

CAN P.S. 27 TURN A PROFIT? PROVISION OF PUBLIC EDUCATION BY FOR-PROFIT SUPPLIERS

DOUGLAS J. LAMDIN*

School districts in the United States have begun to use for-profit contractors to provide management and instructional services. Studies of this phenomenon are limited because this alternative to public provision is relatively new. This article begins to fill the void by examining the conditions under which contractors can be financially viable and can improve quality. Also considered is the potential role of contractors in other policies to restructure public education. (JEL L33, I27, I28)

I. INTRODUCTION

School districts have begun to enter into contracting arrangements with for-profit firms to provide management and instruction. Numerous articles and books have been written on privatization and contracting as these practices grew in the 1980s. The peculiar characteristics of education, however, warrant special consideration. It is fair to say that education is a primary concern of local governments. The size of public education implies large financial consequences for stakeholders. Moreover, perceived school quality plays a major role in residential decisions. Also, though many services have been privatized or contracted to reduce costs, education contracting appears motivated by the objective of improved quality rather than reduced government expenditure.

This matter only recently has attracted the attention of policy analysts because neither demand-side movement by districts nor supply-side activity by contractors occurred until recently. No one was engaged in this practice, so there was nothing to study empirically. Seemingly spontaneously, contracting districts and operating contractors emerged in the early 1990s. For example, Baltimore and Hartford had contracts with a for-profit corporation, Education Alternatives, Inc. (EAI). The for-profit Edison Project now

operates schools in many states across the country.

The limited literature on education contracting falls into three categories: descriptions, preliminary evaluations, and arguments based on ideology. The most ambitious efforts to date, spanning all three categories, are Richards et al. (1996) and Ascher et al. (1996). Discussions are also provided by Hill et al. (1997) and Hill (1997). Lacking is an analytical treatment of two necessary conditions for education contracting to hold promise: the financial viability of contractors, and the likelihood of contracting to improve quality. That is the goal here: to address these two conditions. This analysis is overdue at a time when districts and contractors are entering into contracts with a limited sense of the likelihood of success and factors that affect it. At the outset it should be clear that the approach is more theoretical than empirical for a practical reason. Limited data make generalization difficult, although some studies are available (e.g., U.S. General Accounting Office [1996]).

II. THE RATIONALE FOR CONTRACTING

Calls for policies such as contracting are most likely to occur in an environment of

ABBREVIATIONS

EAI: Education Alternatives, Inc.
RFP: Request For Proposal
ROE: Return on Equity

*The author thanks the anonymous referees and the editor for their helpful comments.

Lamdin: Associate Professor, Economics Department, University of Maryland, 1000 Hilltop Circle, Baltimore, MD 21250. Phone 1-410-455-2672, Fax 1-410-455-1054, E-mail lamdin@umbc.edu

dissatisfaction with the status quo. Hanushek (1997) and others point out that although more resources have been devoted to public education, measures of achievement have not increased and may have even declined. The problems in urban districts with students from low-income families are well documented.

Survey results reported by Elam et al. (1996) are instructive. Only 21% of respondents award an A or B grade to the nation's public schools. The analogous response for nonpublic schools is 57%. The question bearing directly on the matter at hand reveals that about one-third favor privatization of the entire operation of schools.

The state of affairs described above, combined with a zeitgeist of deregulation, privatization, and decentralization at all levels of government, provides an environment for the emergence of contracting. Even in the absence of quality concerns, simply the growth in spending prompts calls for increased nonpublic provision (Baumol, 1993).

A. District Objectives

The objective of contracting is to improve efficiency. Quality improves at the same cost to the district, or quality is unchanged at lower cost. Higher quality at a higher cost may also represent improved efficiency. Whether the primary goal of the district is to improve quality or to lower expenditure affects the way it selects, monitors, and evaluates contractors. Education contracting appears motivated to improve quality without a change in expenditure, so this objective is assumed here.

B. Digression on Welfare Economics

The split in the United States between students in public and private K-12 education is roughly nine-to-one. Of the private providers, most are not-for-profit rather than for-profit organizations. Squaring this configuration with standard welfare economics assists in organizing the debate about the role of government, and in the case of K-12 education, raises questions.¹

1. This discussion draws on Hansmann (1996) and Poterba (1996). See also Gintis (1995) and Hoxby (1996a).

Neoclassical welfare economics requires a market failure to justify a government role. The first-order market failures, an externality, a public good, and natural monopoly, do not appear to be significant. Second-order market failures, namely, the principal-agent problem of parents deciding on schooling for children, or an imperfect capital market/liquidity constraint problem are sometimes invoked. The theoretical and empirical significance of neither is clear. The most compelling explanation appears to be income distribution: Education provision is an indirect way to redistribute and may reduce future income inequality. What a market failure would establish, though, is a role of government financing, not necessarily a role in provision. In light of this one can understand Hansmann's (1996, 264) conclusion that "it is not easy to offer a clear normative justification for this large public sector." The matter of provision, which at its broadest level is the matter at hand, is considered next.

