Does Dual Leadership Promote Risky Decisions?

In the shadow of the financial crisis, public officials have begun to identify its causes, both direct and indirect, and generate new regulations to prevent similar future catastrophes. One of the ideas discussed, and in some places enacted, is the separation of the CEO role from that of Chairman of the Board—prohibiting both positions being held by the same person. Advocates believe that this restriction will temper an executive’s power to make very risky unilateral decisions for a firm, and thereby decrease the chance that those gambles will fail, bankrupt the firm, and endanger the economy.

In PERC Working Paper #1006, PERC Research Fellow D. Scott Lee along with coauthors John Byrd, Donald R. Fraser, and Semih Tartaroglu explore whether this restriction enhances or degrades a firm’s viability. Instead of concentrating on data from the recent events, they analyze the outcomes of the thrift crisis of the 1980s. They compare the Savings and Loans that failed to those that did not and explore the complicity of the organization of the firms’ leadership, namely, whether those firms with only one executive in the two roles (unitary) were more likely to fail than those with two (dual).

Previous research on the topic presents contradictory results but suffers from endogeneity problems. They do agree, however, that splitting the roles does not increase a firm’s costs. To investigate the effects, economists have typically used financial data such as accounting reports or stock return performance and have focused on nonfinancial firms operating in favorable or neutral economies. They also relied on the problematic assumption that a firm’s shareholders bear the firm’s residual risk.

The prevailing research indicates that ownership structure can have a significant impact on a firm’s proclivity to take risks; the more influence shareholder’s wield, the more likely the firm will take risks. Subsequent research has found that this effect is especially pronounced in thrifts; the higher degree of leverage is given as an explanation.

During the thrift crisis, almost 1,000 thrifts failed, costing the government $100 billion. Because the cause of the crisis was an exogenous shock, this crisis escapes the endogeneity problems that plague other similar research. Additionally, the thrift industry was a relatively unregulated environment wherein the deposit insurance subsidy provided motivation for and protection from further risk.

In a departure from previous research on the topic, instead of analyzing accounting or stock return performance of nonfinancial firms, Lee, et al. look only at whether the leadership structure promoted firm failure. They decided to do so because they are primarily interested in whether it is wise for legislators to enact such regulations, assuming legislators to be concerned only with whether potential legislation is good for the public, i.e. will it necessitate future government intervention?

Though thrifts had historically been based on long-term fixed-rate home loans funded with short-term deposits, the increase in interest rates caused by Federal Reserve actions impaired that model and effected deregulatory measures, both nationally and in many states. This paper tracks the thrifts from the deregulation activities until the resolution of the thrift crisis in the late 80s/early 90s characterized by the thrifts’ reregulation.

Knowing the leadership structure of a firm almost requires the firm be publicly traded, as they are obligated to report such information. Unfortunately for this study, most operating thrifts were not publicly traded. They use a list of 165 thrifts compiled by previous researchers; they exclude 35 thrifts that were not operating in the 1980s. Of the 130 remaining thrifts, 46 failed, as defined below. Of the 84 firms that did not fail, 39 were acquired by other firms. Review of press reports and records of government assistance suggest
that these 39 were financially healthy when acquired.

Taking the 46 failed firms as one group for logistic analysis and the 84 as another, the authors find that the probability of failure increases with size of the firm, decreases with the ratio of traditional to nontraditional loans, and decreases when the leadership is unitary. Probability of failure is unaffected by executive share ownership.

Of course, one might expect the probability of failure to increase with the exploitation of the riskier non-traditional loans. What, then, explains a firm’s inclination to use them? Results indicate that unitary leadership, larger firms, and more shares owned by the CEO and other directors decrease the proportion of non-traditional loans. Only unitary leadership both increases the use of traditional loans and decreases the likelihood of failure. Interestingly, larger firms have more traditional loans and a higher rate of failure.

When the three groups of thrifts are compared independently (firms that survive, firms acquired without financial stress, and those that fail), the authors find that in both groups of successful thrifts, unitary leadership is associated with smaller firms and more traditional loan portfolios. This suggests that unitary leadership promotes financial health.

This paper’s conclusions propose that public officials would be unwise to mandate dual corporate leadership, as it encourages riskier behavior, leads to higher probability of failure, and requires more public assistance. Though the limited data available to the researchers leaves room for more study, this paper provides further evidence that public officials should consult empirical research before imposing consequential legislation.

How Facilities Affect the Cost of Education

In the on-going debate over education, many argue that taxpayers must redouble their investments in education to ensure a workforce that can compete with the world’s best. Those increases would attract the most knowledgeable and capable teachers and construct state-of-the-art laboratories and facilities. The logic suggests that only with these assets can we successfully educate our children.

