

## **Prediction Models for Financial Ratios of Greek Construction Companies**

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### **Abstract**

This paper examines the relationship between the items of the balance sheets and income statements of Greek construction enterprises with various market and financial values. This is made possible by calculating selected financial indicators. These indicators provide an important tool for the analysis of sustainability and viability of construction enterprises.

More specifically the paper presents selected findings of the financial analysis concerning the ten largest Greek companies in the construction industry, for the five-year period 2004-2008. Initial reference to the definitions and concepts relating to the construction economy, the building market, efficiency and methods for measuring the performance are described and the legislative framework of the Greek enterprises is briefly presented.

The paper presents methods for assessing performance through financial statements, the concept of balance sheet and income statement of accounts in the light of international accounting standards. Moreover, the definitions and essential financial ratios are analyzed and the selected categories of ratios used in this paper are discussed. The study also presents the statistical analysis of the economic - market factors (parameters) which potentially affect the evolution of financial indicators - ratios of construction industry enterprises. Finally, prediction models for these financial ratios are produced based on regression analysis.

**Keywords:** Financial Analysis, Financial Ratios, Construction Enterprises, Statistical Analysis, Prediction models

### **1. Introduction**

A construction enterprise is a financial entity whose mission is the construction of projects of any type (Fotiadis, 2006). Large construction enterprises mainly have the legal form of a “Societe Anonym” (S.A.). S.A. are obliged to publish a number of documents every year such as periodical financial statements, balance sheets, income statement, statement of cash flows, etc. Public financial statements provide to all involved suppliers, creditors, investors and lenders as well as to the shareholders the necessary information and a picture of the company’s financial assets (Sakellis, 2005, Mentis, 2005, Pappas, 1998).