Assume that government financing is justified. What is the rationale for the government to be the provider? The rationale in Brown (1992) is based on contracting/principal-agent problems due to asymmetric information and opportunism. In a comparison of for-profit and not-for-profit providers, the inability of students/parents to judge product quality (i.e., a trust good), and opportunistic behavior by for-profit firms, leads Brown to conclude that for-profit providers are not viable. Brown states that public provision is the least costly solution to the required monitoring of inputs (inputs being monitored because of the difficulty in measuring outputs). The (small) role of not-for-profits is explained as satisfying those with a demand for a religious component to education.

Brown's explanation can be questioned. He views for-profit organizations as separate from public schools, not potentially part of a contractual relationship with them. The asymmetric information problem may be overstated because as Hansmann (1996, 263) comments: "The content and methods of primary and secondary education are not so esoteric as to be beyond many parents' ability to evaluate. Moreover, schools develop substantial reputations over time." Even if Hansmann is incorrect, the assertion that the nondistribution constraint causes not-for-profits to dominate for-profit providers when

a trust good is at issue has proved difficult to document (Weisbrod, 1989). Except for tax liability, not-for-profits and for-profits may be more similar than dissimilar (Brody, 1996). Though Brown pays limited attention to inefficiencies in public provision, Gintis (1995, 502) states bluntly: "There is no historical experience indicating that government has a comparative advantage in the production of goods and services."

Welfare economics is a valuable tool to frame discussions. Actual policies, however, often bear little resemblance to economists' prescriptions. Procrustean efforts to explain U.S. K-12 education using welfare economics (i.e., normative analysis becomes positive theory) are misguided. The wide variation in private provision across industrial nations, with the United States below the average (James, 1993), suggests that institutional factors dominate. Two constitutional matters may explain U.S. K-12 provision. One is that each state's constitution mandates a responsibility for provision of public education. As such, private providers must compete with "free" public education. The second is that the bulk of the private providers are religion-affiliated, and interpretation of the federal constitution limits their access to public funding.

Education policy debates are intriguing in that the welfare analytic approach is turned on its head. Government provision is the starting point, and proponents of market-oriented policies try to justify competitive provision as an intervention.

III. LESSONS FROM ECONOMICS AND FINANCE

For-profit firms must earn a satisfactory return to continue operations. Firms that contract to provide educational services need only a limited capital investment if the physical plant is provided. The small initial investment implies limited barriers to entry. It follows that potential suppliers are numerous if profits are available. Competitive bidding in response to a request for proposals by a district should result in normal profits. Note that the nature of the competition for the duration of a given contract is *ex ante*—it occurs at the level of the proposal submission. This differs from the ongoing competition envisioned by proponents of market-oriented reform policies discussed later.

With competitive bidding, the issue is not whether profits may be excessive, but whether they are sufficient to ensure the viability of firms given constraints imposed by the district. A financial model can address this. Annual profit (π), is contract revenue (R), less all costs (C) of operation of the schools (which could encompass central administration costs), less depreciation of assets and corporate-based operating costs (C'), less taxes (T). That is, $\pi = R - C - C' - T$. Because the opportunity cost of the equity investment is not included as a cost, π is accounting rather than economic profit (why will soon be clear). Assets (A) are financed with equity (E) and debt (D). The balance sheet identity requires that $A = E + D$. The assets include corporate-based assets and assets placed in the schools. The profitability measure of interest is the owners' return on equity (ROE), π/E .

The ROE is the product of three terms: the profit margin (π/R), the ratio of revenue to assets (R/A), and the ratio of assets to the owners' equity (A/E). This is the Du Pont "decomposition" identity that finance textbooks show. The simulations below illustrate that the likelihood of financial viability turns on whether R/A is sufficiently large given that constraints on the contractor may cause the profit margin to be small. The use of debt and thus (A/E) does not strongly affect ROE in the model. The depressing effect of debt on profit (and ROE) through interest expense is roughly offset by the beneficial effect of debt on A/E (and ROE).

A. Cost Savings as the Source of Profits

If a firm receives revenue equal to what the district would have spent, then cost savings are the source of profits. Personnel costs are by far the largest component of operating expenditure. For U.S. public schools, salaries and benefits associated with instruction account for 63% of operating expenditure. Salaries and benefits associated with school and general administration, and operation and maintenance are 12%. Most of the remaining costs are for instructional material, transportation, and food services (U.S. Department of Education, 1995, 155). Other costs, such as electricity and supplies, are difficult to reduce substantially. Some combination of reduced staff, salaries and benefits, or

a substitution of lower for higher paid staff appears necessary to yield a sufficient return.