In PERC Working Paper #1101, PERC Research Fellow Timothy Gronberg, Mary Julia and George R. Jordan Professor Dennis Jansen, and Lori Taylor address facilities’ effects on student performance. They look at whether school districts in Texas that have invested more in physical assets better educate their students, the investments’ implications for future costs, and which effect dominates. They find that physical investments increase the costs of education, and, reassuringly, that omitting capital stock does not affect cost function estimates. Therefore, unavailable capital data need not disquiet education researchers.

Cost function analysis, as done in this paper, can inform educators’ and administrators’ decisions regarding schools and school districts, such as consolidations and charter school additions. It can also improve decisions about funding expansions and reductions. Previous research has neglected capital costs because labor typically overshadows capital costs and data on capital costs are hard to obtain.

Excluding capital costs from analysis may potentially bias results, unless capital stocks are at their long-run cost-minimizing levels and capital’s cost is identical for all agents; few, if any, defend those propositions. Also, ignoring capital costs may cause researchers to miscalculate a district’s inefficiency. Instead of using proxies for capital costs, such as books in library, expenditures on maintenance, or bond indebtedness, Gronberg, Jansen, and Taylor use insurance records and insurance valuations on a district level. They obtain data on 718 of Texas’s 1,039 districts, representing 63% of Texas’s teachers. The included districts are largely representative of all Texas districts with respect to property wealth, growth, capital outlays, maintenance, and debt service, however, the sample districts are moderately economically more advantaged and less diverse.

The authors focused on Texas school
districts that offered K-12 schooling. Charter schools and military base schools were excluded. They used data from school year 2006-07. Costs are in expenditures per student and exclude debt service, transportation, and food. Output quality was measured by student score increase on the TAKS between the 2004-05 and 2006-07 school years. Since the TAKS does not focus on the highest achieving students, the researchers here include the percentage of students who complete an advanced course.

Input prices comprise teachers’ salaries, administrators’ salaries, and non-professional educators’ (such as custodians and cooks) salaries, as well as prices for equipment. The salaries of the non-professionals come from an index derived from the Bureau of Labor Statistic’s Occupational Employment Survey. Since prices for equipment are largely a product of national trends, the variation in prices should come primarily from differences in location. Therefore, the authors use a measure of geographic isolation to denote this variation.

The authors use a translog cost function to provide flexibility; they apply this cost function in a stochastic frontier analysis to allow for inefficient resource use. They use operating expenditures per pupil as the dependent variable. A common problem in cost function estimation is that the quality outcomes may be endogenous. Without guidance as to remedies and because interactions of quality variables would require a cumbersome number of instrumental variables (they had access only to weak instrumental variables), they decided to eschew the instrumental variables and treat all variables as exogenous.

They find, as one would expect, higher output quality is associated with higher costs and the cost of reaching any particular level depends on wages, geographic isolation, geographic size, and students’ special needs. For example, educating economically disadvantaged students costs 31.1% more than educating those ineligible for subsidized lunches. The results also show that larger schools can produce educational quality more cheaply (on a per student basis), therefore, economies of scale hold in education. The authors also find that districts with greater than $11,050 of capital stock per pupil experience positive marginal costs with additional assets and that most schools operate in this region.

Why would school districts hold so much capital stock that maintenance costs offset productivity gains? Gronberg, Jansen, and Taylor suggest that the greater capital stock can be perceived as an amenity to the community it serves or a dimension of school quality. Regardless, the amount of capital stock has no observable effect on student achievement, meaning that schools lacking a quality staff or supporting disadvantaged students can’t improve their quality with capital investments.

The efficiency analysis concludes that the average district can lower its costs 11% without a detrimental impact on output. It’s important to note that this conclusion is based only on certain subjects, so if a school devotes resources to an activity that’s not assessed by the TAKS, it will appear as an inefficiency. The authors estimate that by reducing the capital stock of schools with a stock greater than $11,050, the state of Texas could save $565 million in operating costs.

This paper seeks to advance the science of estimating educational costs. In an environment in which the public sector, which is generally uninterested in cost-controls, administrates the education system, it is important to provide independent analysis. The authors find that most school districts have a capital stock that costs more to maintain than it saves suggesting that the districts are either grossly overcapitalized or the nicer facilities reflect a nontraditional measure of student achievement.

The results suggest that shrinking school districts could save substantial resources by down-sizing their capital stock and devoting them to more effective inputs. Also, the conclusion that omitting capital stocks does not bias the cost function estimates will relieve future education economists that wish to enhance our knowledge of this topic.