, corporate rather than public, profit maximization rather than economic benefit — factors that argue well for adequately safeguard public and national security interests in any port privatization strategy.

It should also be remembered that ports are but one link in the international trading system and that care should be taken to ensure that reform extends beyond the port itself. If, for example, inefficiencies or monopolistic practices are allowed to persist elsewhere in the system, the benefits from port privatization may be compromised or forfeited altogether. A modern, efficient container port serves no useful national purpose if it is served by poorly maintained or inadequate rail or highway facilities.

Similarly negative consequences can ensue from unnecessary and/or corruptly managed government regulatory practices, from a failure to trim bloated public port bureaucracies, to implement meaningful labor reform, or to sensitize port operations to market rather than political forces. Clearly, the challenge is to promote economic efficiency while preserving and protecting the public interest in a modern, viable port system. In the last analysis, the guiding strategy must be in ensuring the uninhibited flow of waterborne trade rather than short term and, one might

say, short-sighted politically motivated fiscal goals — the danger, as one astute commentator puts it, of "milking for cash, not trade."<sup>13</sup>

Port privatization experiences to date have for the most part focussed on the sale of operating concessions (in Argentina, China, Mexico, and the Philippines, for example)<sup>14</sup>, joint-public-private ventures (Malaysia and Vietnam)<sup>15</sup>, privately-oriented but port authority controlled operating subsidiaries (Saint Lucia)<sup>16</sup>, or the dissolution of government-owned cargo handling monopolies in favor of competitive private sector stevedoring companies (Chile and Dublin).<sup>17</sup> The "lock stock and barrel" sales of public ports in New Zealand and Great Britain are rather the exception than the rule. Only a few months ago, for example, "a barrage of criticism from users, unions, and shipowners" forced the Victoria State Government in Australia to abandon its pursuit of "port reform" through the sale of the shore-based and non-port-related assets of the Port of Melbourne Authority.<sup>18</sup>

Proponents of privatization argue that U.S. public ports many cases operate at a loss and, furthermore, "lack exposure to full commercial competitive pressures" which "may have reduced incentive to operate efficiently" and "are often subject to political interference."<sup>19</sup> They point with approval to privatization success stories in Great Britain and Malaysia, for example,<sup>20</sup> and in so doing imply that because port privatization is occurring elsewhere in the world, it ought to be done in the United States. The underlying assumption is that public ports systems are the same everywhere, and that what makes sense for Malaysia, Argentina, or Mexico, makes equally good sense for the United States.

That assumption is seriously flawed. Unlike most other port systems, particularly in the developing world, the

U.S. port system is decentralized, highly competitive (which is the major reason why many have difficulty turning a profit), and is already "privatized" to a large degree. To say that U.S. public ports are unresponsive to competitive pressures is to ignore the billions of dollars they have invested in facilities and services to ensure that they do in fact remain competitive.

The operating philosophies of public seaport agencies in the United States are dictated largely by local circumstances — by decisions of port managers as directed by their governing boards and the enabling charters of the agencies themselves rather than by administrative fiat of the national government. Indeed, in the United States, there is no single national port authority. Rather authority is diffused through all three levels of government — federal, state, and local. This stems from the federal character of the U.S. Constitution, which reserves certain powers for the national government and delegates others to the states.

The U.S. Constitution grants the federal government exclusive jurisdiction over the navigable waters of the United States, including its deepdraft channels and harbors. However, landside port development, with certain restrictions, is a state and local government prerogative. Port authorities in the United States are instrumentalities of state or local government and established pursuant to laws or grants of authority extended by state legislatures.

Neither Congress nor any federal agency has the power, or even the right, to appoint or dismiss port commissioners or staff members, or to amend, alter, or repeal a port authority charter — with one exception. That exception pertains to the enabling charters of bi-state agencies, which, because of their interstate character, are subject to Congress-

## PRIVATIZATION OF SEAPORTS?

sional approval: In addition, by federal law, ports may not give undue or unreasonable preference or refuse to deal with a person, locality or type of traffic. Port tariffs are filed with a federal regulatory agency to ensure compliance with the law, and lease and service agreements must be made available to the agency upon request.

However, port investment and management decisions are a local, state or private sector function. So far as port development and investment is concerned, the federal function has historically been restricted to navigation channel construction and maintenance. Shoreside development has been left to the non-federal public and private sectors. Indeed, the U.S. Constitution stipulates that the federal government shall give "no preference by any regulation or commerce or revenue to the ports of one State over those of another." Thus, port development in the United States is a shared responsibility between the federal government on the one hand, and local and state government and the private sector on the other. Because U.S. port agencies are state or local government entities, the decision to privatize rests with the legislatures and not with the federal Congress. This contrasts with the case in Britain where port agencies are subject to Parliamentary oversight.

Private sector terminal operations are widespread in the United States, occurring in virtually every port. These include private sector tenants of public port agencies as well as facilities which are both privately owned and privately managed. The latter are functionally, corporately, and legally independent of any public port agency, and many even compete with public port agencies. In addition, most port services such as railroads, trucking, towage, pilotage, bunkers, and so forth are typically pri-

vate rather than public sector function.

As previously noted, port privatization elsewhere has typically favored the sale of operating concessions rather than the outright sale of public port assets, with the port authority as a landlord and terminal operations being formed by its tenants. This, in fact, is already a widespread phenomenon in the United States, particularly among though by no means restricted to the nation's largest container ports. A recent survey by the American Association of Port Authorities of its U.S. port members identifies 31 "operating", 34 "non-operating" (or "landlord") and seven "limited" operating port agencies.<sup>21</sup> "Operating" ports are those in which cargo handling inland from the pier are performed by port authority employees performed by employees of those agencies. At "landlord" ports, by contrast, these functions are performed by port authority tenants. "Limited operating" ports combine characteristics of first two categories, leasing some facilities and operating the others.

In several instances, a desire to commercialize public port operations have led U.S. port authorities to establish quasi-private operating subsidiaries. Examples include the Virginia Port Authority (Virginia International Terminals, Inc.), Maryland Port Administration (Maryland International Terminals, Inc.), Tampa Port Authority (Tampa Bay International Terminals, Inc.) and, most recently, the Delaware River Port Authority (The Ports of Philadelphia and Camden, Inc.).