It is important to examine the feasibility of the cost savings ($R - C$) necessary to generate a sufficient return. The required cost savings under various assumptions are shown with simulations designed to represent long-run equilibrium conditions that hold over time. Such simulations are an important supplement to the financial data from the early experiments that are unlikely to be informative for reasons such as the idiosyncratic nature of the contracts, and the possibility of suppliers entering into unprofitable contracts to obtain a foothold in the industry. It should be noted that thus far negative profits are the industry norm.

Three values of the unlevered (i.e., $D = 0$) ROE in the simulations are 10%, 15%, and 20%. These provide a wide range around the median annual return on equity of 13% for the *Fortune* 500 firms.² There is uncertainty regarding plausible R/A values because existing firms cannot be presumed to be in an equilibrium configuration. Therefore a wide range of values are used that, to date, appear reasonable: one, five, and ten. EAI had a value of R/A of roughly one, while it had the Baltimore contract for about 5% of Baltimore students. If the contract for Hartford had not fallen through, the ratio would have risen to five. However, well over half of these assets were marketable securities (e.g., government bonds) unrelated to the core business. Thus, a more representative R/A is larger. The Edison Project as of fall 2000 had an R/A of about one, but a bit over two if cash and accounts receivable are not counted. The borrowing rate (r) is assumed to be 8%, and the corporate tax rate (τ) is set at 35%. Debt-to-asset ratios of zero and one-half are used.³ For the firms in question, like most new firms, the bulk of financing is equity, so D/A will be close to zero. The costs of operating the corporation (i.e., "headquarters" rather than school-based operating costs) and the depreciation of assets are assumed to be 20% of assets. This is, at best, a reasonable estimate.

2. *Fortune*, May 15, 1995, F-25.

3. ROE is assumed to rise with the use of debt (leverage) in accordance with the familiar Modigliani-Miller proposition: $ROE_L = ROE_U + (ROE_U - r)(1 - \tau)(D/E)$. ROE_L and ROE_U are the levered and unlevered ROE.

TABLE 1

The Percent Cost Savings Required if the Contractor Receives the District Operating Expenditure and Earns the Required Return on Equity (ROE)

	R/A	ROE		
		0.10	0.15	0.20
$D/A = 0$	1	35.4	43.1	50.8
	5	7.1	8.6	10.1
	10	3.5	4.3	5.1
		0.113	0.1955	0.278
$D/A = 0.5$	1	32.7	39.0	45.4
	5	6.5	7.8	9.1
	10	3.3	3.9	4.5

Notes: The numbers in the table are calculated as follows (terms are defined in the text):

$$\pi = [R - \alpha R - r(D/A)(A/R)R - \gamma A](1 - \tau).$$

$$E = [1 - (D/A)](A/R)R.$$

In all calculations $\tau = 0.35$ and $\gamma = 0.2$.

π/E is set equal to ROE. This is solved for α , and $1 - \alpha$ is shown in the table in percent.

The uncertainty regarding this figure is not worrisome because the conclusions are not particularly sensitive to this value (e.g., if doubled to 40%).

Table 1 shows the necessary reduction in expenditure on inputs to extract a profit consistent with the required ROE if the contractor receives revenue equal to what the district would spend. The largest required savings are about 50% (if $D/A = 0$, $R/A = 1$, $ROE = 20\%$). The smallest savings are 3.3% (if $D/A = 0.5$, $R/A = 10$, $ROE = 11.3\%$). The value of R/A has a powerful influence on the required savings. When R/A is five or ten, required savings are generally no greater than 10%. Savings of this magnitude, at first glance, appear plausible. When R/A is only one, the required cost savings (more than 30%) are far less plausible. Thus, the potential viability of for-profit contractors will turn, to great extent, on whether the contractor's revenue is a large enough multiple of its investment in assets.⁴

4. If the assumed value of depreciation and corporate-based costs is doubled to 40% of assets, the Table 1 values of 35.4%, 7.1%, and 3.5% become 55.4%, 11.1%, and 5.5%.

B. How Large Are Potential Cost Savings?

To assess the values in Table 1, it is necessary to evaluate the magnitude of potential cost savings. Two ways to estimate potential cost savings are: a comparison of public schools with private schools, and a comparison of public schools. The latter is preferred for reasons discussed below.

