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## Why Do Nonprofits Fail? A Quantitative Study of Form 990 Information in the Years Preceding Closure

MacKenzie Arbogust  
*Old Dominion University*, [mfrady@gmail.com](mailto:mfrady@gmail.com)

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**WHY DO NONPROFITS FAIL? A QUANTITATIVE STUDY OF FORM 990**

**INFORMATION IN THE YEARS PRECEDING CLOSURE**

by

MacKenzie Arbogust  
B.S. May 1999, College of William and Mary  
M.B.A. May 2006, Georgetown University

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Approved by:

Meagan M Jordan (Director)

Bruce Rubin (Member)

Marina Saitgalina (Member)

## **ABSTRACT**

### **WHY DO NONPROFITS FAIL? A QUANTITATIVE STUDY OF FORM 990 INFORMATION IN THE YEARS PRECEDING CLOSURE**

MacKenzie Arbogust  
Old Dominion University, 2020  
Director: Dr. Meagan Jordan

Nonprofit organizations are an important piece of the community and economy in the United States. Each year, nonprofit organizations close their doors and stop providing services to the community. While there are large amounts of literature around financial health and vulnerability and governance best practices of nonprofit organizations, few of the studies have ever looked specifically at failed organizations. In general, the end stages of the life cycle of nonprofit organizations have not been well studied and are not well understood. This study draws on resource dependency theory and institutional theory to identify financial and governance factors that may serve as indicators of failure for nonprofit organizations by looking at organizations that are known to have ceased operations.

This study identifies nonprofit organizations that have failed and then assess their financial and governance information, as reported in the IRS Form 990 prior to closure. The organizational metrics are both compared to successful organizations of similar size and category and then assessed for deterioration in the final years of operation. Ultimately, increasing revenue concentration appears to be a strong indicator of failure for nonprofit organizations. Other factors including level of administrative costs, reporting of unrelated business income or significant programmatic changes are also significant in the understanding of why failed nonprofits are different from successful nonprofits in general and in the final years of the organization's life

cycle. This unique study offers one of the first empirical analysis of failed nonprofit organizations. To date, few studies have looked at failed organizations beyond individual case studies. This research confirms some of the current literature around financial vulnerability and governance issues.

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This dissertation is dedicated to my husband and family. It has been a long eight years to get here, but you have all helped me each step along the way. Without your love and support I would have given up years ago.

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## INTRODUCTION

Each year nonprofit organizations cease to exist due to a variety of reasons; mergers, lack of resources, and completion of mission to name a few. There is no simple tracking method to understand how many nonprofit organizations shut down each year and no aggregate way to assess the reasons behind an organization's closure. Simply put, there is an overall lack of empirical understanding why some nonprofit organizations remain sustainable year after year and continue operations while others close their doors. Nonprofits employ millions of people and provide important and necessary services to the community at large (Salamon, 2012). Understanding more about why some of these organizations succeed while others fail is an important task that has not yet been tackled by researchers.

While competition amongst and the resulting exit of for profit businesses have been studied, the exit of nonprofit organizations has been less studied and is not well understood, research is fragmented and sparse (Yurenka, 2009). There are a few case studies or post mortem reviews of nonprofit exits that explore the reason for closure or assess the years preceding the closure for possible clues or foreshadowing of the demise but there has been little large-scale study of nonprofit exit or death (Besel, 2000; Hager, Galaskiewicz, Bielefeld, & Pins, 1996; Hamilton, 2006). In this paper, I propose analyzing nonprofit organizations that have ceased operations for reasons other than mission completion for commonalities and patterns in their reported Form 990 information in the three years preceding cessation of operations. This research will focus on first identifying organizations that were not successful and then looking for significant differences between them and a control group of similar successful nonprofits that did stay open in the same time frame. Then, an analysis of the information from the three years

preceding organization closure will be done to assess for patterns or indicators that might be signals of future failure.

It is expected that there will be patterns in governance and financial factors that differ between successful and sustainable nonprofit organizations and that there will be negative financial or governance trends in the final years of failed nonprofit organizations. These identified factors may then serve to potentially alert struggling, but operating nonprofits of possible issues and allow time for course correction. Or, the information can be used by donors to assess the longer-term viability of an organization to decide if they are interested in donating to that organization. In any case, key organizational stakeholders will now be able to assess their own nonprofit organization to empirically known financial and governance indicators of decline and exit.

Since the literature on failed nonprofit organizations is not vast, another way to understand items that influence success versus failure is to look at organizational effectiveness. Failed nonprofit organizations can be assumed to have been ineffective, and thus failed. While not a perfect assumption or correlation, research on organizational effectiveness may provide insight into organizational failure as well. However, it is important to note that it is not only failed organizations that are ineffective, but that failed organizations are one subset of ineffective organizations.

Research on nonprofit organizational effectiveness has grown in the past few years (Liket & Maas, 2015). However, often times the determination of effectiveness or ineffectiveness of an organization is made by individuals involved or related to the organization and research has found that “there is not a single organizational effectiveness reality out there, but rather different stakeholders ‘create’ effectiveness on the basis of the criteria and impressions

they deem most relevant” (Herman & Renz, 1998). Essentially, the research on nonprofit organizational effectiveness is fragmented and often focuses on financial information as the primary determinant (Liket & Maas, 2015). For the most part, failed nonprofit organizations are assumed to be ineffective while sustained nonprofits are assumed to be effective. Interestingly, while the assessment of effectiveness and effective organizations seemed to converge, the assessment of ineffectiveness and ineffective organizations do not. Organizations deemed to be effective were often consistently deemed to be effective. However, those deemed ineffective were rated far less consistently. This suggests that the identification of good or effective organizations may have some consistent themes while ineffective or poor organizations are not as easily identified or articulated (Herman & Renz, 1998). However, the cessation of an organization (for reasons other than mission completion) can be a clear and agreeable signal of failure and may begin to show patterns amongst multiple failed organizations and help to bring some of the information on ineffectiveness together.

The scholarly literature on nonprofit financial vulnerability and nonprofit exit is inconsistent, fragmented and not well supported empirically (Helmig, Ingerfurth, & Pinz, 2014; Myser, 2016; Prentice, 2016). To date, much of the research has focused on a few financial measures or ratios that have been postulated, but not verifiably linked to be indicators of vulnerability in a post mortem review (Eckerd, 2015). This again, highlights the importance of a study like this one that looks at failed nonprofit organizations and assess the metrics of the failed organization rather than assuming or defining certain metrics to be risk factors.

Interestingly, the industry journal *Nonprofit Quarterly* has done short series on nonprofit deaths and reported on nonprofit closures and exits. Generally, poor financial and/or poor governance are called out as primary reasons for organization failure. However, this is not

scientifically investigated nor is the work peer reviewed (Flynn & Tian, 2015). This research aims to empirically link certain financial and governance metrics and measures to the demise of nonprofit organizations. Rather than postulate the relevance of specific ratios and measures based solely on theory, this research will examine nonprofit organizations that have ceased to exist for commonalities amongst themselves and differences from successful, sustained nonprofit organizations. This should allow us to empirically link particular measures and ratios with cessation of operations, something that has not been well documented to date. The use of data from failed nonprofit organizations is a unique contribution to the field in that they can be confirmed to have failed rather than assumed to be ineffective or irrelevant.

Nonprofit demise and the factors preceding nonprofit organizational demise are less understood than those effecting for profit organizations. Often times, assumptions are made that liken nonprofit organizations to for profit organizations in understanding and analyzing their financials, governance metrics and managerial issues (Chang & Tuckman, 1991; Greenlee & Trussel, 2000; Keating, Fischer, Gordon, & Greenlee, 2005).

Traditional for profit financial and governance metrics have been applied to the analysis of nonprofit financials and the demise of nonprofits without consideration of how they may differ in a nonprofit environment. Yet, research has shown differences do exist between for profit organizations and nonprofit organizations in leadership, vision, board roles and composition, employee motivation, stakeholders and various other ways (Epstein & McFarlan, 2011; Rowe, 2014; Ruvio, Rosenblatt, & Hertz-Lazarowitz, 2010). Thus, the possibility that the reasons and signs related to organizational failure are different between for profit and nonprofit organizations remains unexplored.

Recently, financial vulnerability in nonprofit organizations has become more studied. The general aim of much of the research is to identify nonprofit organizations that may be financially vulnerable and, thus, allow management to make informed decisions to stabilize the organization. However, the concept of financial vulnerability is poorly operationalized, is inconsistent from study to study, and has not been empirically understood. The research has a tendency to define financial vulnerability and then to look for it rather than identify organizations that have failed, then look to see if the failure was related to financial vulnerability (Chang & Tuckman, 1991; Greenlee & Trussel, 2000; Keating et al., 2005). Much of the research assumptions relating to which financial ratios to assess is derived from for profit organizational research, and therefore may or may not be easily transferred to nonprofit organizations (Ritchie & Kolodinsky, 2003). Again, an opportunity to empirically link failed nonprofit organizations and some of these metrics would validate them in a new and unique way.

Better understanding of nonprofit organizations, their reasons for demise, and financial vulnerabilities is important. The nonprofit sector in the United States employs about 7% of the US workforce and controls over \$8 trillion worth of assets (Vermeer, Raghunandan, & Forgiione, 2013). Nonprofit organizations are an important and growing part of the US economy and often provide services in place of governments, making them important pillars in many local communities (Twombly, 2003).

First, relevant scholarly literature is reviewed to understand and review current studies and theories on nonprofit organizational failure. Specifically, literature around nonprofit exit and death, financial vulnerability, governance issues, and factors that may signal success in nonprofit organizations are examined. Based on the literature, institutional theory and resource

dependency theory are then explored to help understand and predict factors that may signal upcoming organizational failure.

This research identifies nonprofits that ceased operating and then examines the filed financial and governance information identified in the Form 990 in the years preceding closure and cessation of operations. A group of similar nonprofit organizations that did not cease operating in that time is then also examined in an effort to understand the differences, if any, between the two groups. Information relating to board size, change in practices, revenue concentration, operating margin and others is pulled from the Form 990 for both groups. This research is unique in that it is specifically examining failed nonprofit organizations.

There are two general research questions to address

1. Are there significant differences in financial and governance factors amongst nonprofit organizations that have ceased operations for reasons other than mission completion and those that have not ceased operations?
2. Do nonprofit organizations that have ceased operations for reasons other than mission completion show degradation of financial and governance factors in the years preceding close?

Resource dependency theory and institutional theory are both explored as a basis for the independent variables and to support suggested outcomes. Resource dependency theory is an influential organizational theory that focuses on the organization as one piece of an entire environment and works to explain how an organization both effects and is affected by its environment. Institutional theory suggests that an organization makes connections in its environment and performs certain functions to be viewed as legitimate within its environment. Both theories are commonly used in looking at nonprofit organizations and their effectiveness.