Longshore services, meaning the physical loading or unloading of vessels at pierside, are almost universally performed by private sector stevedoring companies — at both landlord and operating ports. The terminal operator, be it the port authority or a port authority tenant, contracts with the stevedore,

which in turn, hires longshore labor based on the terms of its contract with the longshore union — the International Longshoremen's Association for ports on the Atlantic, Gulf, and Great Lakes Coast and the international Longshoremen's and Warehouseman's Union for ports on the West Coast. These labor agreements historically have been concluded between the unions and local terminal operator and/or steamship associations. Port authorities traditionally have been excluded from these negotiations, except in an observer status. This arms-length relationship with longshore labor negotiations appears to have been dictated by political sensitivities and in some cases by state laws that flatly forbid such involvement by state agencies (such as port authorities). Non-union terminals or terminals operated by unions other than the ILA or ILWU exist in some U.S. ports.

What is more, the U.S. public port system is vast and highly competitive, presenting shippers with an array of routing alternatives that include ports in neighboring countries. East coast ports, for example, compete with their West Coast counterparts and their Canadian counterparts for market share in the U.S. midwest. Terminal operators and other port service providers frequently compete with one another locally as well as with ports elsewhere. Thus the port monopolies that are often the target of port privatization in other areas of the world, particularly in the developing countries, simply do not exist in the United States.

As to the issue of subsidy, while it may occur, many port authorities no longer enjoy ready access to public funds, but are instead being forced to rely on what they generate from earnings to cover their costs and satisfy the exacting demands of private capital markets. In fact, what we are seeing, is

growing instances of "reverse subsidy" such as in the recent case of California, with port authorities being called upon to bail out financially strapped state and municipal governments.

It is important to remember that port authorities were established in the United States to end private sector monopoly and abuse (particularly by railroads), to ensure equal harbor access, and to provide essential facilities and services that the private sector was unable or unwilling to provide. Public access to the waterfront and the discriminatory practices of port facility owning railroads were recurring issues at AAPA conventions in the years immediately following its founding in 1912.<sup>23</sup> While railroads monopolies are no longer at issue, there nevertheless remains an abiding public interest in the management of waterfront development.

Port activities create substantial economic and international trade benefits for the nation, as well as local and regional economies. According to the U.S. Department of Transportation, in 1992 commercial port activities generated 1.5 million jobs, contributed \$73.7 billion to the Gross Domestic Product, provided personal income of \$52 billion, generated federal taxes of \$14.5 billion, state and local taxes of \$5.5 billion.<sup>24</sup>

Facilities owned by public port agencies also serve nation's strategic interests as staging points for the deployment of U.S. Armed Forces in the event of war or other international military contingency. During the Persian Gulf conflict of 1990/91, for example, more than 3.0 million measurement tons of military cargo was loaded out of U.S. commercial ports in support of Operation Desert Shield/Desert Storm.<sup>25</sup>

The shoreside infrastructure requirements of waterborne commerce face growing competition for suitable waterfront land from commercial real

## PRIVATIZATION OF SEAPORTS?

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estate developers, residential housing, recreation boating, historic preservationists, and other interests. Striking a fair and equitable balance that best serves the public economic growth and the quality of life as it related to harbor development is an ongoing challenge to ports and local government as well as those whose livelihood depends on maritime activity. A viable port authority helps assure that the requirements of trade do not go unheeded.

In brief, the private sector is already well entrenched in the U.S. port system.

Furthermore, the highly competitive nature of the system obviates any danger from monopoly to the flow of U.S. waterborne trade. Further privatization of public ports is most likely to be selective — security, pilotage and other discrete functions, along the lines of what is being contemplated in Los Angeles — or the conversion to landlord status by operating ports.

Whatever the case, care must be taken to protect and preserve the overriding public interest in the flow of waterborne commerce so vital to the nation's economy and security.

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# Privatizing Vehicle Registrations, Driver's Licenses and Auto Insurance

It is conceivable that all of the functions of MVD could be privatized. Issuing registrations and driver's licenses are the major tasks performed by MVD. Other tasks (like issuing titles and collecting taxes) could be contracted out. The Ports-of-Entry could be consolidated into the Department of Public Safety. Arizona's innovation in this area could serve as a model for other states.

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*by John Semmens*

**I**n Arizona, the law requires owners of vehicles to carry liability insurance in order to register their vehicles. The idea is that vehicle owners be made responsible for any damage they may create in operating their vehicles. Yet, a considerable portion of the vehicles on the roads are without this required insurance. The All-Industry Research Advisory Council's survey of 1989 found that an estimated 8 percent of households in the nation admitted to operating at least one vehicle without insurance.<sup>1</sup> The Arizona Department of Transportation's Motor Vehicle Division also estimates that about 8 percent of the vehicles operating on Arizona's roads do not have the required insurance.<sup>2</sup> This survey, though, relied upon the self-reported assertions of individuals. Since most states require liability coverage, many individuals may have been reluctant to admit breaking the law. Obviously, statistics on the number of persons breaking the law are prone to data collection difficulties. Aware of this, some

observers have asserted that at any given time, up to 30 percent of the vehicles on the streets may be operated without insurance.

Uninsured vehicles are only half the problem. Other vehicles are grossly underinsured. Arizona state law permits vehicles to be operated with liability coverages as low as \$15,000/\$30,000/\$10,000. What this means is that the insurer will cover bodily injury damages up to \$15,000 for a single victim, up to \$30,000 total for multiple victims, and up to \$10,000 for property damage. It doesn't take much of a wreck to total a car. Replacing one totalled car could easily cost more than \$10,000. Considering that about 75 percent of the traffic accidents in Arizona involve more than one vehicle,<sup>3</sup> it should be readily apparent that many crashes will produce property damage in excess of the minimum mandated liability coverage. As it is, the average cost of a "property damage only" accident in Arizona is \$6,500.<sup>4</sup> Next to this, the \$15,000 to \$30,000 coverage for

injuring or killing someone is ludicrously inadequate. Minor injury accidents result in costs averaging over \$10,000 per accident. Major injury accidents generate an average cost of over \$32,000. Fatal accidents produce damages in the \$880,000 range.<sup>5</sup>