It is common to see comparisons of private and public school costs, usually in the context of comparing achievement differences. Private schools, on average, are almost invariably shown to be less costly. Public school teachers are paid 50% more than private school teachers (U.S. Department of Education, 1995, 82). Tuition data provide a convenient estimate of the cost of operating a private (not-for-profit) school. Recent average tuition figures are \$2,138 for elementary schools, \$4,578 for secondary schools, \$4,266 for combined schools, and an overall average of \$3,116 (U.S. Department of Education, 1995, 72). The figure of \$3,116 is 38% lower than the average expenditure per public school pupil of \$5,000 for all districts with 20,000 or more students (U.S. Department of Education, 1995, 98). In sum, these data suggest the potential for cost savings.

There are reasons to be circumspect about private and public cost comparisons (Levin, 1991). One is that differences in the service mix can increase the relative cost of public schools. Also, tuition may not include costs that are included in public costs, such as textbooks and supplies, transportation, and fees for specialized services. Tuition also underestimates cost insofar as contributions and endowments are used to reduce tuition. Hoxby (1996b) reports that 56% of Catholic elementary school income and 19% of secondary school income comes from these sources. This said, even if one corrected for this, there is a more important reason to eschew private-public comparisons. The contracting arrangements envisioned may not permit the contractor to make unconstrained input choices to the extent that private schools do. The cost environment facing a contracted school or district may be more like another public school or district, so public-public comparisons are more useful.

Table 2 shows expenditure per pupil and expenditure on only instruction for a sample of reasonably similar large urban school

TABLE 2

School District Current Expenditures Per Pupil: Total and Instruction Only (1992-93)

District	Total Expenditure	Instruction Only
Albuquerque	\$3,821 [-24]	\$2,185 [-27]
Baltimore	4,709 [-6]	2,923 [-2]
Buffalo	7,336 [47]	4,636 [55]
Cleveland	6,517 [30]	3,652 [22]
Dallas	4,072 [-19]	2,372 [-21]
Hartford	8,847 [77]	5,783 [93]
Houston	3,980 [-20]	2,272 [-24]
Memphis	3,964 [-21]	2,614 [-12]
Milwaukee	6,804 [36]	4,168 [34]
Philadelphia	6,326 [26]	3,819 [28]
Pittsburgh	8,473 [69]	4,664 [56]
St. Louis	6,648 [33]	3,487 [17]
Washington, DC	8,408 [68]	4,072 [36]
All districts with 20,000 + students	\$5,004	\$2,989

Source: U.S. Department of Education (1995), 98-102.

Note: Shown in brackets are the percent each differs from all districts.

districts. Shown also are these same statistics averaged over all districts with 20,000 or more students. These figures could be further conditioned on factors that affect cost (e.g., see Parrish et al. [1995]), however, the picture that emerges would not change substantially. Suggestive estimates of potential cost savings can be calculated for each district by taking the districtwide average as the lower bound on expenditure. For example, Washington, D.C., spends 36% more than the average district on instruction. The similar calculation for total expenditure is 68%. For Hartford these values are 93% and 77%. These calculations show that, *in principle*, some districts have far more than the requisite potential to reduce costs (i.e., by the amounts in Table 1), but others may not.

The financial simulations and data in Table 2 suggest plausible cost savings consistent with viable contracting. However, if the contractor is constrained to use the existing staff, with the same class size, at the same salaries, even cost savings in the single digits may be difficult to extract. Recall that it is assumed that the district will not pay a contractor more than what the district would have spent. If the district increases expenditure concurrent with

contracting, then smaller cost savings are necessary. Also, the scope of the contract may include central administration, maintenance, food service, and transportation. Cost savings in these can make those in instruction less imperative.

Both the contractors and districts must recognize the likelihood of successful strategies to reduce cost and contract (or not) accordingly. Districts may find contracting attractive, but the necessary decisions surrounding cost savings are likely to create turmoil. To receive financially realistic bids, districts must make clear the extent to which concessions in labor agreements are available to contractors. Clearly teachers' unions have and will play an important role in contracting policies. Stone (2000) reports that unions raise the total cost of instruction by 8–15%.

In sum, the necessary condition of financial viability of contracting will be met under the following condition: The ratio of revenue to assets is large enough so that the reduction in school input expenditures are reasonable given constraints on the contractor and on the district's payment. The simulations and data that bear on cost savings do not appear inconsistent with potential financial viability.

C. Not-for-Profit Contractors

In addition to for-profit providers, contractors could include not-for-profit providers, such as universities, foundations, community organizations, and teachers' associations. The not-for-profit contractor has two obvious financial advantages and one that is not so obvious. The not-for-profit does not pay taxes and need not provide a return on investment to shareholders, so cost-reducing measures for the for-profit are not imperative for the not-for-profit contractor.