This study contributes to the literature in several ways. First, it determines specific factors related to organizational failure via a historical analysis of the population of failed and successful or sustained nonprofits. Second, the determination of indicators that can be indicative of possible failure allowing management and boards to take action quicker and possibly save the organization or plan carefully for a successful closure or merger or provide additional information to donors assessing organizations. Third, this research focuses on failed nonprofits- organizations that have ceased to exist- and looks for commonalities amongst them and differences between them and successful organizations. Most research in the field today reviews nonprofit organizations that are in operation and subjectively categorized as failed or successful rather than looking at organizations that have been confirmed to have failed, as defined by cessation of operations. Lastly, it helps to grow the quantitative literature around failed nonprofit organizations to allow scholars and practitioners to understand why some organizations succeed while others fail. Much of the research today confirms why organizations have succeeded and intimates why others have failed as opposed to confirming why an organization has failed.



## LITERATURE REVIEW

Often referred to as the third sector, the United States nonprofit sector is becoming more and more studied as it grows in both size and prominence (Anheier, 2005; Salamon, 2012). The sector has experienced surges of growth and attention in recent years. Recent economic trends and possible tax reformations make the financial sustainability of nonprofit organizations more relevant than ever. Much of the research focus has been on the four trends identified by Salamon- volunteerism, civic activism, professionalism, and commercialism (Salamon, 2012). However, research to help with the understanding of why some nonprofit organizations fail while others succeed is less frequent, more difficult to find, and not well supported empirically.

Helmig et al. (2014) summarize the research on nonprofit success and failure as fragmented, stating:

Our analysis highlights that scholars addressing NPO success and failure apply a variety of concepts to capture these constructs. However, the categorization of these distinct conceptualizations shows that though academics rarely apply theory-based research in this context, they follow some theoretical considerations stemming from general management literature on that topic (p.1522).

The current literature on nonprofit governance, while large, generally focuses on the actions and role of the board in relation to the nonprofit organization. Some research suggests most nonprofit organizations filing with the IRS have adopted best case practices as outlined by the IRS (Blackwood, Dietz, & Pollak, 2014). Yet, little, if any focus, has been on if the presence or absence of some these best practices as outlined by the IRS exists between failed and successful organizations.

Identified differences between these failed nonprofit organizations and their successful peers allows the development of a framework to assess current nonprofit organizations and their potential as a going concern. This framework can then be used by both nonprofit managers as well as donors and board members to make informed decisions to either wind down operations or turn things around.

To help potentially fill in some of the research gaps, research related to for profit organizations is also reviewed. While there are differences between for profit and not for profit organizations, there are also similarities. Drawing on for profit organizational theories is common in the nonprofit literature. It is important to understand that the information related to for profit organizations may not be directly related or relatable to not for profit organizations, but it is often insightful, and, at the least, a starting point for thought and discussion.

### **Reasons for Nonprofit Demise and Exit**

Organizations, like people, follow natural life cycles. Each day, organizations are created, grow, decline and die. Death, as it is for humans, is a natural process in the life span of an organization- both for profit and not for profit. However, in general organizational death, demise and exit are not as well studied as the other lifecycle stages. (Hamilton, 2006). This review will focus on the demise and death stages of the lifecycle to try to understand what factors occur that may be able to provide signals of this change in life cycle stage.

The mortality rate in nonprofit organizations, in general is not well studied. In one study by Bielefeld (1994) between 1980 and 1988 of nonprofit organizations in Minneapolis/St. Paul Minnesota exhibited a mortality rate of twenty percent. The author is careful to point out at that time there were many external forces and changes in governmental funding that likely affected

nonprofit organizational survival and that the mortality rate varied dramatically among different types of nonprofit organizations.

Weitzel and Jonsson (1989) developed a model outlining five steps organizations in demise go through:

1. Organization is blind to early signs and stages of demise or decline.
2. Organization recognizes the need for change but takes no action.
3. Organization takes inappropriate action.
4. Organization reaches crisis point.
5. Organization is forced to dissolve.

The authors suggest that “Organizations enter the state of decline when they fail to anticipate, recognize, avoid, neutralize, or adapt to external or internal pressures that threaten the organizations long term survival” (Weitzel & Jonsson, 1989, p. 95). In other words, organizations that fail to respond to changing external or internal factors begin the demise and death process. This basic premise is echoed in research on nonprofit organizations reviewed below.

Hamilton (2006) also suggests there are occasions where death and demise may be sudden and would not then follow the steps outlined by Weitzel and Jonsson. Sudden organizational demise and death are often due to a loss of legitimacy and Hamilton points to for profit cases such as Enron and Arthur Anderson as examples of sudden demise and death that did not follow established steps. Thus, the loss of organizational legitimacy often may act as an antecedent to organizational death.

Death, demise and exit in nonprofit sector is no exception. There are periodic case studies on organizations that ceased operations, but as a whole the field is fairly blank. On the

surface, nonprofits are often assumed to have closed because of financial failure. However, nonprofit organizations may exit the market for four different reasons (Levine, 1978):

1. Political vulnerability (internal)- internal factors, such as size and age contribute to inexperience and inability to resist demands,
2. Organizations atrophy (internal)- performance declines causing instability to the organization, ultimately causing its decline,
3. Problem depletion (external)- the problem the organization was designed to address has been solved,
4. Environmental Entropy (external)- the community supporting the organization is no longer able to support the organizations for financial or other reasons.

Levine (1978) suggests there are both internal and external reasons for exit, and that not all reasons for exit are negative. In addition, Levine reviews different tactics used by managers to ‘smooth the decline’ in the time during decline and before death or to ‘resist the decline’ in an effort to move back to the growth stage out of the decline stage.

Twombly (2003) reviewed data in 53 metropolitan areas that used Aid for Dependent Children (AFDC) waivers in the period between 1992 and 1996. The study assumed organizational death when the nonprofit organization ceased operations as an individual entity. The study looked for relationship between nonprofit organization exits in the metro areas organizational size, age, and service type. For this study, an organization that merged with another was assumed to have exited the market, since the community then had fewer choices for services. The study did not exclude mergers as exits. Ultimately, the study found that in human services organizations in urban areas, a few factors, such as size and age of nonprofit were found

to be stronger predictors of exit from the field than most other proposed factors (Twombly, 2003). This suggests the political vulnerability as strong factor in the demise of nonprofit organizations.

Another study, again focused on human service organizations in Canada between 1971 and 1987 organizations with institutional linkages- that is a direct and regular relationships with other organizations- specifically organizations with social capital or other community influence within its environment-had a significant survival advantage over those without such linkages (Baum & Oliver, 1991). The findings confirmed the author's hypothesis that the presence of institutional linkages reduces the likelihood of organizational mortality. This hypothesis is based on resource dependency theory and the assumption that organizational linkages allow organizations to garner resources and thus increase survival rates. This suggests environmental entropy also as a strong factor in nonprofit organizational demise.

An older study looked at nonprofit organizations that closed from 1980 to 1994 in a specific urban area (Hager, 1999; Hager et al., 1996). In this study initially over two hundred nonprofit organizations in the Minneapolis- St. Paul area were identified. Organizations were interviewed in the 1980/1981 period, 1984/1985 period, 1988/1989 period, the 1993/1994 period, and then finally in 1995. Ultimately, the study had data from five different points in time to assess. The researchers then conducted exit interviews with some of the nonprofit organizations that had been in the original sample but closed during the subsequent period of research to understand their perception of reasons for closure. Lastly, the data from 1980 was used to predict survival or death in the other four periods of data gathered and this was matched to the true survival and death patterns. Ultimately, organizational size was significant in all the

time periods as a predictor of survival. Smaller organizations were more likely to close than larger organizations.

The researchers then assessed the exit interviews of nonprofit organizations that exited the market for internal and external factors that preceded the exit and grouped these in broad theoretical constructs. Similar to Levine, the researchers proposed four theoretical possibilities for nonprofit death:

1. Ecological theory concerning the capacity of the environment of the organization to sustain it;
2. Market theory concerning the demand for the goods or services produced by the nonprofit organization;
3. Resource dependency theory concerning how nonprofit organizations network and integrate with donors, funders and the community; and
4. Institutional theory concerning legitimacy and image.

Ultimately, it was found that the liability of smallness (too small) and liability of newness (too young) of the organization were cited as a major reason contributing to the death of a nonprofit organization by a significant number of organizations. The “liability of newness” (too young) does appear to be one of the well-studied factors in both for profit and nonprofit demise (Baum & Oliver, 1991; Bielefeld, 1994; Chambré & Fatt, 2002; Hager, Galaskiewicz, & Larson, 2004; Singh, Tucker, & House, 1986). The liability of newness can be boiled down to three main factors: lack of stability, lack of resources and lack of social approval or social capital (Baum & Oliver, 1991). Hannan and Freeman (1984, p. 157) summarize the liability of newness simply by stating “Development of trust and smoothly working relationships take time.” Older organizations, both for profit and not for profit have had the opportunity to develop and solidify

important relationships with resources that younger organizations have not, thus young age often proves to be a liability to organizations. In studying reasons for bankruptcy in Canadian for profit organizations, Thornhill and Amit (2003) suggest, that in addition to lack of resources, lack of or deficiencies in financial management and lack or poor managerial knowledge also contribute to the demise and death of newer. As cautioned earlier, the transference of information from the for profit to the nonprofit realm should be undertaken carefully. However, even in nonprofit organizations, money is needed to pay the rent, pay the staff and generally keep the doors open, thus it makes sense that the same deficiencies in nonprofit organizations may also contribute to demise and death.

The “liability of smallness” is a reason for demise seen in both the for profit and not for profit organizations as well (Karl, 2001). While researching for profit organizations in both the United States and Europe, Hannan, Carroll, Dobrev, and Han (1998) suggest smaller organizations are more likely to experience demise and death because they have less resources on which to draw in times of need, in short, “they exist close to the edge” (p. 283).

Wollebaek (2009) confirmed both the liability of newness and smallness as significant factors in organizational death for many of the same factors cited in the highlighted articles. Studying survival of local voluntary associations in Norway from 1980 to 2000, Wollebaek (2009) found both factors to be significant predictors of organizational survival.

Interestingly, researchers report that as many as one fifth of the organizations reported the closure of their organization was due to the completion of their mission, in short, the closure was a positive event and not considered a failure (Hager et al., 2004). The researchers did not test or verify this by reviewing the original mission statement of the organization.

It is important to realize that a nonprofit organization may close for a reason other than financial. It is possible organizations merge to form one, stronger, more efficient organization. It is possible an organization satisfies its mission. It is important to understand why a nonprofit closed before assuming it was due to financial vulnerability. Unless closed nonprofits are categorized and then studied, we can get no clear measure or understanding of the financial indicators of vulnerability.