When the damage caused by a driver is not covered by his liability insurance (either because he has none or is underinsured) it is borne by the victim. In terms of what the insurance industry pays for claims by its policy holders who have purchased "uninsured" and "underinsured" coverage this amounted to around \$30 million per year in the mid-1980s in Arizona.<sup>6</sup> Even though the accident rate has declined since the mid-1980s (from 3.2 per million vehicle miles of travel to 2.6 per million miles)<sup>7</sup> the cost of each accident has risen. This would give us an estimate of around \$80 million per year as the current amount paid by insurers to cover damages done to their policy holders.<sup>8</sup>

These payments made by insurers understate the actual damages for several reasons. First, the "uninsured" and "underinsured" coverages offered by insurers cover only bodily injury medical expenses. They do not cover damage to property. Neither do they cover lost wages, pain and suffering or other tort-related damages. Second, not everyone who is insured purchases these coverages. Medical expenses charged to a person's medical insurance rather than to his auto insurance under his "uninsured" or "underinsured" coverage would not be counted in this calculation. Finally, the uninsured losses borne by individuals are also not captured by this estimate (for example, if one uninsured driver causes damages to another uninsured driver). So, in terms of the order of magnitude of the problem, we are probably talking about \$100 million per year in costs imposed on the victims of accidents or their insurers.

### Modeling a Solution

There are two models useful in analyzing this situation. On the one hand, we could view roads as falling into the "ballpark" model. In the ballpark customers are warned that the management assumes no responsibility for any injuries or damages suffered by its customers in the event that they are harmed by baseballs, bats, or players in the normal course of the game. If this model was applied to the roads, anyone who paid the price of admission to the roadways (i.e., purchased the necessary licenses and vehicle registrations) would have access. Road agencies would assume no responsibility for any injuries or damages. Users would determine whether to buy insurance or not. Anyone venturing onto the roads would do so at his own risk and with the explicit warning that he might be harmed by others who would not be able to compensate for any damage done.

The chief advantage of the "ballpark" model is that it would remove the ambiguity regarding who should bear the responsibility of insurance. No one could venture onto the roadways under the impression that the state has guaranteed him that the other drivers are insured. The knowledge that there are no insurance requirements would inspire those who desire to be indemnified against damages that may be caused by other drivers to purchase their own adequate levels of insurance coverage. Those willing to bear the risks of going without insurance would be permitted to do so. Since the accident rate in Arizona is about one per 400,000 vehicle miles of travel, the odds of any one driver being in a crash are very small. Given a typical annual 12,000 miles of travel for each automobile, there is a 97 percent chance that the vehicle won't be involved in an accident in any one year. When we fac-

## PRIVATIZING VEHICLE REGISTRATIONS, DRIVER'S LICENSES AND AUTO INSURANCE

tor in the possibility that one can significantly reduce the chances of accident involvement by adopting safer driving habits (i.e., obeying traffic rules, keeping the vehicle in good running order, and not consuming alcohol), the decision to go without insurance may not be entirely unreasonable. In fact, on an actuarial basis, the estimated annual cost of Arizona traffic accidents averages around \$600 per vehicle.<sup>9</sup> If the cost to obtain insurance for a vehicle is greater than this amount, going without insurance becomes a logical economic decision.

The chief disadvantage of the "ballpark" model is that driving might become more financially risky. Even though the reduction of the impact of "moral hazard" (i.e., the tendency for humans to exert less care in preventing events that are covered by insurance) on driving behavior in the "ballpark" model would tend to reduce the frequency of traffic accidents, the financial impact on those unfortunate enough to experience them could be substantial. Those without insurance could easily sustain major losses. Those who do purchase insurance might well have to buy larger amounts of coverage since there would likely be larger numbers of uninsured drivers. So, even though the aggregate social cost of traffic accidents would likely be lower if the "ballpark" model was implemented, the redistribution of financial burdens to those risk-averse enough to purchase insurance might be viewed as undesirable by many.

An alternative to the "ballpark" model is the "Disneyland" model. In Disneyland, customers are covered by the business' liability insurance. Consequently, the management puts its own risk reducing restrictions on who may use various facilities. Customers may

be barred from some rides or attractions for being too small, too big, too frail, too pregnant, etc. Since the business is held strictly liable for any damages suffered by those entering the park, management will undertake a substantial effort to enforce its rules in order to avoid having to compensate injured parties for any harm done to visitors while in the park.

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**Enforcement of the insurance requirement would be achieved by having the insurers issue the licenses and vehicle registrations.**

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Like the "ballpark" model, the "Disneyland" model would also reduce the ambiguity concerning who will be responsible for damages. In this case, obtaining insurance would be a prerequisite of venturing out onto the roadways. Enforcement of the insurance requirement would be achieved by having the insurers issue the licenses and vehicle registrations. This differs from the current system wherein the mandatory insurance is sold by private vendors, but is enforced by the public sector. The State of Arizona does not assume liability for damages done by drivers that fail to comply with the insurance requirement. There is no significant financial consequence to the State for failure to enforce the insurance requirement. Hence, we must rely upon the bureaucracy's devotion to duty as the main motivation for enforcement of the mandatory auto insurance law. As dedicated to duty as many individual bureaucrats may be, bureaucracy itself is not noted for efficiency or effectiveness.

Meanwhile, private insurance companies have very weak incentives to guard against persons buying inadequate insurance or cancelling coverage once their vehicle obtains the desired

registration tags from the Motor Vehicle Division. Inasmuch as insurance premiums are directly related to amount of coverage and the risk of having to pay, rates will vary. Some of the worst drivers - those most likely to inflict substantial damages on others - buy only the minimum amount of coverage allowed by law. These drivers form the pool of "underinsured" risks on our roadways.

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**Keeping these high risk drivers off the roads, then, could create some hardship for them by greatly reducing their mobility.**

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The insurance industry knowingly sells these inadequate policies because the insurer's liability is capped by the low amounts of coverage provided. So, while the premiums paid by these high risk drivers are sufficient to cover the losses of the insurers, they are not sufficient to cover the full actuarial cost of the damage that is the likely result of their driving behavior. These costs will be shifted to the victims of these drivers.