What may not be obvious is that a not-for-profit may have volunteer labor available and may be able to attract cash or in-kind donations that a for-profit might not. Therefore, the not-for-profit values of C and C' may be lower than the for-profit values. Without the cost-reducing incentives of the profit motive, however, some not-for-profits may have higher values of C and C' than for-profits. Studies from the health economics literature that compare for-profit and not-for-profit hospitals and nursing homes, such as those cited by Follard et al. (1993),

find some (but not unequivocal) evidence that for-profits have lower costs than not-for-profits. Because of the nature of competitive bidding procedures, the $C + C'$ value of not-for-profits and the value of $C + C' + T + \pi$ of for-profits would be important in determining the mix of for-profit and not-for-profit contractors. Should contracting take hold, the mix between for-profit and not-for-profit provision is difficult to predict. The focus to date on for-profit contractors may reflect the sluggish response of not-for-profits because of both the lack of incentives for entrepreneurs in the not-for-profit sector, and less access to equity capital (Hansmann, 1996).

IV. MIGHT CONTRACTING IMPROVE QUALITY?

The focus thus far has been on the necessary condition of financial viability. A second necessary condition is quality improvement. In light of earlier comments, contractors are not envisioned to be selected on the basis of lowest cost, but rather on the basis of their expected ability to meet quality goals. Existing experience is insufficient to determine the impact of contracting on quality. However, the *potential* for contracting to increase quality can be examined in light of the large literature on school performance. Three relevant strands of this literature, which at times overlap, are considered: (1) the production function literature that relates school resources to outcomes, (2) the program evaluation literature on curricula and instructional methods, and (3) the role of incentives. All three suggest the potential, though no guarantee, that contracting can improve quality.

A. Production Functions

Hanushek's studies (e.g., 1997) of "production function" relationships between achievement measures and school resources tell us that we are not certain that variations in input measures (e.g., teacher-pupil ratio, teacher salary, and expenditure per pupil) affect outcomes. How this bears on whether contracting can improve quality can be viewed in two opposing ways. A pessimistic view is that because researchers cannot confidently identify beneficial inputs, there is no reason to expect that contractors can. An optimistic view is that these counterintuitive results indicate inefficiencies in schools.

Contracting may be able to rectify these inefficiencies. This is true if the inefficiencies stem mainly from a lack of incentives to use inputs efficiently. In sum, this literature does not rule out the potential for quality improvement.

B. Program Evaluations

The results of the production function literature can be erroneously interpreted as implying that there is no evidence of performance-enhancing strategies. To the contrary, the evaluation of curricula and instructional methods reveal that some are more successful than others. For example, three models appear to improve outcomes: the School Development Program, Accelerated Schools, and Success for All. In Barnett's (1996) examination of these programs he makes two points important to this discussion. One is that the programs do not require large increases in expenditures. The second concerns the conundrum of effective programs that are not adopted. Barnett attributes this to there being no incentive to adopt successful programs. Contracting provides an incentive to adopt effective programs because the contractor's success in getting a contract, its payment (or level), and renewal can be contingent on sufficient quality improvement. All three programs are also examined in King (1994). Further data on the cost of these and other programs is warranted. Education policy analysis focuses on outcomes far more than cost; subsequently, cost-effectiveness is rarely considered. Cost-effectiveness, essentially, is the crux of the matter at hand.

A variant on the evaluation literature compares public with private (often Catholic) schools. Several studies report superior performance of private schools, but these findings have been much debated. A wave of new studies considers selection bias and focuses more on graduation rates and continuation into postsecondary education rather than on test scores. Evans and Schwab (1995) and Neal (1997) report superior performance of Catholic schools in comparison to public schools. These analysts cannot confidently identify the reason for the difference, though one explanation is that they must continue to attract students to remain viable and therefore have the incentive to do well by

them. Also, Toma (1996) finds that for the five countries she studied, privately provided schools are generally superior to public counterparts regardless of the funding source.

C. The Role of Incentives

That the current method of public education provision does not provide incentives to induce efficiency has been stated many times. For example, Hanushek et al. (1992, 232) comment, "there appear to be no incentives within the current U.S. structure for systems to adopt either cost-saving or productivity-enhancing innovation." Levin (1994, 173) states that schools do not meet these conditions for efficient school organization: "(1) a clear objective function with measurable outcomes, (2) incentives that are linked to success on the objective function, (3) efficient access to useful information for decisions, (4) adaptability to meet changing conditions, and (5) use of the most productive technology consistent with cost constraints." Chubb and Moe view incentive problems as endemic to public education (1990, 184): "But the fact remains, institutions of democratic control work systematically and powerfully to discourage school autonomy and, in turn, school effectiveness. If public schools are ever to become substantially more effective, the institutions that control them must first be changed."