The research on organizational demise and exit has started to make differentiations in the reason for exit and make it clear that not all organizational exits are the result of demise or should be considered failures.

Mission drift is another reason for financial vulnerability or instability. Mission drift occurs when an organization begins to spend time and effort on an activity that may not necessarily align with its mission (Bennett & Savani, 2011). This can occur in a myriad of ways. In a search for funding, organizations may seek and accept grants that do not align with their original mission, thereby weakening the organization and, in time, lead to failure as they venture into areas in which the lack expertise and knowledge (Cornforth, 2014).

Recently, the trend in nonprofit organizations for social entrepreneurship and self-sustainability has been growing (Cornforth, 2014; Foster & Bradach, 2005; Weisbrod, 2004). As governmental and private donations have been declining, nonprofit organizations are looking for new and sustainable ways to supplement their income streams. The result is more nonprofit organizations reporting unrelated business income on their annual Form 990s filed with the Internal Revenue Service.

However, this new income stream is not proving to be the stabilizing factor initially sought. Foster and Bradach (2005) reviewed IRS form 990 information and determined that very



few nonprofit organizations make money through unrelated income streams, and many are actually losing money. This can be for a myriad of reasons, but essentially the authors suggest the focus on the mission or the organization is often diluted, absorbing management time and resources that are no longer directed to the primary mission. Weisbrod (2004) goes so far as to suggest that nonprofit organizations should avoid commercial activities as a whole. He goes on to state that many of the commercial activities undertaken by nonprofit organizations serve more to divert resources from the mission than to serve the organization's mission or provide the desired stable, sustainable income stream.

### **Nonprofit Financial Health and Vulnerability**

The ability to assess the financial health of a nonprofit organization is of interest to many different stakeholders- from donors to management (Greenlee & Trussel, 2000; Hager, 1999; Hager et al., 1996). Researchers have proposed varied and different metrics and models to identify financial vulnerability in nonprofit organizations (Chang & Tuckman, 1991; Greenlee & Trussel, 2000; Tevel, Katz, & Brock, 2015).

The metrics are often based on for profit business assumptions of health and success. Much of the original for-profit failure research is based on Ohlson's seminal work around understanding the signals that indicate bankruptcy. Four factors were found to be significant in bankrupt firms (Ohlson, 1980):

1. Size of the company:  $\log(\text{Total Assets}/\text{GNP price level index})$
2. Measure of the financial structure:  $\text{Total Liabilities}/\text{Total Assets}$
3. Measure of performance:  $\text{Net Income}/\text{Total Assets}$

#### 4. Measure of current liquidity: Current Liabilities/Current Assets

Similarly, Edward Altman, another prominent researcher on for profit bankruptcy suggests that ratios that predict liquidity, solvency and profitability are the most relevant and significant ratios to predict bankruptcy (Altman, 1968). Both Altman and Ohlson have developed models to predict bankruptcy in for-profit organizations based on financial ratios present the one to two years preceding filing for bankruptcy. From this research, extrapolations are made from the for-profit environment to the nonprofit environment. For example, declining cash is generally seen as unhealthy in for profit business and is therefore proposed to be unhealthy in nonprofit organizations as well. Overall, the research in this field as it relates specifically to nonprofit organizations is limited and fragmented.

Perhaps the first issue to tackle is the definition of financial vulnerability in nonprofit organizations. Financial vulnerability is not a perfectly defined term as it relates to nonprofit organizations, but instead varies from study to study based on the definition set by the researcher (de Andres-Alonso, Garcia-Rodriguez, & Romero-Merino, 2016). The definition of financial vulnerability in nonprofits varies amongst researchers but is most often defined as a group of values and ratios and is often looked at over a period of time. The ratios and values included may vary between studies and researchers and often times there is little rationalization for the wide variety and changing ratios discussed (Prentice, 2016).

However, there have been few, if any, verifications of the definition (i.e. studies that have confirmed these various values indeed are indicators of financial vulnerability). As a result, the values and ratios being used to determine if a nonprofit organization is indeed financially vulnerable have not been empirically proven to show that they are indicators of financial vulnerability in nonprofit organizations (Prentice, 2016). Perhaps the most simple and

comprehensive definition of a financial vulnerability nonprofit is one that “fails the test of simple persistence” (Hager, 2001, p. 382) In short, to date, little if any research has validated the definition of financial vulnerability retrospectively by looking at failed or closed organizations.

One of the initial and still most cited pieces of research on nonprofit financial vulnerability was done in 1991 by Chang and Tuckman looking at Form 990 information of 4,370 organizations in 1985 and 6,168 organizations in 1983. Financial vulnerability, for this study, is defined as the ability of an organization to “avoid program cutbacks when a financial shock occurs” (Tuckman & Chang 1991, p.659). Tuckman and Chang (1991) proposed four criteria to represent this operationalization of financial vulnerability:

1. Lack of sufficient equity as defined by Equity/Revenue,
2. High concentration of revenue defined as the sum of the square of each percentage share of each line of revenue,
3. Low levels of administrative costs,
4. Low net operating margin.

If an organization falls in the bottom 20% for any one of these measures, it is considered at risk. If an organization falls in the bottom 20% for all four criteria, it is considered severely at risk. These criteria were tested against IRS data from 1983 and 1985 and from this the profile consisting of the four metrics above was developed to define organizations as financially vulnerable.

However, one of the weaknesses cited in the article was the failure to link the identified financial vulnerability to attrition, or exits, in the nonprofit sector. In addition, the research did not validate the “financial vulnerability-ness” of those identified organizations. It simply identified a profile of organizations that all exhibited certain characteristics. None of those

organizations were verified as financially vulnerable. In addition, the research did not account in any way for different accounting rules that may result in some of these metrics and ratios being very different than those of for profit businesses. Lastly, the model did nothing to predict financial vulnerability rather, it simply sought to identify financial vulnerability.

About a decade later, Greenlee and Trussel (2000) proposed a model based on the four criteria identified by Tuckman and Chang combined with financial vulnerability models used in for profit industry. In this model, Greenlee and Trussel first defined financially vulnerable nonprofit organizations as those with a reduction of program expenses for three consecutive years from 1993 to 1995. The basis for this definition was similar to that of Tuckman and Chang. Of the four hundred thirty-five nonprofit organizations identified as financially vulnerable, Greenlee and Trussel then looked at the ratios in 1992 to see if they could predict the status of the financials in 1995. In this work, Greenlee and Trussel found three of the four criteria proposed by Tuckman and Chang in 1991 to be significant -the equity criteria was the only one found to not be significant. Restated, Greenlee and Trussel found that in cases where a nonprofit organization showed three consecutive years of declining program expenses, they also exhibited three of the four Tuckman-Chang (low gross margins, low administrative costs and concentrated revenue).

In both studies, financial vulnerability was defined based on theory and for-profit research and then looked for based on ratios and values. Neither study found nonprofit organizations that were proven to be financially vulnerable (i.e. had ceased operations) and then review the financials in the period leading to demise. There can be various reasons an organization has lowered program expenses or may score as vulnerable in any one of the Tuckman and Chang measures when the organization is, indeed, not financially vulnerable.

Shortly after the Greenlee and Trussel research was presented, Hager (2001) tested the Tuckman and Chang measures of financial vulnerability on nonprofit arts organizations in Minnesota that filed with the IRS for tax years between 1990 and 1992. Hager appears to be the first to deal with organizational death and demise in combination with the financial analysis in that he defines a financially vulnerable organization as one that is no longer in existence. Ultimately, Hager found there to be great variation in the accuracy of the Tuckman and Chang measures based on organization type (Hager, 2001).

Keating, Fischer, Gordon and Greenlee (2005) undertook a study on US based nonprofits from 1998 to 2000. In this research, the authors attempt to predict financial vulnerability of a nonprofit organization based on three models being used to assess or identify financial vulnerability: the Ohlson model based on for profit businesses to predict bankruptcy, the Altman model also used to predict for profit business bankruptcy and the Tuckman and Chang measures. Ultimately none of the models effectively predicted financial distress in nonprofit organizations. The authors then go on to suggest a new model that add factors representing endowment sufficiency and commercial ability to generate revenue to bolster the model. Adding these two factors to all models increased their explanatory power.

Similarly, Tevel et al. (2015) tested three different models of financial vulnerability on performing arts organizations in Israel. The first model tested was based on for profit business known as Ohlson's model- the same one used by Keating, Fischer, Gordon and Greenlee in 2005. The second was the Tuckman and Chang model using the four measures identified earlier. Lastly, they tested what they called a practitioner's model that was based on rating organizations- however, it is noteworthy that the models were based on Israeli and British rating organizations and that the organizations tested were all Israeli organizations. The results showed

the Tuckman and Chang model to be the only model empirically proven to accurately identify financial vulnerability in performing arts nonprofit organizations. It is unknown or unaddressed how the financial reporting metrics may vary from US to Israeli organizations.

Recently Lu, Shon, and Zhang (2020) looked specifically at revenue mix and administrative costs in relation to the effect on dissolution of nonprofit organizations in an effort to identify possible antecedents to nonprofit organizational demise. Using data from a ten-year period between 2005 and 2015 the authors found that diversified revenue sources are beneficial to the survival of nonprofit organizations. Said differently, nonprofit organizations with more diversified revenue streams and sources are less likely to dissolve than those with less diversified revenue streams and sources. In line with this, the authors also found that increase in administrative spending- in their study, specifically employee compensation and fundraising expenses only- also increases the nonprofit organization's risk of dissolution. In short, the more they spend on administrative costs, the higher likelihood of organizational failure or dissolution.

Perhaps unsurprisingly, there is inconclusive and conflicting information on the ability of the Tuckman and Chang model or other models to predict financial vulnerability among nonprofit organizations. With no clear definition of financial vulnerability and without empirically understanding the financials of failed nonprofits, there is no clear understanding of how or if financial vulnerability contributes to an organization's failure.

## **Good Governance in Nonprofit Organizations**

In recent years, nonprofit governance has become more of a focus as public scandals have shaken the public's trust in nonprofit organizations (Harris, Petrovits, & Yetman, 2017; Myser, 2016). The IRS revised the mandatory tax Form 990 in 2008 to include a litany of questions and information about the governance habits and practices of nonprofit organizations (Harris, Petrovits, & Yetman, 2015). Loosely defined, nonprofit governance refers to the board of directors and its role in the nonprofit organization's management (Lee, 2016; Stone & Ostrower, 2007).