In addition to buying an inadequate amount of coverage, another way of flouting the mandatory auto insurance law is to buy a policy in order to obtain the vehicle registration tags, but cancel the coverage after the tags are received. When the policy is cancelled, the insurer is required to notify the Motor Vehicle Division. On average, there will be about two weeks elapsed time between the termination of a policy and the notification of the Motor Vehicle Division. Once notified the Motor Vehicle Division sends a letter to the vehicle owner to let him know that the State is now aware that he has cancelled his insurance. If there is no response from the vehicle owner, this failure to carry insurance will be entered into a computerized database accessible

by law enforcement officers. Then, if these officers have occasion to call for information on the vehicle, the lack of insurance will be one of the pieces of information they will be given. Obviously, an individual could drive around for a considerable period with no insurance. If, during this period, there is an accident, the victim or victims will have no assurance that they will be compensated for any damages caused by this uninsured individual.

The chief advantage of the "Disneyland" model is that it would provide a much stronger incentive to keep bad drivers off the

roads. If insurers had to accept full liability for whoever they issued a license and registration to the problem of "underinsureds" would vanish. By definition, there would be no limit to the liability assumed by the insurer. The insurer would, in fact, be insuring that whatever damage was caused by one of its policy holders would be covered. Bad drivers would not have the option of buying a woefully inadequate policy. They would be forced to pay the full cost of their actuarial risk in order to obtain a driver's license and vehicle registration. The insurance company would see to this as a matter of business survival.

The chief advantage of the "Disneyland" model is also, in many people's view, its chief disadvantage. Many high risk drivers would not be able to purchase insurance. Either the price to cover the likely damages they would cause would be higher than they would be willing or able to pay, or they may be unable to find an insurer willing to sell them coverage at any price. This would effectively deny them the legal right to drive on the state's roads. Keeping these high risk drivers off the roads, then, could create some hardship for them by

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greatly reducing their mobility.

As we can see, each of the above models has its advantages and disadvantages. Either could work because the responsibility is clearly assigned. The current mandatory auto insurance law fits into neither model. The idea that users of the roads should be responsible for the damages they may cause is not a bad one! However, the enforcement of the current mandatory auto insurance law has proven troublesome. The fine for failure to carry liability insurance is only \$250 for a first offense. The amount of this fine is less than the typical six month insurance premium on most vehicles. Even then, the fine may be waived if the cited individual purchases insurance prior to his court appearance.<sup>10</sup> Many financially irresponsible drivers may choose to go without insurance when facing these cost trade-offs. So, even though the state nominally requires users to be insured, since the state is not held liable for allowing uninsured vehicles onto the roads the incentives to enforce the mandatory insurance law are weak. As a result, victims of high risk underinsured or uninsured drivers must suffer an estimated \$100 million per year (or more) in uncompensated costs.<sup>11</sup>

### Outline for Restructuring this Activity

Given the problem of a significant annual burden due to uncompensated costs that are being inflicted on victims of underinsured and uninsured drivers a coherent solution is needed. The contrasting "ballpark" and "Disneyland" models each offer a coherent solution. However, it is my opinion that the "Disneyland" model provides a solution that most people would find more satisfactory. While each model is likely to make the roads safer, the "ballpark" model does this by imposing more of the burden on the cautious drivers. The

"Disneyland" model, in contrast, would make the roads safer by removing more of the high risk drivers.

Assuming that we'd like to explore the "Disneyland" model in more detail before deciding whether to implement it, let's take a look at how it might work. Conceivably, one might assert that the same entity that issues the licenses and registrations ought to supply the insurance. This would entail the State of Arizona getting into the insurance business. While plausible on paper, government insurance schemes have not fared well in practice. The Old Age, Survivors' and Disability Insurance (i.e., Social Security) program has had repeated financial problems. Government medical insurance (i.e., Medicare and Medicaid) has seen expenses soar beyond the government's planned outlays on a regular basis. Government insured student loans have an extraordinary non-payment percentage. So, if having the State run an auto insurance program is a bad means of consolidating the insurance and licensing/registration functions, the alternative of having the insurers issue the licenses and registrations merits examination.

Having insurers issue licenses and registrations amounts to a "privatization" of this activity. Nominally, a privatization law would state that vehicle registrations and drivers' licenses would be issued by those willing and able to assume full responsibility for any damage caused by the vehicle and its driver. Normally, we would expect that this would mean that insurance companies would issue the registrations and driver's licenses. Since it would be absolutely clear who was responsible for a particular vehicle being on the road, insurers would have a strong incentive to make sure that every vehicle and driver is adequately insured. Insurers would also have a strong incentive to make sure that uninsured vehicles and drivers did not use the roadways.

To clarify financial responsibility for potential damages done on the roadways, the privatization law would state that as long as a vehicle bore the license plate of an insurer, that insurer would be held liable for any damages caused by that vehicle. It is likely that insurers would only issue plates after investigating the driving record of who they are insuring and receiving an adequate premium from the insured individual. Insurers could not escape liability by later showing that the insured lied on his application to purchase the insurance. This may seem hard on the insurers, but consider the alternative. When an insurer can bail

given the greater degree of responsibility placed on each insurer, it seems likely that steps to improve the "visibility" of license plates would be undertaken. For example the, much-tested but little deployed, "electronic license plate" would be a likely innovation under a privatized licensing system. Under this scenario, plateless vehicles would be even more conspicuous.

The dodge of buying insurance just to obtain a vehicle registration tag and then cancelling the insurance once the tags are received would become much more difficult. Since the insurer is responsible for damages done by vehicles

bearing the insurer's plates, there is a very strong incentive to require a substantial insurance payment or deposit that will only be refunded when the plates are turned back

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**Each insurer would be free to establish its own criteria for issuing policies and license plates.**

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out of a policy, this means that the victims of the erstwhile insured party are apt to be left without any recourse for ameliorating the damages they have suffered. Potential victims have no reasonable means of investigating all potential high risk drivers prior to an accident. On the other hand, insurers do have a reasonable means of conducting such an investigation prior to issuing a policy. If an insurer is not satisfied that a prospective customer is truthful or a good risk, it can refuse to issue a policy. Under the proposed privatization scheme, suspect applicants will not be able to legally use the roads until they can find an insurer willing to issue them a policy.

Since issuing an auto insurance policy and issuing license plates would be simultaneous events, those without insurance would be easier to spot on the roads. They would be operating vehicles without plates. This would be a more obvious sign of lack of insurance than is currently the case. In fact,

to the issuer. While this return-for-refund process may be less convenient than cancelling one's insurance by phone, it should virtually eliminate the problem of uninsured vehicles resulting from cancelled policies. Given the many insurance sales locations and the interconnection of these offices via computer networks, obtaining or returning plates ought to be a lot more convenient than it is to deal with the Motor Vehicle Division on these issues in the current environment.