What these observations imply is that incentives are lacking in public education, and thus the potential for contracting arrangements to create or expand incentives and increase accountability exists. Properly structured contracting could provide the rewards and sanctions to induce improvements. It is difficult to disagree with the statement that the "right incentives" can improve quality. What needs further examination is the matter of placing the incentives where they need to be. Implicit in arguments for contracting is the belief that it will correct the incentive problems at the source (the district superintendent perhaps) or that the incentives of contracting will be contagious to all levels (perhaps principals and teachers). Missing incentives are a problem, but even if found, they may not be simple to correct. It may be that that the district has no incentive to and does not hire the most qualified

teachers (Ballou, 1996). If the contractor has limited control of hiring policies, even if the contractor faces the correct incentives, it may be unable to hire better teachers and improve quality. On the other hand, if the problem is the curriculum and instructional method rather than the quality of teachers, a contractor with the ability to change these has the incentive to seek out and adopt what appears to be successful.

Earlier, financial viability was examined for a known payment by the district to the contractor that was not contingent on performance objectives. This not only simplified the analysis but is consistent with experience to date. The implicit or explicit incentive to achieve objectives is that contract renewal is contingent on performance. If the contract specifies that the level of payment is contingent on performance, then *ex ante*, neither the contractor nor the district knows the contract value (although analyses can be conducted in terms of expected values). In principle, performance-contingent contracts create stronger incentives, however, the financial uncertainty this creates for both parties, in addition to increased contract complexity, must be weighed against the benefits of heightened incentives.

The necessary conditions of potential for financial viability and quality improvement both appear to hold, however, these are not sufficient. Appropriate implementation must follow. Implementation subsumes: the request for proposals (RFPs) and contractor selection, the contract, and monitoring and evaluation. These are not discussed here, but are discussed in McLaughlin and Norman (1995), and Hill et al. (1997). "How-to" publications such as that of the National School Boards Association (1995) can reduce implementation problems.

V. OTHER RESTRUCTURING MECHANISMS

To fully understand the potential role of contracting, it is useful to place contracting in the context of competing restructuring mechanisms: vouchers, charter schools, and public school choice initiatives. These are discussed more fully in Lamdin and Mintrom (1997). The common theme among these alternatives is to infuse public education with responsiveness and greater efficiency

through increased competition. Decentralized, school-based management is another common theme.

Vouchers and contracting are not mutually exclusive. In a voucher plan, the public schools continue to be provided directly by the district, but must compete alongside a variety of private schools that students can attend at a lower tuition (perhaps zero) than before. Under a voucher system, entry of new private schools is expected. These new entrants could be some of the same operations that could contract with school districts, but under a voucher system, except for regulatory constraints, they are autonomous from the district. This is therefore not contracting as defined here. In a sense, however, a voucher plan is contracting on an individual basis. Public schools could compete, however, by offering contracted schools as an alternative. Thus, under a voucher system, contracting as described here would have a role, although it is difficult to predict what form it would take.

Charter schools are a recent innovation in restructuring. More than half of the states have passed charter schools legislation, and hundreds of charter schools are in operation (Hassel, 1999). Charter schools are operated by an organization, such as a teachers' group, a university, a community organization. The schools are publicly financed but are free from many of the regulations that govern "regular" public schools. As with vouchers, the funding follows the student. In addition to helping achieve the objective of making school decisions less centralized, charter schools have the incentive to succeed because they must attract and retain students.

Contracting is a potential force in the charter school movement, either directly or indirectly, through an intermediary. In many ways, the charter proposal presented to a school district or state would be similar to a contractor's response to an RFP. It is important to recognize that charter schools are a disguised form of contracting. Furthermore, the extent of oversight of charter schools can be more limited than it would be with a contracting arrangement. Curiously, charter schools have generally been subject to less rancorous debate than contracted schools. Perhaps this is because contracting has focused on for-profit corporations, and charter schools have not; charter schools have

not had the “making money” stigma. Charter schools can be viewed not only as disguised contracting but also as a supply-side equivalent of (demand-side) vouchers because the funding follows the student.

Two points should be made regarding vouchers and charter schools as compared to contracting arrangements. To their advantage, the for-profit charter schools would likely face fewer constraints to enact cost-reducing strategies. If the voucher amount or charter school reimbursement rate is set equal to the current per-pupil expenditure, then it appears that for-profit schools could be viable. A major difference is that in voucher and charter arrangements, the for-profit firms would likely not use buildings and equipment at essentially zero cost. The for-profit schools would need to make investments in assets (i.e., the building, equipment, and so on), or lease these assets. In either situation, the increase in investment, or the increase in the cost of operation (lease payments), works against financial viability.

Another major difference between these two alternatives and contracting is the nature of the “competition” among schools. Unlike the *ex ante* competition for a contract, vouchers and charter schools entail ongoing competition for students. Vouchers and charter schools represent more of the type of competition envisioned by proponents of infusing public education with competition than is the competition that contracting creates.