Good governance practices generally include the adoption of written conflict of interest policies, document retention policies, whistleblower protections, key employee compensation review, and audits (Blackwood et al., 2014; Lee, 2016; Ostrower, 2007). Harris, Petrovits, and Yetman (2017) looked at data on over ten thousand nonprofit organizations between the years of 2008 and 2010. Seven factors of governance were identified from twenty-one governance related questions on the IRS Form 990. These seven factors are policies, audit, compensation, board, management, access and minutes. All seven factors were found to be significantly positively associated with donations. In other words, in nonprofit organizations that had all seven of the factors present, donations were higher.

Research has shown that small board size is often negatively associated with the establishment of good governance policies while board independence is often positively associated with the establishment of good governance policies (Blackwood et al., 2014; Harris et al., 2017). An independent board member is one that does not receive, either indirectly or directly, material financial benefit from the organization on which they sit on the board of directors, nor does anyone related to the director received material financial benefits from the

organization (Blackwood et al., 2014). The authors suggest that larger and more independent boards are more likely to enact good governance policies than their smaller and less independent peers. Nonprofit boards tend to be large in comparison to the boards of for profit organizations (Stone & Ostrower, 2007). In addition, more established, older organizations as well as those that receive government funding are more likely to establish and follow good governance policies (Blackwood et al., 2014; Lee, 2016; Ostrower, 2007).

In general, research has shown that for profit boards have an average size of nine directors with most boards having between eight and eleven members (Ning, Davidson, & Wang, 2010). For profit organizations that went bankrupt were also found to have a general decline in board size in the time period leading to bankruptcy (Gales & Kesner, 1994). Blackwood et al. (2014) reviewed 2010 IRS Form 990 information and found the median board size reported to be 9 members, but this varied by the size of the organization. Smaller organizations (less than \$250K annual) generally have a median board size of seven while larger organizations (over \$10M annually) generally have a median board size of fifteen. Related to board size, the IRS cautions against very small or very large boards of directors but provides no specific or other guidance related to board size.

The Internal Revenue Service does provide some basic guidance related to nonprofit organization governance ("Governance and Related Topics- 501 (c) 3 Organizations," 2008). The IRS does suggest nonprofit organizations engaging in good governance practices would have a whistleblower policy, conflict of interest policy, document retention and destruction policy, and an independent committee to review and determine the CEO compensation. Specifically, in the review of 2010 IRS Form 990 info Blackwood et al. (2014) found that 60 percent of nonprofits filing in that year reported adoption of three specific good governance



practices: (1) independent accountant reviews or audits financials (2) written conflict of interest policy (3) review and approval process for executive compensation.

Recent research has shown that stronger governance reduces the likelihood that a nonprofit organization will report asset diversion, but that the likelihood of asset diversion does increase as organizations become larger and more complex (Harris et al., 2017). Also, Harris et al. (2015) report that nonprofit organizations that practice good governance, specifically related to having a whistleblower policy, presence of audit committee, larger percentage of independent board members, post the 990 for public review on website, have no related parties to management and ensure CEO compensation is reviewed by independent persons report higher overall contributions.

Regulations on reporting and governance requirements can vary from state to state and country to country, suggesting there may be differences in governance related to the geographical location of a nonprofit organization. However, research using data from National Center for Charitable Statistics for 2010 has shown that nonprofit organizations that operate in states that require specific reporting and registration requirements are no more likely to adopt best practices governance policies than those that are not located in such states (Lee, 2016). Surprisingly the same study also showed that the adoption of good governance policies is more likely in nonprofit organizations that engage in lobbying than those that do not- including those that receive governmental funding.

To be sure, there is no direct link or assurance that adoption of any of the governance policies cited above will ensure accountability or prevent malfeasance (Lee, 2016). In addition, it is important to note that organizations do not always report accurately on the IRS Form 990. After reviewing published articles about nonprofit fraud and cross checking with the IRS Form

990 filed information for the discovery period, Archambeault, Webber, and Greenlee (2015) found that as few as 21% of organizations that have experienced fraud report the diversion of assets on their annual Form 990.

Overall, IRS data from the Form 990 is considered reliable. However, in a study of 350 nonprofit organizations researchers compared specific responses with information contained in the organizations audited financial statements (Froelich, Knoepfle, & Pollak, 2000). Ultimately researchers found variation between the two sources, although generally small, to be present. It is relevant to note that this study was done prior to the re-vamping of the Form 990 and prior to additional guidance from GAAP in the presentation of financial statements both in an effort to make the two sources more informative and easier to understand. In any case, caution must be used in interpreting the IRS Form 990 information and results.

Beginning in 2015 organizations receiving over \$750,000 in Federal funds are required to undergo an annual audit governed by Circular A-133 issued by the OMB. Prior to this time, the threshold for requiring an audit was \$500,000 in Federal funds. In theory, this should provide funders and others with important information relating to the financial and operational health of the nonprofit organization. Kitching (2009) reports that: “reputable charities have incentives to hire high quality auditors to convey information about the nonprofit’s stewardship of donated resources, because donors reward charities that spend a large share of resources on programs, but donors recognize that the performance measure can be manipulated... Thus, audit quality potentially separates charities with creditable financial reports from those with less reliable information” (p. 512-513).

Salamon (2012) reports one of the major trends effecting the nonprofit sector is the professionalization of nonprofit organizations. The sector recognizes the importance of subject

matter expertise and sees the value in many of the practices undertaken in the private sector.

One signal of this professionalization would be the presence or absence of an audit performed by independent auditors.

While some nonprofit organizations will be required to have annual independent audits due to the size of their federal grants, others may not be required, but may select to have an annual independent audit as a signal to stakeholders including board members, the community, and donors.

## THEORETICAL BASIS

For this study, there are two primary theories that help support the inclusion of variables and suggest possible outcomes of the study. Both theories, institutional theory and resource dependency theory, are widely cited in the literature and are commonly associated with nonprofit organizations today. The review of both theories includes their respective histories and relevance to nonprofit organizations, as well as their support for the analysis of some of the independent variables.

### Resource Dependency Theory

“The key to organizational survival is the ability to acquire and maintain resources” (Pfeffer & Salancik, 2003, p. 2). Simply put, resources are required for organizational survival. Resource dependency theory was formalized by Pfeffer and Salancik in their now widely cited and foundational text *The External Control of Organizations: A Resource Dependence Perspective* first published in 1978. The text explored the relationships and power dynamics between organizations and their environment. Pfeffer and Salancik stressed the importance of context, i.e. the environment in which it operates, to an organization, and specifically the multiple, sometimes conflicting restraints or opportunities that environment may place on an organization. The basis of resource dependency theory assumes organizations are interdependent upon one another.

Resource Dependency theory recognizes that all organizations, including nonprofit organizations, need resources to survive; organizations can obtain resources from their environment such as other organizations, including governmental organizations and private individuals. However, those resources then retain some level of power over the recipient organization (Malatesta & Smith, 2014). The level of power a resource retains over the

organization is often dependent on the level of criticality of the resource to the organization, the amount of discretion the organization has on how the resource is distributed and the availability of alternative sources for that resource (Akingbola, 2013).

An organization will often face conflicting demands from its environment. This becomes a problem when organizations rely on other organizations for critical or important resources and the demands of the resource providers do not align (Pfeffer & Salancik, 2003). As a result, one strategy to avoid undue influence of any one resource, organizations may seek to diversify their dependence on any one resource- for nonprofits this would be the diversification of donors and revenue streams to not allow any one funding source to hold too much control or power over the organization (Pfeffer & Salancik, 2003). This is bolstered by research by Carroll and Stater (2009) which indicates that revenue volatility in nonprofit organizations can be reduced when revenue is diversified and the reliance on earned income, contributions and investment income are more equalized and less lopsided. Froelich (1999) terms this rebalancing of revenues as “modifying the locus of dependence” (p.249), and it allows nonprofit organizations to better manage their reliance on any one source. Following from this idea, it is expected that nonprofit organizations with more diversified revenue streams are better able to acquire resources due to their broader reach and that those that lack this diversification are more likely to struggle in acquiring resources due to fewer resources upon which they can draw.

It is important to note that not all research around revenue diversification converges to the ideas above. Mayer, Wang, Egginton, and Flint (2014) suggest there is not necessarily a direct benefit to nonprofit organizations that diversify revenue streams. In their research they found that the resulting changes of revenue diversification may be more related to and dependent upon the original makeup of the portfolio and some diversification changes may result in

increased volatility as opposed to reduced volatility. Moreover, Chikoto, Ling, and Neely (2015) suggest the concept of revenue diversification versus concentration is too simplistic and the information too aggregated to show the true magnitude and effect of different revenue streams on overall organizational financial health.

Nonprofit organizations are often not able to support themselves financially and are therefore dependent on the ability for them to garner resources within the environment. These resources vary from individual or foundation donors to local, state and federal resources, to various earned income sources. This specific resource dependency, or locus of dependence as coined by Froelich, can often force nonprofit organizations to make decisions that may not always be in the best interest of the organization or may have unclear long term consequences to the organization (Malatesta & Smith, 2014) .

In this instance, the resulting organizational changes are often referred to as mission creep or mission drift. Both terms are used to describe organizational changes that occur, often without specific intent, where the organizations may diverge away from the original intent and mission of the organization. This is often the result of the external pressure to secure and constant search for financial resources and are the result of decisions that do not fully align with the organization's mission but may allow the organization to continue operating or receive specific funding (Akingbola, 2013; Cornforth, 2014; Froelich, 1999). Other times, organizations may choose to merge in an effort to reduce competition (Malatesta & Smith, 2014).

Resource dependency theory also provides logic for the increasing number of nonprofits moving into the social entrepreneurial space- i.e. those generating market-based income to aid in supporting the organization (Gras & Mendoza-Abarca, 2014). In fact, some studies have found that nonprofit organization participating in market-based income opportunities are less likely to

cease operations than those that are not (Carroll & Stater, 2009; Gras & Mendoza-Abarca, 2014). The ability to diversify revenue and decrease the reliance on the generosity of donors allows nonprofit organizations to be more stable and self-sufficient. This directly relates to resource dependency theory as the nonprofit organization becomes less reliant on one, external and uncontrollable resource -donors- to relying on an internal and more reliable source of resources-earned income.

In addition the challenge of maintaining revenue, nonprofit organizations have lately been challenged by the entrance of for profit businesses into many traditional nonprofit areas, such as social services, higher education, and hospitals (Salamon, 2012). As a result, nonprofit organizations are facing increasing scrutiny from donors to articulate the value of the nonprofit model over the for-profit model as well as having to be more efficient and prove their effectiveness to maintain their relevance and resources.

