

NONPROFIT FINANCIAL VULNERABILITY: A TEST OF THE TUCKMAN-CHANG MODEL USING THE GREAT RECESSION

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ABSTRACT

In 1991, Tuckman and Chang published the seminal work on the financial vulnerability of nonprofit organizations and presented a model that describes financially vulnerable non-profit organizations. Subsequent studies utilizing this model indicate that the model is predictive; however, those studies did not utilize an actual financial shock. Using binary logistic regression, this study tests the predictive ability of the Tuckman-Chang model by applying it to charitable organizations that survived and did not survive the Great Recession of 2007-09. Results of the testing indicate that the Tuckman-Chang model can be used to accurately predict if a charitable organization can survive a financial shock.

Keywords: *charitable organizations, non-profit organizations, not-for-profit, financial vulnerability, Great Recession*

1. INTRODUCTION

The nonprofit sector is defined as “those entities that are organized for public purposes, are self-governed, and do not distribute surplus revenues as profits” (Boris & Steuerle, 2006, p. 67). Nonprofits continue to grow as an important part of the US economy (NCCS Project Team, 2020). Nonprofits provide valuable services to the economy, and they contribute to the economy’s wages and the workforce (Bridgeland et al., 2009). Americans substantially invest in nonprofit charitable organizations through their donations. In 2021, these organizations received donations of \$484.85 billion, with the largest percentage of giving coming from individuals (Giving USA, 2022).

As an important part of the US economy and an important provider of social services to a wide variety of people, it is beneficial for these organizations to survive. This study provides the management of nonprofit charitable organizations with a group of financial metrics that can be used in strategic decision-making and in assessing the financial health of the organization. The use of these metrics for strategic decisions may allow nonprofit organizations to fulfill their missions for an extended period. Management’s use of the information in this study will allow charitable organizations to be prepared for inevitable financial shocks; thus, resulting in the continuation of public charities that serve the public good. As Denison and Beard (2003) noted, “Without the nonprofit sector, public agencies would be forced to provide more services or community needs would simply go unmet” (p. 24).

In 1991, Tuckman and Chang published their seminal article on the financial vulnerability of nonprofit charitable organizations. They presented four financial metrics that are descriptive of financially vulnerable charitable organizations: low equity balance, concentration of revenue sources, low administrative costs, and low operating margins. Organizations were labeled financially at-risk if they are in the bottom quintile for any one metric and financially severely-at-risk if they are in the bottom quintile for all four metrics. The Tuckman-Chang (T-C) model has been used for empirical testing since its introduction, and results of the testing indicate that the model can predict the financial vulnerability of nonprofit charitable organizations.

A variety of definitions of financial vulnerability have been proposed by various researchers. Definitions include adverse shifts in financial health (Keating et al., 2005), failure to meet the organization’s mission (Tevel et al., 2015), reduction in program expenditures for three consecutive years (Greenlee & Trussel, 2000), a 20 percent decrease in net assets over three years (Trussel, 2002), and insolvency for two