HENLEY
MANAGEMENT COLLEGE

BUREAUCRATIC LIMITS OF FIRM SIZE: PRACTITIONERS SUMMARY

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Managerial diseconomies of scale are often discussed but seldom studied. The purpose of the current research is to open up avenues of inquiry into this potentially important topic. The research is the foundation for the doctoral thesis "Bureaucratic Limits of Firm Size: Empirical Analysis Using Transaction Cost Economics" presented by Staffan Canbäck at Henley Management College/Brunel University in 2002. The thesis can be downloaded from http://canback.com/henley.htm.

Data from the 784 largest US manufacturing companies in 1998 were statistically analysed to test whether diseconomies of scale exist and whether they can be moderated. The underlying framework is based on transaction cost economics, a discipline within organisational economics, which has become increasingly important over the last thirty years. Leading academics in the discipline include Oliver Williamson and Nobel Prize winners Ronald Coase and Douglass North, who heavily influenced the approach taken here.

The research shows that diseconomies of scale do indeed exist. They strongly hamper large corporations' ability to grow and they reduce their profitability. The research also shows that successful large corporations strive to minimise the diseconomies of scale while leveraging moderating mechanisms.

Background

If diseconomies of scale do not exist, then we would presumably see much larger companies than we do today. Why are there no corporations with ten million, a hundred million or even a billion employees?

At the time of the research, no business organisation in the United States had more than one million employees or more than ten hierarchical levels. Related to this, the concentration in the US manufacturing sector has changed little or has declined over much of the last century. Further, no corporation has ever been able successfully to compete in multiple markets with a diverse product range over a long time period.

Common sense tells us that there are limits to corporate size. Common sense does not, however, prove the point. Unfortunately, scientific inquiry has not yet focused on finding such proof.

Limits to corporate size pose real and difficult problems for business executives. The cost of being too large is significant. For example, up to 25 per cent of the cost of goods sold of a large

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manufacturing company is attributable to organisational slack, often arising from communication problems, bureaucratic inefficiencies and other dysfunctions described below. Moreover, large corporations have a tendency slowly to decline and disappear.

Findings

The research shows that there are four major categories of diseconomies of scale:

Atmospheric consequences. As companies expand, there will be increased specialisation, but also less commitment on the part of employees. The employees often have a hard time understanding the purpose of corporate activities, as well as the small contribution each of them makes to the whole.

Bureaucratic insularity. As companies increase in size, senior managers are less accountable to the lower ranks of the organisation and to shareholders. They thus become insulated from reality and will often strive to maximise their personal benefits rather than overall corporate performance.

Incentive limits. Large corporations tend to base incentives on tenure and position, rather than on merit, because of the difficulty to structure well-functioning incentive programmes. This especially affects executive positions and product development functions, putting large corporations at a disadvantage when compared with smaller enterprises in which employees are often given a direct stake in the success of the company.

Communication distortion. A single manager cannot understand every aspect of a complex organisation. Thus, it is impossible to expand a company without adding hierarchical layers. Information passed between layers inevitably becomes distorted. This reduces the ability of high-level executives to make decisions based on facts.

While the four categories relating to diseconomies of scale impose size limits on corporations, three factors tend to moderate diseconomies of scale:

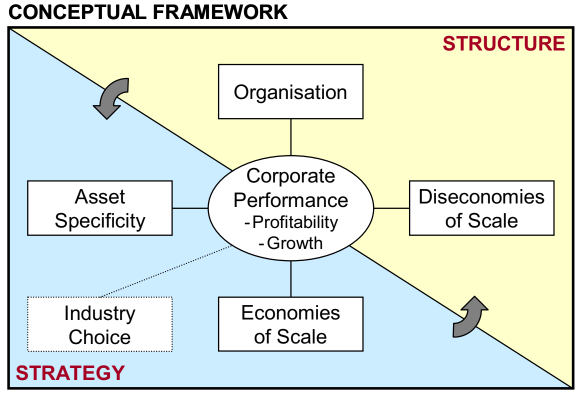
Economies of scale. In industries where there are high fixed-overhead costs, economies of scale tend to offset the diseconomies of scale. Economies of scale in production are not important though.

Organisation form. Diseconomies of scale can be reduced by organising appropriately. In general, a multidivisional organisation performs better than a functional organisation. In addition, well-designed governance policies help offset diseconomies of scale.

Asset specificity. Corporations that focus on the core business outperform diverse corporations. Asset specificity measures the degree of focus and it can be optimised along three dimensions: geographic reach, product breadth and vertical depth.

The framework below captures these influences. An additional factor, the choice of industry, is included as well. While this is not an important factor in the manufacturing sector studied here, it is important in the services sector.

CONCEPTUAL FRAMEWORK



Extensive statistical analyses and a literature survey validate the conceptual framework. The findings imply that companies have to balance a number of countervailing forces to reach a performance optimum. In general, the diseconomies of scale have a stronger negative influence on growth than on profitability, while the positive influence of economies of scale, multidivisional-form organisation and high internal asset specificity is larger on profitability than on growth. Combined, these forces explain up to 42% of growth and 64% of profitability for the 784 companies studied.

Practical implications

There are a number of real-life implications of the research. First, strategy and structure appear to be intimately linked. Indeed, structure does not necessarily follow strategy; strategy and structure inform each other continuously and forever. This means that strategic development cannot be done in isolation from organisational development.

Second, much of the rationale for mergers and acquisitions seems to be weak, at best. Proponents of mergers typically argue that the resulting larger entity after a merger will realise economies of scale, thus benefiting customers and shareholders. In addition, they claim that growth will accelerate with the introduction of new products and services. However, the current research shows that although some economies of scale may be realised, they are likely to be offset by diseconomies of scale. Furthermore, there is no evidence that larger, merged entities innovate more and grow faster. Instead, the opposite appears to be true.

Third, boards of directors may want to emphasise the importance of executive renewal and the elimination of rigid processes to stimulate growth. Maximising the quality of governance is an important lever for addressing these issues.

Fourth, companies that strive for high internal asset specificity appear to be better off than those that expand reach, breadth or depth. This does not imply that single-product or single-geography strategies are optimal (because this reduces growth in the long run), but it does imply that any expansion strategy should strive for high asset specificity and that some companies are best off reducing their scope.

Finally, in a world in which companies increasingly try to sell solutions rather than basic products and services, incentive limits have become real and problematic. In businesses that involve team selling or large product-development efforts, attention should be paid to creating well-functioning incentive schemes for employees. The superior productivity of research and development in small firms, in which incentives are tailored to individual performance, demonstrates why effective incentive schemes matter.