Board size, organizational size and organizational age can also be seen as a result of resource dependency theory; larger boards would allow the organization to achieve more external resources while smaller boards may inhibit an organization from obtaining necessary resources (Ning et al., 2010; Pfeffer & Salancik, 2003). More established, i.e. older and/or larger, organizations are likely to have more connections in the community and be viewed as legitimate community partners and therefore have access to more resources for the organization than a newer, younger organization.(Singh et al., 1986). Although, it should be acknowledged that quality of directors, i.e. those with many external linkages and ability to garner resources, is also of great importance (Hillman, Withers, & Collins, 2009). Specifically, Pfeffer and Salanic (2003) argue that the primary purpose of the board is to provide links, and therefore resources and stabilization, to external organizations (p.169). Based on this theory, we would expect

failing organizations to be smaller and younger and to have smaller boards that were not able to secure external resources or provide stabilization needed for organizational survival and successful organizations to be older, larger, and have larger boards (Mwenja & Lewis, 2009).

Resource dependency theory posits that the ability to garner and acquire resources is of utmost importance to an organization. For this study, the inclusion of the independent variables—sufficient equity, administrative costs and operating margin—are supported by resource dependency theory.

Resource dependency theory and institutional theory complement each other and, in some cases, provide dual support for the inclusion of particular independent variables in this study. Together, both institutional and resource dependency theory support the inclusion of board size, number of independent board members, and if the organization recently underwent significant program or service changes.

As mentioned in the literature review as well, the liability of newness can be boiled down to three main factors: lack of stability, lack of resources and lack of social approval or social capital (Baum & Oliver, 1991). Lack of resources is clearly underpinned by resource dependency theory and lack of social approval or capital is clearly underpinned by institutional theory. Lack of stability could be argued to be a result of the lack of both social capital and resources.

### **Institutional Theory**

Organizations do not exist in a vacuum, but instead are products of and at the mercy of varying forces in the surrounding external environment. Organizations can work to control how those external environmental forces impact them, but they cannot eliminate them. How the external environment interacts and affects an organization is the basis for institutional theory.



As John Donne said in the seventeenth century, “no man is an island entire of itself.” This is also true of organizations and a primary tenant of institutional theory. Organizations are a product of their environment and are not purely self-determined. For nonprofit organizations, this environment includes the community in which the nonprofit organization operates, the funders and other stakeholders working with the organization, the local, state and federal governmental partners, restrictions and rules, as well as many other external forces all organizations face. Organizations may control how they react to external environmental factors, but they cannot control external environmental factors. Institutional theory stresses that each of these different external forces can be used to explain organizational death and survival (Feeney, 1997).

Although institutional theory has existed for years, it was the publishing of *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields* by Paul Dimaggio and Walter Powell in 1983 brought it back to the forefront in the discussion organizational change. In the article, Dimaggio and Powell (1983) suggest there are three specific external mechanisms in which change can be affected on an organization. First, coercive mechanisms- that is pressure from external organizations upon which an organization is dependent- for example, a new governmental mandate or reporting requirements tied to funding imposed by a significant donor. Second, memetic mechanisms are seen when an organization attempts to mimic other organizations viewed as legitimate- for example, when starting a new line of service, a nonprofit organization may model its new services after a researched and proven method rather than starting their own service model and method. The third mechanism is normative- that is the establishing of expectations and rules that a specific group must abide by to be considered legitimate. This has been seen in nonprofit organizations recently as the trend

towards professionalization, highlighted by Salomon (2012), with the drive to outcomes, benchmarks, accountability and data driven activities for nonprofit organizations and increasing tied to the awarding grants and funding streams.

The normative mechanism is often the most salient one for nonprofit organizations. Galaskiewicz and Bielefeld (1998) suggest the bestowing of social legitimacy by conforming to social mores and norms is of vital importance to the survival of nonprofit organizations. Nonprofit organizations attempt to signal conformance to the accepted norms of the external environment in a variety of ways in an effort to garner resources and to then be viewed as legitimate. Some signals of legitimacy for a nonprofit organization would be receiving grants or government contracts or an annual independent audit.

As an organization aligns less with the accepted and expected environmental expectations, one might expect to see board members resigning and people less willing to be associated with the organization or decline in revenues as less donors are willing to signal acceptance of the organization by giving donations. Singh et al. (1986) found support for this in their study when they found that nonprofit organizations with larger boards had significantly lower death rates than those with smaller boards. Ultimately, the authors made the conclusion that a larger board of directors provided a signal of legitimacy to the community that, in turn, allowed it to survive.

Cornforth (2014) suggests institutional theory can also help explain mission drift amongst social enterprise organizations, including nonprofit organizations. Cornforth suggests external pressures on an organization to diversify and increase revenue and provide self-sustainment may contribute to mission drift in nonprofit organizations. Put another way, as the pressure to secure funding increases, organizations may be more likely to stray from their core skills and mission in

an effort to secure funding- any funding- and thus cause the resulting mission drift. This can be seen in nonprofit organizations that undergo significant program changes or operate an unrelated business. Often time both of these efforts are driven by the effort to attract more resources and funding. In these cases, nonprofit organizations may lose focus on their original mission or delve into territory in which they have no expertise as they seek to bolster revenue. As an organization undertakes significant program changes, it must be aware that regardless of overall organizational age, the issues that are seen in organizations suffering from the liability of newness may begin to arise again. Lack of expertise and knowledge in a new field for this new venture may handicap the change and ultimately cause more problems than they solve. These attempts often result in failure as the organization is not focusing on its core skills and wastes valuable and finite resources on this new venture.

Coercive mechanisms may also influence nonprofit organizations. For example, federal grants require organizations receiving over \$750,000 annually in federal funding to undergo an annual financial audit. Some funders may require audits in reporting regardless of the organizational size. As an organization grows and broadens its revenue streams, there may be more obligatory requirements imposed by funders. This can result in increased administrative costs to manage the varied funding requirements (Cornforth, 2014).

Institutional theory puts forward the idea that organizations are acted upon by their external environment and they then chose how to react to those factors. For this study, institutional theory supports the inclusion of unrelated business income, board size and number of independent board members as well as the presence of an independent financial audit as independent variables.

## Hypotheses

The hypotheses below are derived from institutional theory and resource dependency theory as described above. See Table 3 for categorization of each variable in relation to which theory supports its inclusion in this dissertation. Note that some variables may be supported by both resource dependency theory as well as institutional theory. In addition, some variables may be considered both governance and financial, but for purposes of this study independent variables have only been included in one category.

Based on the literature and theories presented, the expectation is that failed nonprofit organizations exhibit more concentrated revenue, less equity and lower operating margin than successful organizations.

**H1:** Financial indicators for failed nonprofit organizations differ from those of sustainable nonprofit organizations.

H1A: Failed nonprofit organizations will exhibit significantly less sufficient equity than successful nonprofit organizations.

H1B: Failed nonprofit organizations will exhibit significantly lower operating margin than successful nonprofit organizations.

H1C: Failed nonprofit organizations will exhibit significantly more concentrated revenue than successful nonprofit organizations.

Based on the literature and theories reviewed the expectation is that failed organizations report fewer board members, fewer independent board members and will not provide audited financial statements. In addition, failed nonprofit organizations undergo significant changes or reported unrelated business income more often than successful nonprofit organizations.

**H2:** Governance indicators for failed nonprofit organizations differ from those of sustainable nonprofit organizations.

H2A: Failed nonprofit organizations will exhibit significantly less board members than successful nonprofit organizations.

H2B: Failed nonprofit organizations will exhibit significantly less independent board members than successful nonprofit organizations.

H2C: Failed nonprofit organizations are less likely to provide audited financial statements than successful nonprofit organizations.

H2D: Failed nonprofit organizations are more likely have undergone significant organizational changes in the period preceding failure than successful nonprofit organizations.

H2E: Failed nonprofit organizations are more likely have reported Unrelated Business Income (UBI) in the period preceding failure than successful nonprofit organizations.

H2F: Failed nonprofit organizations are more likely have reported significantly more admin costs (reported as a % of revenue) than successful nonprofit organizations.

Rooted in both institutional and resource dependency theories is the ability for an organization to garner resources. As a nonprofit organization loses community support, it may be harder to recruit independent board members and the donor base may also be shrinking, causing the organization to spend any reserve it may have to continue operations. Based on this, it is expected that failed nonprofit organizations exhibit a decline in board members, a decline in independent board members, deteriorating operating margin, lowering equity and eroding operating margins in the three years preceding failure.

**H3:** Failed nonprofit organizations will exhibit deteriorating governance and financial factors in the years preceding closure.

H3A: Failed nonprofit organizations will exhibit a decline in sufficient equity in the years preceding closure.

H3B: Failed nonprofit organizations will exhibit a decrease of operating margin in the years preceding closure.

H3C: Failed nonprofit organizations will exhibit a higher revenue concentration in the years preceding closure

H3D: Failed nonprofit organizations will exhibit a decline in the number of reported board members in the years preceding closure

H3E: Failed nonprofit organizations will exhibit a decline in the number of reported independent board members in the years preceding closure

## METHODOLOGY

### Research Overview

Nonprofit organizations, like businesses, succeed and fail. Many donors and nonprofit managers and other community stakeholders would be interested in understanding if there are specific financial or governance indicators that may predict nonprofit failure. The reason for failure of nonprofit organization is neither well studied nor well understood. The primary research questions of this study seek to begin closing that gap:

- Are there financial indicators for failed nonprofit organizations that differ from those of sustainable nonprofit organizations?
- Are there governance indicators for failed nonprofit organizations that differ from those of sustainable nonprofit organizations?
- Do failed nonprofit organizations exhibit deteriorating governance and financial factors in the years preceding closure?

The primary reason this research is different and unique is that it will be looking at organizations that have failed, i.e. ceased operations, both on their own and in comparison, to active organizations. The research seeks to empirically confirm or reject specifically identified risk factors as relating to failed nonprofit organizations rather than all nonprofit organizations.

The research looking at failed or closed organizations is sparse. This research acts as a confirmation or repudiation for much of the research about nonprofit failure in that it takes nonprofit organizations known to have failed and assesses the specific metrics outlined.

This is a quantitative, correlational, non-experimental designed study that seeks to find a pattern in the information filed in the Form 990 for both successful and failed nonprofit

organizations. These factors will then allow trends to be identified in the three years preceding organizational death in nonprofit organizations that have died and confirm those trends via regression and t tests as significant factors in the success or failure of nonprofit organizations.

## **Data Collection**

This research uses secondary data obtained from the IRS Form 990. The data in the master files for 2014 and 2016 are cross referenced to identify closed organizations that had primary addresses in the Mid-Atlantic region of the United States, specifically the Commonwealth of Virginia, District of Columbia, Maryland, Pennsylvania, Delaware, New Jersey and New York.

First, the IRS master data files as of August 2016 and June 2014 are downloaded from the project data warehouse maintained by the National Center for Charitable Statistics (NCCS). The lists are compared to identify the organizations that were approved and active in the 2014 file but are no longer active in the 2016 file. The organizations identified are assumed to no longer be operating and compile the initial sample of failed organizations.