Individuals would be free to shop for the best registration/insurance deal they could find. Each insurer would be free to establish its own criteria for issuing policies and license plates. Some insurers may opt to cover only low risk drivers. Other insurers may opt to cover high risk drivers at correspondingly higher premiums. Insurers may wish to give written and/or road tests to prospective customers. Insurers may wish to encourage or require some or all ve-

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hicles they insure to be equipped with safety-enhancing devices (for example, an ignition that can only be activated after the driver passes an automated, on-board breathalyzer test). Customers may choose to accept some limitations on their driving in exchange for reductions in premiums. Other may prefer to pay more in order to escape restrictions. In short, there is likely to be a wide variety of payment/license options available. Nevertheless, those who could not meet the minimum requirements of any insurer would not be issued vehicle plates. Insurers would have no incentive to assist individuals in "beating" the system. Vehicles without license plates would be easier for police to spot and remove from the roads.

Privatizing the issuance of licenses and registrations in this fashion would also do away with underinsured vehicles. Since the issuer of the vehicle plates would be responsible for whatever damage is caused by one of its policyholders, there would be no motive for selling low dollar coverage. The current policy of allowing "judgment proof" drivers (i.e., those who do not fear the financial consequences of the damage they may do because they are unable to pay) to buy insurance that may fall far short of compensating victims for any harm they suffer at the hands of these "judgment proof" drivers is irresponsible and, in many instances, inhumane.

### Estimate of Potential Savings

The potential savings would occur in two areas. We have already estimated that the current system causes the victims of uninsured and underinsured drivers to

be burdened by \$100 million per year in uncompensated costs. The proposed reform would shift these costs off of the innocent victims of bad driving and back onto those who cause the accidents. In one sense, this is not so much an elimination of costs as a displacement of costs. Nevertheless, as the perpetrators of damage were forced to bear a larger share of the consequences of their actions we could expect some modifications in their behavior. Insurers, in order to make a profit and stay in business, would have to do a good job of matching premiums to risk. This would motivate them to take actions that would reduce risk. A price structure that accurately reflected risk would push drivers toward safer behavior. A refusal to insure the worst risks would take many of the really dangerous drivers off the roads entirely. So, over the long run, not only would the \$100 million of uncompensated losses be

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A price structure that accurately reflected risk would push drivers toward safer behavior.

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shifted, it is also likely to be reduced in total as driving behavior improves and the worst risks are taken off the roads.

The other source of potential savings would come from eliminating functions of the Arizona Department of Transportation. Currently, the Motor Vehicle Division of ADOT is budgeted for an annual expenditure of around \$30 million.<sup>12</sup> While the costs of specific activities are not published, I estimate that about half of this outlay is the result of vehicle registration activity. Of the remaining activities (issuing driver's licenses, recording vehicle titles, collecting highway user taxes, and manning the ports-of-entry) issuing driver's licenses is probably the most expensive. So, if we privatize the

registration and driver's license functions we could probably reduce public sector spending by about \$20 million per year.

Some may argue that the \$20 million per year saving of public expenditure will be offset by an increase of private sector spending as insurers undertake the effort to issue registrations and driver's licenses. This apparent offsetting expense, though, may be exaggerated. As it now stands, auto dealers must compile all the data necessary to register newly sold vehicles. This data is then forwarded to the Motor Vehicle Division for entry on the state's database. Selling insurance and issuing registrations on the spot might actually be easier than the current process. The perception that this might be the case inspired the Linda Brock dealership to volunteer to pilot test a program wherein the dealership would issue the registration.<sup>13</sup> ADOT estimates that this "third party" registration could save up to \$1 million a year if adopted statewide. One third of the savings are in postage alone.<sup>14</sup> The law now permits the Director of the Motor Vehicle Division to authorize "third parties" to issue vehicle registrations.<sup>15</sup> The potential for "one-stop-shopping" convenience under privatization would appear substantial. One could buy a car, get it registered, and insured all at one location. The insurers and auto dealers would have an incentive to make the process as expeditious as possible. In fact, competition among insurers and dealers would help promote efficiency and convenience.

Consider a typical transaction with the current Motor Vehicle Division. It's your lunch hour. You have chosen this opportunity to take care of some business down at the Motor Vehicle Division office. Maybe you need to renew a driver's license, register a vehicle, or obtain a title. Your first task is to find the local MVD office. They're not always conveniently located. They're certainly scarcer than any other related business location you

might have need of. As your search for the MVD office drags on you pass numerous gasoline stations, a half-dozen auto parts stores, several auto insurance sales offices, and a few auto dealerships.

Finally, you locate the MVD branch office. You walk in and join the line of people waiting for service. Your advance to the head of the line is not hastened by the fact that a goodly percentage of MVD personnel have also chosen this time to take their lunch hour. When your turn finally arrives you are greeted by an employee whose occupation was ranked last in a survey of civility published by the *Wall Street Journal*. That is, on a scale of zero to ten (with zero being bad and ten being good), MVD employees have been rated 0.2. This is below ratings received for comparable customer contact employees like sales clerks (7.5), grocery check-out cashiers (7.0), gas station attendants (6.2), bank tellers (6.0), stadium ticket sellers (3.5), city bus drivers (1.6), and utility company employees (0.8).<sup>16</sup>

You think the service could be more convenient, expeditious, and courteous, but it isn't and won't be likely to get that way. The monopoly position of the state agency authorized to handle matters relating to the operation of vehicles on public roads pretty much assures that it won't. After all, it is not as if you could take your "business" elsewhere. Reducing the incidence of the above mentioned type of transactions would be another benefit of privatizing the vehicle registration and driver's license functions of the Motor Vehicle Division.

### Possible Legal, Political, and Other Obstacles

Shifting the issuance of vehicle registrations and driver's licenses to the private sector would require legislation. Any prospective legislation must overcome the normal obstacles of the legis-

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lative process. A bill privatizing registrations and driver's licenses would have to clear committees in both Houses of the Legislature, get a majority vote in each House, and be signed by the Governor. This is an arduous process that trips up many a bill.

