

SIMULATING SCENARIOS FOR FINANCIAL STATEMENT ANALYSIS

Fernando Arellano
University of Dallas
farellano@udallas.edu

Carlos Serrano
EGADE Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico
cserrano@itesm.mx

ABSTRACT

A spreadsheet model is used to generate a number of scenarios for financial statements analysis purposes in a financial management course. The model is capable of generating the three traditional financial statements characterizing different scenarios in terms of liquidity, profitability, asset utilization, and debt. The instructor decides if the firm will have high, medium, or low liquidity, profitability, asset utilization, and debt and also the way in which the firm conducts its operations. At the beginning of the simulation, no items on the liability side of the balance sheet are included and only cash and fixed assets are shown on the asset side. Everything is done on a cash basis and the firm has perfect knowledge of its sales volume which implies zero inventory. As the simulation progresses, the firm first offers credit to its customers, then requests credit from its suppliers, then creates inventory to account for imperfect knowledge of the market, and finally funds its operation with different sources of capital. Financial ratios are computed at each stage. The advantage of this way of doing financial analysis is that as the scenario and the corresponding financial statement increase their complexity, financial ratios also evolve, allowing for an interesting class discussion about the factors causing the difference in the financial ratios from stage to stage.