Organizations are identified by unique Employer Identification Numbers (EIN); therefore, a quick check is run to ensure there are no duplicate entries. No duplicates were found in this review. Once the EIN of each org has been identified, the Form 990 information was retrieved using various tools that store and show Form 990 information, including Charity Navigator, Open 990, GuideStar, and in a few cases, the organization's own website. Each organization was also confirmed to be no longer operating with a search of the Form 990 to confirm termination and disposition of assets or an internet search to see if the organization



continue to operate was done. All organizations were confirmed to have ceased operations and no longer active

Ultimately a total of 102 organizations were identified that met all the criteria below:

1. Address in one of the identified states
2. Was active in 2014 IRS master file but not 2016 IRS master file
3. Filed Form 990 (not 990PF, 990EZ or 990N)
4. Had three consecutive years of filed Form 990s before cessation of operations.

In some cases, the final Form 990 filed was the year of closure and included full disposition of assets, thus ending with a 0 balance in assets and little useful information. In those cases, this last year of data was excluded and the data for 2013 was pulled instead to provide three years of data for analysis.

Once organizations that are no longer considered active by the IRS are identified, the mission stated in the Form 990 is reviewed to assess if the reason for closure is related to completion of mission. Those organizations whose stated missions could have been completed or were for a specific event or time are then excluded from the study. For example, a nonprofit organization may have been created for the promotion and a specific historic anniversary. Once that event has passed, the cessation of the nonprofit organization would not be considered a failure, but a completion of mission, and would thus be excluded from the study. Of the 102 organizations in the sample of failed organizations, only one closed due to an obvious completion of mission. In reviewing the data, two of the organizations incorrectly filed Form 990 but rather should have been filing Form 990 PF. Based on this info, a total of three organizations were excluded from the final sample, leaving a total of 99 organizations in the study.

The data from both the failed and successful groups was compiled and coded to load into Stata. Successful organizations were coded with “0” and failed organizations were coded with “1”. In all cases of nominal (Yes/No) data points, “0” was entered to represent a “yes” and “1” was entered to represent a “no”. Specifically, the independent variables relating to unrelated business income and if the organization reported significant changes in the past year are nominal yes/no responses. For the audit variable in addition to the responses of Yes and No, a third one was also included which represented when financials had been reviewed but not audited by a financial professional. When the response for this variable was that the audit was reviewed but there was no formal audit, a two was entered to represent the response. Note that the values for this coding are not ordinal, but are instead nominal.

The mix of organizations by NTEE code, state, and revenue are shown below in Tables, 1 and 2 below. Table 3 below shows a summary of the coding for each variable as well as descriptive statistics for each variable.

Table 1

*NTEE Code detail: Failed Organizations*

<b>NTEE Code</b>		
A	Arts and Culture	6
B	Education	17
C	Environment	2
D	Animal Related	2
E	Health Care	23
F	Mental Health & Crisis Intervention	3
	Voluntary Health Associations & Medical	
G	Disciplines	6
I	Crime and Legal related	1
J	Employment	2
L	Housing & Shelter	8
N	Recreation & Sports	2
P	Human Services	13
Q	International, Foreign Affairs & National Security	2
R	Civil Rights, Social Action & Advocacy	4
S	Community Improvement & Capacity Building	1
T	Philanthropy, Voluntarism, & Grantmaking	2
U	Science and Technology	5
		<hr/>
		99

Table 2

*Detail by State and Revenue: Failed Organizations*

<b>State</b>		<b>Revenue</b>	
DC	4	\$0-\$99,999	22
DE	2	\$100,000- \$299,999	15
MD	13	\$300,000-\$499,999	7
NJ	14	\$500,000-\$999,999	9
NY	23	\$1M- \$1.999M	14
PA	25	\$2M-\$2.99M	10
VA	18	\$4M -\$9.99M	8
	<hr/>		
	99	\$10M+	14
		<hr/>	<hr/>
			99

Table 3

## Descriptive Statistics

Variable	Year 1											
	Successful Organizations				Failed Organizations				All Organizations			
	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation
Sufficient Equity	(14.90)	405.80	9.26	47.60	(3.66)	163.00	4.24	16.96	(14.90)	405.80	6.75	35.73
Admin Costs	0%	100%	20%	21%	0%	100%	23%	25%	0%	100%	21%	23%
Unrelated Business Income	0	1	0.92	0.27	-	1	0.96	0.20	-	1	0.94	0.24
Operating Margin	-1507%	99%	-34%	210%	-415%	102%	-9%	74%	-1507%	102%	-22%	157%
Revenue Concentration	34%	304%	82%	32%	0%	123%	82%	22%	0%	304%	82%	27%
Board Size	-	58	10.96	8.32	1	64	12.60	9.92	-	64	11.78	9.17
Changes	0	1	0.97	0.17	-	1	0.96	0.20	-	1	0.96	0.19
Audit	0	2	0.46	0.67	-	2	0.42	0.64	-	2	0.44	0.66
Independent Members	-	48	9.98	8.09	-	64	11.66	10.08	-	64	10.82	9.15

Variable	Year 2											
	Successful Organizations				Failed Organizations				All Organizations			
	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation
Sufficient Equity	(84.01)	359.82	6.50	37.59	(3.99)	82.73	3.68	10.70	(84.01)	359.82	5.09	27.60
Admin Costs	0%	100%	17%	18%	-44%	277%	26%	36%	-44%	277%	21%	29%
Unrelated Business Income	-	1	0.91	0.29	-	1	0.97	0.17	-	1	0.94	0.24
Operating Margin	-5056%	319%	-54%	514%	-66925%	128%	-728%	6725%	-66925%	319%	-391%	4769%
Revenue Concentration	36%	105%	77%	21%	0%	259%	85%	31%	0%	259%	81%	27%
Board Size	-	58	10.64	8.40	-	65	12.22	9.95	-	65	11.43	9.22
Changes	-	1	0.99	0.10	-	1	0.94	0.24	-	1	0.96	0.19
Audit	-	2	0.56	0.75	-	2	0.55	0.67	-	2	0.55	0.71
Independent Members	-	52	9.74	8.37	-	65	11.09	10.07	-	65	10.41	9.26

Variable	Year 3											
	Successful Organizations				Failed Organizations				All Organizations			
	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation
Sufficient Equity	(27.98)	38.03	3.61	7.83	(4.71)	152.81	3.64	18.34	(27.98)	152.81	3.63	14.06
Admin Costs	0%	122%	18%	20%	0%	100%	24%	27%	0%	122%	21%	24%
Unrelated Business Income	-	1	0.91	0.29	-	1	0.95	0.22	-	1	0.93	0.26
Operating Margin	-962%	94%	-5%	104%	-609028%	1041%	-8096%	63760%	-609028%	1041%	-4050%	45153%
Revenue Concentration	15%	151%	78%	24%	0%	1398%	107%	157%	0%	1398%	93%	113%
Board Size	2	59	10.94	8.57	-	59	11.60	9.16	-	59	11.27	8.86
Changes	-	1	0.99	0.10	-	1	0.77	0.43	-	1	0.88	0.33
Audit	-	2	0.56	0.77	-	2	0.59	0.62	-	2	0.57	0.70
Independent Members	-	53	10.00	8.59	-	59	10.34	9.18	-	59	10.17	8.87

Variable	Average of all years											
	Successful Organizations				Failed Organizations				All Organizations			
	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation
Sufficient Equity	(84.01)	405.80	6.46	35.26	(4.71)	163.00	3.85	15.64	(84.01)	405.80	5.15	27.28
Admin Costs	0%	122%	18%	20%	-44%	277%	24%	30%	-44%	277%	21%	25%
Unrelated Business Income	-	1	0.91	0.28	-	1	0.96	0.20	-	1	0.94	0.24
Operating Margin	-5056%	319%	-31%	325%	-609028%	1041%	-2944%	37072%	-609028%	1041%	-1488%	26233%
Revenue Concentration	15%	304%	79%	26%	0%	1398%	91%	94%	0%	1398%	85%	69%
Board Size	-	59	10.85	8.41	-	65	12.14	9.66	-	65	11.49	9.07
Changes	-	1	0.98	0.13	-	1	0.89	0.32	-	1	0.94	0.25
Audit	-	2	0.53	0.73	-	2	0.52	0.65	-	2	0.52	0.69
Independent Members	-	53	9.91	8.32	-	65	11.03	9.77	-	65	10.47	9.09

It is expected that nonprofit organizations that close for reasons other than mission completion exhibit negative financial characteristics as well as governance practices that did not fit IRS recommended best practices suggestions in the years preceding closure and that they show significant differences in these factors when compared to successful nonprofit organizations. That is, nonprofit organizations that have closed are likely to have experienced degrading financial ratios that are commonly used to assess financial health. It is also expected that nonprofit organizations that closed for reasons other than mission completion exhibit governance characteristics that are not considered best practices in the years preceding closure.

A predictive model is used to understand the relationship, if any, between the financial and governance information filed in the years preceding closure, the independent variables, and the ultimate status of the operation of the nonprofit organization, the dependent variable. The unit of analysis for this study is the individual 501 (c) 3 tax-exempt organization with a primary address in one of the mid-Atlantic states.

The control group of successful organizations is pulled from the 2016 IRS master file specifically to match the NTEE code, state and revenue mix of the sample of failed organizations.

### **Operationalization of Variables**

The independent variables all relate to the financial health of the organization and the governance structure of the organizations. Specifically, the four measures postulated by Chang-Tuckman (2001) were included:

1. Sufficient Equity as defined by  $(\text{Assets less Liabilities})/\text{Revenue}$

2. Net operating margin measured as (Revenue less Expenses)/ Revenue
3. Concentration of revenue defined as the sum of the square of each percentage share of each line of revenue,
4. Levels of administrative costs, measured as administrative costs/total costs- note this variable can be considered financial or governance, so was grouped to governance for this study

As described above, in addition to finance, governance may often play a role in the success or failure of organizations. While the IRS does not recommend a specific nonprofit board size, it does caution that too small or too large boards may not serve the organizational needs well. The consensus on board size, for both nonprofit and for-profit organizations, is that there is no one optimal size (Coles, Daniel, & Naveen, 2008; de Andrés-Alonso, Azofra-Palenzuela, & Romero-Merino, 2009) .

Not all nonprofit organizations are required to undergo external audits by independent auditors. Those receiving more than \$750,000 in federal funds are required to have an external independent audit. However, the function of an external audit is to test controls and the representativeness of financial statements. There have been some studies that link higher financial reporting quality to independent audits (Garven, Beck, & Parsons, 2018). In addition, as referenced earlier, an independent audit can be a signal to external parties of legitimacy of the organizations.