A third alternative is choice among public schools. The standard model in public education matches students with schools by location. With public school choice, students choose among public schools within their district or perhaps their state. There must be differentiation among schools or the choice is illusory. For this reason, specialized schools, often labeled magnet schools, are a part of this restructuring. One method by which districts could create differentiation is through contracted schools. There is little evidence at the moment, however, of using contracting and public school choice in tandem.

VI. DISCUSSION

The public financing and provision of primary and secondary education in the United States is practically a given. The onus is on proponents of contracting to demonstrate

that movement away from public provision is desirable. The analysis here suggests that contracting can be financially viable and has the potential to improve quality. In actual implementation, however, both have yet to be witnessed over a sustained period.

Theory and evidence suggest that contracting is more likely if the service is easily specified and measurable, its quality can be monitored, and the government is willing to reduce some control of provision for the potential improvement of provision (Ferris and Graddy, 1986). In the case of education, these circumstances are not as apparent as they are for other services. In the absence of a willingness of districts to reduce their oversight and evidence of successful contracting arrangements, slow rather than rapid diffusion of contracting is to be expected. Also, the opposition to contracting, most notably by teachers' unions, is unlikely to diminish.

The future of education contracting is difficult to assess. Thus far it has been implemented only on a limited basis. Because experiments take years to fully implement and evaluate and more such experiments are necessary to make confident general assessments, the ultimate success or failure of contracting will not be resolved soon. Hanushek (1990) sets forth a triumvirate of: disciplinary research, policy research, and policy analysis. At this point, with the matter at hand in its infancy, all three warrant attention. Policy analysis (evaluation of experiments) will likely generate the most attention. However, the quality of the antecedent analysis designed to enhance the likelihood of the experiments being successful—disciplinary and policy research—clearly need further development.

If contracting does become common, the potential size of the education contracting industry is large. Using the annual revenue receipts of school districts and the revenue of the firms in the *Fortune* 500 (they are ranked by annual revenue), a contractor with the New York City district would be ranked 156. Similarly, a contractor with the Los Angeles district would be 333, and with Chicago would be 461.⁵

5. Data are from the U.S. Department of Education (1995, 98-102 and 158) and *Fortune*, May 15, 1995, F1-F19.

Of many themes to consider as education contracting unfolds, politics, experimentation, and the organizational form of providers warrant particular attention. Politicians, school boards, administrators, teachers, unions, parents, and others surely desire to improve the quality of public education. However, they also have individual interests that are in conflict with this goal. The way these conflicts play out in the political arena will influence the form and scope of contracting. Second, experiments in education restructuring, such as contracting, coupled with careful evaluation of the experiments and dissemination of the findings, are crucial to our understanding. Policy makers and contractors will learn from the experiments. The ultimate success or failure of contracting will, in large part, depend on this learning. Finally, the dominant organizational form of the contractors is uncertain. The future mix of for-profit and not-for-profit contractors existing along with traditional public schools may be far different both over time and across the United States than it is now.