This proposal will likely be resisted by the MVD bureaucracy. After all, if the Motor Vehicle Division is no longer needed to register motor vehicles some may well question whether it is needed at all. At the very least, MVD may be talking about a 50 percent cutback in its budget. Hundreds of people would see their public sector jobs eliminated. These prospective impacts will inspire those affected to object to the proposed reform.

We may also expect some initial opposition from the auto insurance industry. At the outset, the increased responsibility thrust upon the insurance industry will provoke uncertainty. Businesses generally do not like uncertainty. Uncertainty increases risk. New means of coping and making a profit would have to be learned. However, once the insurers understand that they will be compensated by their customers for the costs of issuing registrations and licenses they should be more receptive to the idea. The opportunity to play a more direct role in controlling the risk of the roadway environment should be perceived as a means of reducing underwriting losses over the long term. As the environment becomes safer, insurer's losses will fall (ultimately, premium rates would be expected to fall, as well, but not as rapidly as underwriting losses). This should improve profitability. Then, too, many of those currently evading the mandatory insurance law will become the reluctant customers of the insurance industry. This also should increase profitability.

The general public may be apprehensive about letting the private sector insurers decide who gets onto the roads.

As it now stands, though, private sector businesses decide who can and can't obtain credit and at what price. Obtaining a loan to buy a house or a car must pass private sector scrutiny. We have learned to live with this system. We expect the decisions to be made on rational criteria. And they are. Reflection upon how the private sector has handled this vital segment of contemporary life combined with the greater convenience of the hours kept by insurers and the assurance that responsible drivers would not have to pay high premiums to cover damage done by uninsured or underinsured drivers should help to alleviate some of the general public's apprehension.

Of course, that segment of the population that is currently flouting the mandatory insurance law or exploiting it by underinsuring their vehicles would be expected to raise quite a fuss over this reform proposal. While we should not be persuaded by the objections of those who wish to continue passing the burdens of their own actions on to others, we can envision some means of addressing their legitimate concerns.

The cast most deserving of sympathy is that of the individual whose past driving behavior has taught him a lesson. It is unfortunate for such individuals that many more proclaim to have learned lessons that actually have. Consequently, individuals with bad driving records would undoubtedly have trouble obtaining insurance and permission to use the roads. I would expect insurers to establish methods of serving this market niche. One method would be to require the vehicle of such a person to be equipped with devices that enhance the safe operation of the vehicle. We already mentioned the possibility of a "breathalyzer-ignition" link. Other options could include vehicles that could only run during daylight hours (perhaps having a solar collector connection to the engine or transmission) or ve-

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hicles whose maximum speed could not exceed a low setting (perhaps having "speed governors" placed on the engine). Insurers might see fit to require regular safety inspections of the vehicle as a condition of issuing a registration. Insurers might see fit to require regular driving tests for individuals whose driving behavior has been demonstrated to be more hazardous than normal.

It may then be feasible for some high risk, but repentant, drivers to work toward a full reinstatement of driving privileges by demonstrating meritorious performance under limited driving privileges. For others, though, the outlook will be less sanguine. There are some people who should not be behind the wheel of a car. Stopping them from driving not only helps to preserve the health and lives of others, but also may save the driving-deprived individual from killing himself. Incompetent drivers must find other means of

meeting their transportation needs. Carpooling is one obvious option. Living or working closer to the places one needs to travel is another option. Riding the bus is another, albeit inconvenient, option. Society is not obliged to bear the risk of allowing persons who cannot cover the costs of any damage they are likely to cause to drive vehicles on the roadways.

It may be preferable to try this reform in a pilot project in one county prior to full scale statewide implementation. This would enable insurers to gain some experience with the process before having to rely on it for three million vehicles registered in Arizona. The selection of a specific county should be made jointly by the insurance industry and the Arizona Department of Transportation. This will enable ADOT to better anticipate any transitional difficulties and prevent them from taking on a crisis proportion.

### Endnotes

1. *Uninsured Motorists* (All-Industry Research Advisory Council, 1200 Hanger Road, Suite 310, Oak Brook, IL 60521, 1989), p. 3.
2. Estimate provided by Charles Ramsey, Administrative Service Officer, Mandatory Insurance Section, Motor Vehicle Division, Arizona Department of Transportation, June 10, 1994.
3. *Arizona Traffic Accident Summary for 1992* (Arizona Department of Transportation, Traffic Engineering Section, Traffic Records Branch, 206 S. 17th Ave., Room 064R, Phoenix, AZ 85007), p. 22.
4. *Ibid.*, p. 5.
5. *Ibid.*
6. *Uninsured Motorists*, *op cit.*, p. 22 and 1993 *Arizona Transportation Factbook* (Arizona Department of Transportation, Transportation Planning Division, 206 S. 17th Ave., Room 300B, Phoenix, AZ 85007), p. 13.
7. *Arizona Traffic Accident Summary for 1992*, *op cit.*, pp. 4 & 6; and *Arizona Traffic Accident Summary for 1986* (Arizona Department of Transportation, Traffic Engineering Section, Traffic Records Branch, 206 S. 17th Ave., Room 064R, Phoenix, AZ 85007), p. 4.
8. In 1986 the average cost per accident was about \$7,200 (*Arizona Traffic Accident Summary for 1986*, *op cit.*, pp. 4 & 5). In 1992 the average cost per accident was about \$29,800 (*Arizona Traffic Summary for 1992*, *op cit.*, pp. 5 & 6). The ratio of these two figures (19,800/7,200 = 2.75) is \$30 million ÷ \$80 million.

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9. Using figures from Arizona Traffic Accident Summary for 1992, op cit., pp. 5 & 6: \$1,776,900,000 in accident costs, divided by 89,862 accidents, multiplied by the 3 percent probability that any one vehicle would be in an accident in a given year, yields a figure of around \$600.