Lastly, I was unable to find any research to link significant program changes to organizational failure. However, similar to the logic for both the liability of newness and the unrelated business income factor, when an organization reports that it has undergone significant program changes, it would be reasonable to assume there might be challenges associated with these changes that may put the organization at risk for failure. Specifically, the administration of

the new or changed programs may not have the expertise or infrastructure needed to successfully operate, causing an established organization to suffer from the same pitfalls new organizations may face and then fail or exhibit symptoms similar to mission drift that can also lead to failure. In addition, as cited earlier, Foster and Bradach (2005) report that very few nonprofits that venture into the unrelated business income area actually report profits, but instead end up losing money on those ventures.

Based on the above research, the following governance metrics are also included:

1. Number of voting members of the governing body
2. Number of independent voting members of the governing body
3. Obtaining independent audited financial statements
4. Significant program changes
5. Unrelated business income

Research has shown that young organizations have a higher likelihood of failure than older organizations (Hager et al., 2004; Singh et al., 1986). This is often attributed to the lack of experience and structure in newer organizations and has been tested across many fields including nonprofit organizations. This is often referred to as the liability of newness. In addition, the smaller organizations, as measured by revenue are also more likely to fail than larger organizations (Hager et al., 2004; Searing, 2015). In recognition of these factors, both age and size of organization are included as control variables.

The dependent variable is nonprofit organizations that have either failed or succeeded. For this research, a nonprofit will be considered as failed if it has ceased operations for a reason

other than mission completion. A nonprofit will be considered successful if it is over 5 years old and was open for at least 2 years post the data period.

Table 4 summarizes the independent, dependent and control variables:



Table 4

## Study Variables

Variable Type	Label	Definition	Source	Data Measurement	Type (Financial/Governance)	Theoretical Basis	Code
<b>Dependent Variable</b>							
Successful NPO	Org=0	NPO remains active and files required IRS reports	Listed in IRS master File	nominal: Y/N			
Failed NPO	Org=1	NPO no longer files IRS reports and has not closed due to mission completion	No longer listed in IRS master file	nominal: Y/N			
<b>Independent Variable</b>							
Sufficient Equity	SE	equity/revenue	Part 1 Line 20 less line 21; divided by line 12	ratio: percentage	Financial	RSD	
Admin Costs	AC	costs related to admin and fundraising of organization divided by total costs of the organization	Part 9 line 25 sum of column C and D form 990 divided by column A	ratio: percentage	Governance	RSD	
Unrelated Business Income	UB	Income from activity of exempt org not related to tax-exempt purpose	Part 1, line 7a of Form 990	nominal: Y/N	Governance	Institutional	0=Y 1=N
Operating Margin	OM	measure of profitability as defined by earnings less expenses divided by total earning	Part 1 line 12 less line 19 of Form 990	ratio: percentage	Financial	RSD	
Revenue Concentration	RC	% of revenue each stream is of total	sum of square of each percentage share of revenue from Part 1 lines 8 to 11 of Form 990	ratio: percentage	Financial	RSD	
Board Size	BS	Number of voting directors reported on Board	Part 1, Line 3 of Form 990	continuous: count	Governance	Institutional and RSD	
Changes	CH	Org made significant changes in programs or services in prior year	Part 3, question 3 of Form 990	nominal: Y/N	Governance	Institutional and RSD	0=Y 1=N
Audit	AU	Financials audited by independent accountant	Part 12 question 2 b of Form 990	nominal: 0,1,2	Governance	Institutional	0=Y 1=N 2=Reviewed
Independent Members	IM	Number of independent voting directors reported on Board	Part 1, Line 4 of Form 990	continuous: count	Governance	Institutional and RSD	
<b>Control Variable</b>							
Age	A	years active	Block L of Form 990	continuous; years			
Size	S	Revenue	Part 11, line 1 of Form 990	continuous: dollars			

## Research Design

The research design used in this study is a quantitative, correlational, and nonexperimental design. Three different analyses are completed in this research. First, logit regression analysis is conducted to understand if the financial and governance factors identified can help predict failure of nonprofit organizations. Second, a two-sample t test will look at both the successful and failed organizations to assess for differences in the studied factors. Lastly, a one sample t test will look at only the failed organizations and assess the identified financial and governance factors for significant changes in the years preceding closure.

The sample of failed nonprofit organizations is first identified by cross referencing the IRS Master Data file as of August 2016 with the IRS Master Data file as of June 2014. The file was restricted to 501c (3) organizations. From here, only organizations that file the Form 990, were included in the search. Organizations filing the 990PF (private foundation), 990N (e-Postcard, revenue under \$50K) are unlikely to add value to this study. Those that file 990PF are private foundations and are likely to have few independent board members and concentrated revenue. Organizations that file a 990N have revenues less than \$50,000. Ultimately those that filed a Form 990 EZ were also excluded as so few organizations. Form 990EZ is filed by organizations with revenue of less than \$200,000 and assets of less than \$500,000. These organizations, while important to the nonprofit ecosystem are often not as professional and are therefore excluded from this study. Lastly, because the analysis requires multiple years of filing, organizations that had not filed a Form 990 for three consecutive years before ceasing operations were also excluded.

Those organizations in the June 2014 file but not the August 2016 file are assumed to have ceased operations. This group will be restricted to nonprofit organizations that have primary

addresses in Mid-Atlantic region which includes the Commonwealth of Virginia, District of Columbia, Delaware, Pennsylvania, New York New Jersey and Maryland and then categorized by National Taxonomy of Exempt Entities (NTEE) code. Those that were no longer in the Master Data file and had three years of Form 990s filed with the IRS were investigated. A simple assessment of the mission of the closed organizations was then done to assess if it was possible that the identified organization closed due to mission completion. This was completed by reading the mission listed in the Form 990 or visiting the organization's website.

Once the sample of failed nonprofit organizations has been identified, a sample of successful nonprofit organizations that are similar in mix (size, state, NTEE code) are randomly selected from the current IRS master file. Each relevant IRS master exemption file by state was downloaded, then filtered to include only 501(c)3 organizations, then filtered on NTEE code and size. A random number generator was then used to prompt which of the resulting organizations to choose. Upon investigation, 29 of the selected successful organizations did not file three years of 990 data- many had filed a mix of 990 and 990EZ forms and one was misclassified and was a 501(c)5. These orgs were sorted by state and NTEE code and replacement orgs were pulled from the IRS master file in the same way as previously described. In a few instances, specifically those with low revenue, there were few organizations that had filed 990s for three years.

The control group of successful organizations is important to ensure any patterns found in the failed group are not patterns in the overall nonprofit industry. For example, if failed nonprofit organizations show a decrease in revenue in the years preceding closure, but we see the same trend in a majority of successful nonprofits, the conclusion cannot be drawn that one precedes the other. The decrease in revenue paired with another factor may predict failure, but

the decrease in revenue alone is possibly a trend of the entire industry due to environmental pressures.

Because the dependent variable is not continuous nor are all the independent variables, the ordinary least squares method of regression cannot be used. Therefore, once the groups are established, binary logistic regression and other analysis are run to assess the relationship between the independent and dependent variables. Binary logistic regression estimates the probability that the dependent variable, in this case, the nonprofit organization, belongs to either the successful or the failed group. The failed group is considered to be 1 while the successful group is considered to be 0 for this research. The coefficients will then be examined and transformed via logarithmic transformations. Ultimately, the regression will enable us to estimate the probability of a nonprofit organization being either successful or failed based on the independent variables (Hair, Black, Babin, & Anderson, 2010).

While the probit model would also be appropriate due to the dichotomous nature of the variables, in this research the logit model method has been selected for analysis primarily because it is easier to interpret and to apply to the data at hand.

Multicollinearity may be an issue with this study and the variables will be tested for this issue by calculating the variance inflation factor (VIF). The VIF is defined as the amount of variability of the independent variables that is not explained by the other independent variables. Variables with VIF of more than 10 will be assessed for multicollinearity (Acock, 2016). Variables identified as multicollinear will be assessed against the theoretical basis for the study and the decision to include or exclude the variables will be addressed in the results section.

The equation for this analysis is:

$$\text{Logit}(p) = \log\left(\frac{p}{1-p}\right) =$$

$$B_0+(B_1*SE)+(B_2*AC)+(B_3*UB)+(B_4*OM)+(B_5*RC)+(B_6*BS)+(B_7*CH)+(B_8*AU)+(B_9*IM) \\ + (B_{10}*A)+(B_{11}*S)$$

A two-sample t test will also be used to assess H1 and H2 to determine if there is a significant difference between the means of the two groups, failed and successful nonprofit organizations. This test will assess if there is a difference between the means of the two groups- i.e. if there are significant differences relating to these factors between the two groups. The financial factors of sufficient equity (SE), operating margin (OM) and revenue concentration (RC) will each have an average value calculated for each organization based on the three years of data. The governance factors including board size (BS), number of independent members (IM) and administrative costs (AC) will also have an average calculated based on the three years of data. Each factor will use the average of the three years data as the value in the t test. Note that averages are used in this calculation. This was done because the goal of this analysis is to see if there are differences between the groups rather than if there are differences over time amongst each group. See Table 5 below to show the yearly average and total averages for both failed and successful organizations.

*Table 5*

*Board Size and Admin Costs, summary data*

	<b>Successful Organizations</b>				<b>Failed Organizations</b>			
	Year 1	Year 2	Year 3	Average	Year 1	Year 2	Year 3	Average
Board Size	10.96	10.64	10.94	10.85	12.6	12.22	11.57	12.13
Admin Costs	19.8%	16.7%	17.9%	18.1%	23.2%	25.9%	24.0%	24.4%

The three factors that are yes/no responses, specifically Changes (CH) Audit (AU) and Unrelated Business Income (UB) will use the final reported year response.

A one sample T test will be used to assess Hypothesis 3 to assess if there was a significant degradation of the independent variables over the final three years of operations in the failed organizations. Degradation is defined for each variable in the sub hypothesis. In this case a t test rather than a z test is being used as the population variance is unknown. For this test, the factors sufficient equity (SE), board size (BS), operating margin (OM) and revenue concentration (RC) will be assessed.

### **Research Limitations, Delimitations and Validity Concerns**

The research study focuses only on nonprofit organizations that have or had a primary address in the Mid Atlantic. Thus, the generalizability or external validity, of this research beyond this area is necessarily limited. In addition, only organizations that filed a Form 990 with the IRS for three consecutive years prior to closure considered. This excludes many churches that are not required to file Form 990 annually with the IRS as well as organizations that may exist but failed to file as required as well as those that are not required to file due to size. The research also covers a specific period of time, and thus, may not be representative or generalizable beyond that time frame due to economic or other factors.