REFERENCES

- Ascher, C., N. Fruchter, and R. Berne. *Hard Lessons: Public Schools and Privatization*. New York: Twentieth Century Fund Press, 1996.
- Ballou, D. "Do Public Schools Hire the Best Applicants?" *Quarterly Journal of Economics*, 111(1), 1996, 97-133.
- Barnett W. S. "Economics of School Reform: Three Promising Models," in *Holding Schools Accountable: Performance-Based Reform in Education*, edited by H. Ladd. Washington, DC: Brookings Institution, 1996, 299-326.
- Baumol, W. J. "Health Care, Education and the Cost Disease: A Looming Crisis for Public Choice." *Public Choice*, 77(1), 1993, 17-28.
- Brody, E. "Agents without Principals: The Economic Convergence of the Nonprofit and For-Profit Organizational Forms." *New York Law School Law Review*, 40(3), 1996, 457-536.
- Brown, B. W. "Why Governments Run Schools." *Economics of Education Review*, 11(4), 1992, 287-300.
- Chubb, J. E., and T. M. Moe. *Politics, Markets, and America's Schools*. Washington, DC: Brookings Institution, 1990.
- Elam, S. M., L. C. Rose, and A. M. Gallup. "The 28th Annual Phi Delta Kappan/Gallup Poll of the Public's Attitudes toward the Public Schools." *Phi Delta Kappan*, 78(1), 1996, 41-59.
- Evans, W. N., and R. M. Schwab. "Finishing High School and Starting College: Do Catholic Schools Make a Difference?" *Quarterly Journal of Economics*, 110(3), 1995, 941-74.
- Ferris, J., and E. Graddy. "Contracting Out: For What? With Whom?" *Public Administration Review*, 26(4), 1986, 332-44.
- Follard, S., A. C. Goodman, and M. Stano. *The Economics of Health and Health Care*. New York: Macmillan, 1993.
- Gintis, H. "The Political Economy of School Choice." *Teachers College Record*, 96(3), 1995, 492-511.
- Hansmann, H. "The Changing Roles of Public, Private, and Nonprofit Enterprise in Education, Health Care, and Other Human Services," in *Individual and Social Responsibility: Education, Medical Care, and Long-Term Care in America*, edited by V. R. Fuchs. Chicago: University of Chicago Press, 1996, 245-71.
- Hanushek, E. A. "The Policy Research Markets." *Journal of Policy Analysis and Management*, 9(2), 1990, 146-54.
- . "Assessing the Effects of School Resources on Student Performance: An Update." *Educational Evaluation and Policy Analysis*, 19(2), 1997, 141-64.
- Hanushek, E. A., S. G. Rivkin, and D. T. Jamison. "Improving Educational Outcomes while Controlling Costs." *Carnegie-Rochester Conference Series on Public Policy*, 37, 1992, 205-38.
- Hassel, B. C. *The Charter School Challenge*. Washington, DC: Brookings Institution, 1999.
- Hill, P. T. "Contracting in Public Education," in *New Schools for a New Century*, edited by D. Ravitch and J. P. Viteritti. New Haven, CT: Yale University Press, 1997, 61-85.
- Hill, P. T., L. C. Pierce, and J. W. Guthrie. *Reinventing Public Education: How Contracting Can Transform America's Schools*. Chicago: University of Chicago Press, 1997.
- Hoxby, C. M. "Are Efficiency and Equity in School Finance Substitutes or Complements?" *Journal of Economic Perspectives*, 10(4), 1996a, 51-72.
- . "The Effects of Private School Vouchers on Schools and Students," in *Holding Schools Accountable: Performance-Based Reform in Education*, edited by H. Ladd. Washington, DC: Brookings Institution, 1996b, 177-208.
- James, E. "Why Do Different Countries Choose a Different Public-Private Mix of Educational Services?" *Journal of Human Resources*, 28(3), 1993, 571-92.
- King, J. A. "Meeting the Needs of At-Risk Students: A Cost Analysis of Three Models." *Educational Evaluation and Policy Analysis*, 16(1), 1994, 1-19.
- Lamdin, D. J., and M. Mintrom. "School Choice in Theory and Practice: Taking Stock and Looking Ahead." *Education Economics*, 5(3), 1997, 211-44.
- Levin, H. M. "The Economics of Educational Choice." *Economics of Education Review*, 10(2), 1991, 137-58.
- . "The Necessary and Sufficient Conditions for Achieving Educational Equity," in *Outcome Equity in Education*, edited by R. Berne and L. O. Picus. Thousand Oaks, CA: Corwin Press, 1994, 167-90.
- McLaughlin, J. M., and M. M. Norman. "Responsibility 101." *American School Board Journal*, 182(2), 1995, 28-30.
- National School Boards Association. *Guidelines for Contracting with Private Providers for Educational Services*. Alexandria, VA: National School Boards Association, 1995.

- Neal, D. "The Effects of Catholic Secondary Schooling on Educational Achievement." *Journal of Labor Economics*, 15(1), 1997, 98–123.
- Parrish, T. B., C. S. Matsumoto, and W. J. Fowler Jr. *Disparities in Public School District Spending 1989–90: A Multivariate, Student-Weighted Analysis, Adjusted for Differences in Geographic Cost of Living and Student Need*. Washington, DC: U.S. Department of Education, 1995.
- Poterba, J. M. "Government Intervention in the Markets for Education and Health Care: How and Why?," in *Individual and Social Responsibility: Child Care, Education, Medical Care, and Long-Term Care in America*, edited by V. R. Fuchs. Chicago: University of Chicago Press, 1996, 277–304.
- Richards, C. E., R. Shore, and M. B. Sawicky. *Risky Business: Private Management of Public Schools*. Washington, DC: Economic Policy Institute, 1996.
- Stone, J. A. "Collective Bargaining and Public Schools," in *Conflicting Missions? Teachers Unions and Educational Reform*, edited by T. Loveless. Washington, DC: Brookings Institution, 2000, 47–68.
- Toma, E. F. "Public Funding and Private Schooling across Countries." *Journal of Law and Economics*, 34(1), 1996, 121–48.
- U.S. Department of Education. *Digest of Education Statistics*. Washington, DC: U.S. Department of Education, 1995.
- U.S. General Accounting Office. *Private Management of Public Schools: Early Experiences in Four School Districts*. Washington, DC: U.S. General Accounting Office, 1995.
- Weisbrod, B. A. "Rewarding Performance that Is Hard to Measure: The Private Nonprofit Sector." *Science*, 244(4904), 1989, 541–46.