10. Arizona Revised Statutes Title 28, Section 1251

11. See footnote #8 and the paragraph of text following it.

12. Arizona Department of Transportation budget summary prepared in accordance with Arizona Revised Statutes, Title 28, Section 101, p. 439

13. Mark J. Scarp, "Brock Auto Mall Tests License Plate Program," *Scottsdale Progress/Tribune* (October 15, 1993), p. A-1

14. Ibid

15. Arizona Revised Statutes, Title 28, Section 1471

16. Donald G. Smith, "Rating Occupations on a Civility Scale," *Wall Street Journal*(1986)

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Privatization  
and the Emergence  
of For-profit  
Prisons

# Privatization and the Emergence of For-Profit Prisons

COMPLIMENTS OF THE  
ALASKA STATE LIBRARY

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## Abstract

*This paper demonstrates that the for-profit prison is almost exclusively a Southern phenomenon, formed and shaped by the unique social and especially economic characteristics of that region. Unionization rates and wages of correctional employees provide a statistically significant and theoretically sound basis for privatization in the southern states. The authors conclude that, when comparing the American South to the Northeast and Mid Atlantic, states with the lowest inmate increases have privatized while states with the largest increases have not privatized.*

## Introduction

The growth of the American criminal justice system, particularly its correctional component, has been truly phenomenal in the past 20 years. In 1992, 743,984 inmates were held in state correctional institutions, and another 12,688 adjudicated state inmates were held in private prisons. With the addition of the approximately 336,000 inmates held in jails and detention facilities (*Vital Statistics in Corrections*, 1991, p. 66), and inmates in Federal institutions, the number of incarcerated individuals in the United States is well over one million.

As prison populations grow, so does the emergence of the for-profit prison. This paper is about for-profit prisons and seeks to explain the socioeconomic reasons why contemporary for-profit prisons are located, for the most part, in the American South as opposed to the Northeast and Mid-Atlantic regions.

## Private Sector Involvement

From Lilly and Knepper's perspective (1992), the private prison sector consists of three parts: (1) private prison financing and construction; (2) private prison ownership and/or management; and (3) corporations under contract with governmental units and private management firms to provide goods and services, such as lavatory units. They conclude that, "The ownership and operation of secure facilities for adults constitute, in actual numbers alone, the least significant area of private sector involvement in corrections" (p.176). When considering sheer numbers and their corollary, the expenditure of funds, this statement is probably accurate. The totality of the corrections commercial complex greatly transcends the singular effort of private sector involvement in the management and ownership of prisons. However, when one considers the growth pattern of private state facilities in relation to state inmate growth, private sector involvement no longer seems "least significant." The authors estimate from 1991 to 1992 total public sector state inmates grew by 5.4% while those in the private sector grew by nearly 41%. In other words, state private inmate populations outpaced public sector state populations by over 750%. In a recent business article for *The New York Times*, Ramirez (1994) proclaimed that, "Despite a checkered past the future is looking brighter for the private prison industry" (p. 5).

The growth and proliferation of a privatization ideal in the corrections market is embodied in the philosophy, management style, and budgetary practices of the for-profit prison. The for-profit prison is unrestrained by competitive bids, union contracts, direct government oversight, and the countless regulations unrelated to inmates to which government units must adhere. The private for-profit prison represents the quintessential ideal of the corrections commercial complex. It can tap into, acquire, and develop a market at lightning speed, while the ponderous state apparatus crawls along at a snail's pace. Philosophically, the private prison's *raison d'etre* corresponds to the contemporary popular punitive concept of incarceration. The authors agree with

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McShane and Williams (1989) as well as Lilly and Knepper (1992,1993) when they suggest that private for-profit prison interests have actually contributed to a retributive warehousing approach to correction.

As of December 31, 1992, over 80% of all privatized state inmates were held in four southern states: Kentucky, Louisiana, Tennessee and Texas (Table 1). The corporate headquarters of the three largest corrections corporations are located in the South: Corrections Corporations of America (CCA), Nashville, Tennessee; United States Corrections Corporation (USCC), Louisville, Kentucky; and Wachenhut Corrections Corporation (WCC), Coral Gables, Florida. Of the 21 corrections corporations listed in Thomas and Foard's directory (1992), 13 (62%) are located in the South and most of the others are located in far western states; those in the North are nonprofit corporations, such as Volunteers of America.

### Southern Industrial Growth and Northern Decline-Their Link to Prison Privatization

The pattern of southern industrial growth and northeastern decline is well documented in the literature of the 1970s and 1980s. We believe that the same economic forces which contributed to the "Third Wave of Corporate Migration" are also shaping the formation of for-profit prisons. Prison privatization is, in addition, facilitated by the conservative crime control philosophy and practice of the southern region. Labor intensive firms, of which private prisons are an example, will view areas of the country where unions are strong as the least desirable location for investment.

All of the southern states in our analysis (Tennessee, Texas, Louisiana) except one (Kentucky) have some form of "right to work law" in place; in contrast, no state in the Northeast or Mid-Atlantic regions has such laws. Right to work laws are the product of a long standing alliance between political and business elites (Ichniowski & Zax, 1991). Miller

and Canak (1988) document, in their quantitative analysis, the significance of opposition to unions in the American South. Business also lobbied against public sector unions by advocating legal limits on collective bargaining rights of civil servants and stiffer laws against public employees' strikes. In Miller and Canak's words, "the statistical evidence indicates rather persuasively that business influenced policy makers against collective bargaining in the public sector" (p. 275).

Virtually all prisons, whether public or private, locate in rural, economically depressed regions. Consequently, private prisons must rely on the reserve of rural labor (Wenger and Bonomo, 1993). Marginality is a key feature of the low wage labor process and is readily utilized by capital. In developed societies capital expands principally within the service sector, of which prisons are a component. All research indicates that service workers on average receive less pay and benefits and have less job security than industrial workers. Workers who move into service jobs from some other sector are much more likely to be marginalized. Based on the authors' interviews with corporate administrators in both CCA and USCC, wages in private prisons are lower than for comparable positions in state facilities, and wages in Southern facilities, as noted in the paper data, are considerably lower than those of Northeastern states.

