# Actuarial Methods and Public Pension Funding Objectives: An Empirical Examination

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## Abstract

This paper examines the degree to which certain actuarial methods satisfy public pension plan funding objectives. It compares the funding patterns that result from a conventional actuarial approach used by the majority of public plans with patterns that result from the "market value of liability" (MVL) approach. The comparison is made by applying these approaches to a modeled public plan based on historical demographic, economic and investment data over the period from 1978 to 2008. The paper finds that funding under the MVL approach would likely result in rapid and erratic changes to a public plan's normal costs, accrued liabilities and funded levels; due largely to changes in the MVL discount rate. By contrast, conventional funding results in measures that are more stable and predictable over time. Consequently, the paper concludes that the conventional approach is more effective in meeting the funding objectives of public pension plans. The serious instabilities in the MVL measures would most likely lead either to erratic demands on government resources or plan terminations. If the MVL approach were applied, we believe it would ultimately be abandoned as being too unstable for state and local governments.