## Chapter 1

## Introduction

Professional logging contractors face a continuing challenge to be efficient and profitable. Qualified labor is getting more costly. Equipment, while more powerful and technically improved, has risen in cost. Increasing regulation has made the operating environment more complex and bureaucratic, furthermore, compliance can curtail vital production and raise operating costs. Contract rates have barely increased in the last ten years, pushed down by the demand for low cost fiber at the mills.

This study examines the real costs of logging with cash flow analysis and actual production records, building on Loving's (1991) two-year study of twenty-four logging contractors. Expanding this cost-production database has allowed longer-term monitoring of contractor businesses, cost changes and production efficiencies.

This same data set was analyzed and discussed in LeBel's dissertation: *Performance and Efficiency Evaluation of Logging Contractors Using Data Envelopment Analysis* (1996). LeBel and the author worked as a team in the data collection process. LeBel's research utilized fairly complex models to explore certain facets of efficiency, such as most productive scale size, that this report will not touch upon. This report provides a thorough description of the logging businesses sampled and uses simple ratios of tons of output per dollars of input to measure efficiency with respect to many variables in the operating environment such as business size, trucking strategy, hauling distance, physiographic region, capacity utilization and species mix.

This study is not intended as a census or demographic analysis of a representative sample of all Southeastern U.S. independent logging contractors. Instead candidates are pulled from the 30% of loggers that supply 80% of the wood in the industry (Stuart et al. 1996). The participants are "top shelf" logging contractors at major forest products mills in six Southern states. These are the contractors living up to the Sustainable Forestry Initiative, supporting programs such as Log-a-Load for Kids, complying with safety regulations and paying workers compensation premiums. These are the loggers that the industry can be proud of, however industry wood supply systems must constantly improve to keep this

type of logger efficient and profitable. The principal objective of this study was to extend the cost-production data base for southern logging operations and use the resulting information to extend the evaluation of changes in efficiency of these operations. These changes are to be measured in the composite, a benchmark of how well the industry sector is doing. The performance of individual firms in the composite is of interest, but not the focal point of the study.