### Privatization and Geographic Region: Method of Analysis

As noted in the above, four southern states (Kentucky, Louisiana, Tennessee, and Texas) account for 80.6% of all privatized state inmates. These states were compared to seven northeastern states (Connecticut, Delaware, Maryland, New Jersey, New York, Pennsylvania, Vermont) and the District of Columbia which comprise the member states of the Mid-Atlantic States Correctional Association. The

Table 1:  
Percentage of State Inmates Privatized by Correctional Employees Unionized or in Employee Associations (1992)

| State | % Private Inmates | Private | Public | TOTAL  | % Private | % State Corr Employee Union |
|-------|-------------------|---------|--------|--------|-----------|-----------------------------|
| KY    | 8.6               | 1,095   | 8,531  | 9,626  | 11.4      | 0                           |
| LA    | 17.8              | 2,282   | 14,576 | 16,858 | 13.4      | 10 <sup>1</sup>             |
| TN    | 11.3              | 1,438   | 9,677  | 11,115 | 12.9      | 55 <sup>2</sup>             |
| TX    | 42.8              | 5,438   | 51,214 | 56,650 | 9.5       | 0                           |

<sup>1</sup> Includes staff in both adult and juvenile facilities, represented by American Federation of State, County and Municipal Employees (AFSCME) [American Federation of Labor (AFL) - Congress of Industrial Organization (CIO)]

<sup>2</sup> Career employees are represented by the Tennessee State Employees Association and only the non-supervised employees at Brushy Mt. are represented by AFSCME (AFL-CIO).

northeastern states have no privatized state inmates in secure facilities. The central tenets in Rusche and Kirchheimer's thesis (1939) regarding the significance of economic and fiscal variables are analyzed with data derived from the American Correctional Association's (ACA) publications *Vital Statistics* (1991) and the ACA's *Directory of Adult Facilities* (1992, 1993) as well as the *Statistical Abstract of the United States* (1993). The most consistent, comparable data are available for states rather than counties and of course the Federal Bureau of Prisons system does not distinguish among regions.

If in fact these regions are distinct, significant statistical differences should manifest themselves with respect to some or all of the following social, economic, and fiscal variables: (1) unionization rates of correctional employees, (2) starting salaries of correctional officers, (3) percentage increase of state inmate populations, (4) percent change per capita debt, (5) percent increase in state revenues, and (6) percent increase in operating budget (Table 2). The two regions, Northeastern and Southern, are the explanatory X variables which are compared by an analysis of variance. The hypothesis is that there is no significant statistical difference ( $p=.05$ ) between the regions in relationship to the five criterion-dependent variables.

## Presentation of Data

(1) *Unionization rates.* Table 2, column 1, compares unionization rates between correctional employees in each region for 1991. There is a significant statistical difference between regions in correctional employees' unionization rates.

(2) *Correctional officers' starting salaries.* Column two examines the starting salaries of correctional officers as of December 31, 1990. There is a significant statistical difference between regions in correctional officers' starting salary.

(3) *Increase in state inmate population.* Column three presents growth patterns in inmate populations over a ten year period, 1983-1992. Mean imprisonment rates have grown at a much faster pace in the Mid-Atlantic region than the South: 99.3% in the former and 40.8% in the latter. These differences cannot be explained by a corresponding growth in private inmate populations in the South since the percentage of private inmates within these states ranges only between 9.5% in Texas and 13.45% in Louisiana. In other words, the percentage increase in the private sector is too low to reduce the growth rate in the South's public sector prisons (See Table 1). There is a significant statistical difference between regions in increases in state inmate populations.

Table 2:  
Relationship Between Regions and Dependent Variables

| Mid-Atlantic States (MAS)<br>$X_1$<br>South States (SS)<br>$X_2$ | % Adult Corr. Employees Unionized<br>1991<br>$Y_1$ | Starting Salary C.O.<br>12/31/90<br>$Y_2$ | % Increase State Inmate Population<br>1983-1992<br>$Y_3$ | Per Capita Debt 1983-1990<br>% Change<br>$Y_4$ | % Increase State Revenue<br>1983-1990<br>$Y_5$ | Operating Budget % Increase<br>1983-1992<br>$Y_6$ |
|------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------|----------------------------------------------------------|------------------------------------------------|------------------------------------------------|---------------------------------------------------|
| CT                                                               | 80%                                                | \$22,958                                  | 113.6%                                                   | 40.7%                                          | 43.8%                                          | 310.8%                                            |
| DC                                                               | 72%                                                | \$22,655 <sup>1</sup>                     | 138.3%                                                   | —                                              | —                                              | 146.7%                                            |
| DE                                                               | 85%                                                | \$17,702                                  | 83.8%                                                    | 17.7%                                          | 57.0%                                          | 88.0%                                             |
| MD                                                               | 66%                                                | \$20,772                                  | 65.0%                                                    | -43.8%                                         | 25.0%                                          | 165.6%                                            |
| NJ                                                               | 90%                                                | \$26,045                                  | 121.0%                                                   | 2.4%                                           | 35.7%                                          | 303.0%                                            |
| NY                                                               | 91%                                                | \$21,338                                  | 102.0%                                                   | -18.7%                                         | 24.5%                                          | 168.1%                                            |
| PA                                                               | 80%                                                | \$17,734                                  | 124.0%                                                   | -48.7%                                         | 18.0%                                          | 265.4%                                            |
| VT                                                               | 85%                                                | \$16,661                                  | 46.4%                                                    | 11.6%                                          | 46.7%                                          | 115.3%                                            |
| MAS MEAN =                                                       | 82.4%                                              | \$20,658                                  | 99.3%                                                    | -5.1%                                          | 36.0%                                          | 198.0%                                            |
| KT                                                               | 0%                                                 | \$13,668                                  | 92.3%                                                    | -43.1%                                         | 47.5%                                          | 214.1%                                            |
| LA                                                               | 10% <sup>2</sup>                                   | \$13,778                                  | 23.3%                                                    | 14.2%                                          | 11.0%                                          | 98.9%                                             |
| TN                                                               | 55%                                                | \$13,560                                  | 8.3%                                                     | -66.5%                                         | 23.4%                                          | 132.4%                                            |
| TX                                                               | 0%                                                 | \$15,576                                  | 39.2%                                                    | -75.9%                                         | 11.0%                                          | 417.8%                                            |
| SS MEAN =                                                        | 16.25% <sup>3</sup>                                | \$14,148                                  | 40.8%                                                    | -42.83%                                        | 23.2%                                          | 215.8%                                            |
| SIG. DIFF. BETWEEN MID-ATLANTIC AND SOUTH ANOVA $p =$            | .0001                                              | .0028                                     | .0166                                                    | .1248                                          | .2109                                          | .7894                                             |

<sup>1</sup>Information obtained from contact with Department of Corrections, Personnel Division.

<sup>2</sup>Include staff in both adult and juvenile facilities, Department of Corrections, represented by AFSCME.

<sup>3</sup>The 16.25% is inflated because of qualifications.