The data gathered for this study are secondary, gleaned from the organizational filings with the IRS rather than the organizations themselves. The information in the Form 990 is not necessarily externally or internally validated in any way prior to filing. While organizations receiving over \$750,000 in federal funding annually are required to undergo an annual A133 audit by an external auditor, many nonprofits not reaching this threshold have not undergone external financial audits. Even so, there have been studies that have questioned the accuracy of audited financial statements as well (Wing, Hager, Rooney, & Pollack, 2004). In general, it must be recognized that the information filed with the IRS is likely to be inconsistent and have

inaccuracies and cannot be considered to be perfectly reflective of the population of nonprofit organizations and therefore necessarily introduce additional error or bias into the study that cannot be quantified or specifically identified.

Organizations can define their fiscal year in different ways. Some align with the calendar year, others do not. Not all organizations in the study used the same fiscal year, so comparison and extrapolation may be limited. However, the fiscal year periods will not vary more than nine months and will always have at least three months in common in all filings.

Criterion validity, or how well one measure predicts another measure is also a concern for this study, specifically the predictive validity of the model developed. How well one set of measures predict another- in this case financial information or governance actions in prediction of the closure of a nonprofit organization-is of concern. Many of these actions are related and may be difficult to determine causality or directionality based on presence or absence alone.

Lastly, the internal validity of the study may be at risk due to the inclusion of ten different independent and control variables. However, variables may be excluded going forward if not deemed significant to the model. In addition, each variable included in the initial model is supported by other research as an indicator or metric that can lead to success or failure of a nonprofit organization.

Delimitations exist based on the choices the researcher has made surrounding the project. In this case the research delimitations include the specific variables chosen to be included in this study and theories reviewed to support this research. It's possible there are many other variables that may also prove to be significantly different between sustainable and failed nonprofit organizations. These other variables may be supported by theories and studies not examined in this study.

## **Data Integrity**

In gathering the data, it became clear that the accuracy of the data provided on the IRS Form 990 may need to be further researched. In multiple cases in the failed group the response for the unrelated business income amount was the amount of revenue generated from investment income. In another case, an organization reported more independent board members than total board members. In addition, despite the divestment of significant assets or obvious actions towards closing of the organization, it was not uncommon to find the response to the question about significant program changes to be “no” suggesting there were no significant program changes occurring in the organization. In a few other cases, the wrong Form 990 was filed, or groups changed between filing Form 990 and Form 990 PF (private foundations) making it unclear what the correct reporting structure would be. While there has been some research on the validity of the data submitted by organizations in the IRS Form 990, based on the sample collected, it may be prudent to revisit this analysis to understand if the data presented on the revised IRS Form 990 continues to be reliable and accurate since there is no IRS or other external validation of the information prior or upon submission to the IRS.

The breakout of expenses into functional categories also appears to be a point of concern for data integrity. There are three functions the IRS requires expenses to be broken into: program services expenses, management and general expenses, and fundraising expenses. While this is intended to provide the reader of the statement with important information about the amount of funds going to programs and services versus overhead functions, there are no absolute, consistent guidelines on how to classify expenses into the three categories. It was not unusual to find an organization reporting no fundraising expenses while also showing contribution revenue. Currently, there are no Generally Accepted Accounting Principles



(GAAP) methods to accomplish the splitting of expenses. Instead, the splitting of expenses amongst the categories is left to management discretion (AICPA, 2018) Consequently, there a lack of consistency in how expenses are categorized across the nonprofit community.

In the total sample of failed and successful organizations (198 total orgs) 26 of them reported 0% administrative costs. Of these 26, half also reported revenue in the grants and contributions line. Mitchell (2017) suggests that the dual concepts of overhead minimization and fiscal leanness influence norms and may lead to the minimization of the reported administrative costs and the maximization of programmatic costs suggesting there may be an external factor incenting organizations to report as low as possible numbers in the administrative cost section.

While it may be possible for an organization to run with minimal administrative and fundraising expenses and still earn contribution and grant revenue it does not seem to be likely and makes the researcher question the validity of the functional splitting of the reported expenses. This pressure to manage ratios as reported in functional expenses has been noted in other research as well, specifically Krishnan and Yetman (2006), Keating, Parsons, and Roberts (2008) and Parsons, Pryor, and Roberts (2017). Further research into the splitting of costs between programmatic, fundraising and administrative buckets may be warranted to better understand this seeming incongruence.

Research by Froelich et al. (2000) suggests that, in general, the information on the Form 990 is reliable and consistent with the audited financial statements. However, that research was done prior to the revision and expansion of the Form 990 in 2008 to include questions related to governance. In addition, this research was specifically comparing Form 990 information to audited financial statement info- many of the new governance questions are not available in the audited financial statements. Gordon, Khumawala, Kraut, and Meade (2007) questioned the

reliability of the information in the Form 990 and compared Form 990 information to audited financial statement information for thirty-nine organizations. Their research suggests the data shows inconsistencies in “revenue and expense recognition, incongruities between reporting of gains and losses on investments and portfolio holdings, misstatement of functional expenses, discrepancies in disclosure of program services, and errors attributable to difference in IRS Form 990 rules and not for profit GAAP.” In addition, the researchers concluded that involvement of an outside CPA firm did not resolve the reporting problems discovered. However, this research focused on reporting periods ending prior to 2000, and as such, is dated and does not consider the revised Form 990 either.

Conversely and more recently, Gross and Neely (2014) did find that having a paid preparer complete the Form 990 resulted in “high quality” reporting as opposed to organizations that completed the Form 990 without the assistance of an outside CPA firm.

Still, based on the findings of this research paired with the dated Form 990 research, there does appear to be real concern about the ability of researchers to rely on Form 990 information to accurately and consistently represent the financial and governance situation of nonprofit organizations- both failed and successful. Future research opportunities may exist in comparing filed Form 990 information with the organizations audited financial paired with qualitative interviews on governance factors to confirm reported information. The IRS Form 990 is supposed to provide donors and other interested parties with important information relating to the operation of a nonprofit organization. At this time, based on prior research and the data gathered in this project, the value of the information being provided is not proven to fulfill that stated purpose. Unfortunately, the Form 990 is also the only source of information relating to financial and governance metrics that is widely available for analysis and review.

## RESULTS AND DISCUSSION

In total, each group of organizations (failed and successful nonprofit organizations) has ninety-nine observations for a period of three years. Below are the results of the three different statistical analysis.

### Regression Results

Before beginning logistic regression models, the independent variables are first assessed for multicollinearity. Multicollinearity occurs when independent variables are highly correlated with one another. To test for multicollinearity in this model, a Variance Inflation Factor (VIF) analysis was done. In general, a VIF score of 10 or lower suggests multicollinearity is not a problem amongst variables (Acock, 2016). In the first run of the VIF with all independent variables board size and number of independent board members prove to be highly correlated with VIF scores over 17. All other variables have VIF scores below two suggesting multicollinearity is not an issue for the other independent variables.

Only one of these variables can remain in the final model. Most research today deals with the number of board members rather than the number of independent board members. In reviewing the data, about 1/3 of the nonprofits included in this study (both failed and successful) reported a difference between number of board members and number of independent board members. Barring one outlier reporting none of its large board to be independent, the differences between number of board members and number of independent board members tended to be only one or two. Both board members and independent board members were supported by both theories- institutional and resource dependency theory as well. In reviewing the data and comparing the number of board members to the number of independent board members it is clear that most of the organizations in the sample, both failed and successful, have a small difference

between these two variables. On average, for all organizations in the study the difference between the number of board members and number of independent board members reported on the Form 990 is about one for all three years. The average board size for all organizations ranges from 11.8 to 11.3 while the average number of independent board members ranges from 10.8 to 10.2 across the three-year period of the study. Based on this review of the data, the fact that both factors were supported by both theories, and then paired with the lack of research on independent board members vs board size, the researcher opted to exclude the variable independent board members from the final model. See Table 6 below for the variance inflation factor information with and without the excluded variable.

*Table 6*

*Variable Inflation Factor (VIF) Results*

Variable	VIF	1/VIF	Variable	VIF	1/VIF
Board Size	17.62	0.056754	Board Size	1.1	0.909091
Independent Members	17.51	0.05711			
Size	1.26	0.793651	Size	1.2	0.833333
Unrelated Business Income	1.18	0.847458	Unrelated Business Income	1.18	0.847458
Age	1.13	0.884956	Age	1.12	0.892857
Admin Costs	1.08	0.925926	Admin Costs	1.08	0.925926
Audit	1.08	0.925926	Audit	1.08	0.925926
Changes	1.07	0.934579	Changes	1.07	0.934579
Sufficient Equity	1.06	0.943396	Sufficient Equity	1.06	0.943396
Revenue Concentration	1.05	0.952381	Revenue Concentration	1.05	0.952381
Operating Margin	1.01	0.990099	Operating Margin	1.01	0.990099
Mean VIF	4.09		Mean VIF	1.09	

Once the variables had been assessed and corrected for multicollinearity, logit regression was used to analyze the data and assess the hypothesis. All independent variables excluding the number of independent board members were run in one model. Ultimately, administrative costs, revenue concentration, unrelated business income, and significant organizational changes proved

to be significant at the .005 level. Sufficient equity is significant at the .10 level, but see forthcoming section discussing the issues with the confidence interval on this variable. Operating margin, board size and presence of an independent audit did not prove to be significant in the model. Table 7 below shows the results of the logistic regression.

*Table 7*

*Logistic regression results*

Log Likelihood = -365.863					Number of obs	592
					LR chi2 (11)	88.95
					prob > chi2	0
					Pseudo R2	0.1084
	Odds Ratio	Std. Error	z	P> z	95% Conf. Interval	
Sufficient Equity	0.9911739	0.0048075	(1.83)	0.07	0.98180	1.00064
Admin Costs	1.0152	0.0042094	3.64	0.00	1.00698	1.02348
Unrelated Business Income	2.531317	1.101142	2.13	0.03	1.07911	5.93780
Operating Margin	0.9997862	0.0002991	(0.07)	0.48	0.99920	1.00373
Revenue Concentration	1.011942	0.0036589	3.28	0.00	1.00480	1.01914
Board Size	1.012624	0.0103286	1.23	0.22	0.99258	1.03301
Changes	0.1470069	0.0755862	(3.73)	0.00	0.05366	0.40272
Audit	1.08517	0.1434892	0.62	0.54	0.83742	1.40621
Size	1	0.0000001	0.90	0.37	1.00000	1.00000
Age	1.019895	0.0043379	4.63	0.00	1.01143	1.02843
_cons	0.3578311	0.2583457	(1.42)	0.16	0.08692	1.47308

Odds ratio is the probability of an event happening divided by the probably of the event not happening. In general, the odds ratio greater than one suggest an increased likelihood of an event occurring while odds ratio of less than one suggest a decreased likelihood of an event occurring. The only two factors that show a strong odds likelihood are the presence of unrelated business income and the reporting of significant changes in the operations of the organization. Interestingly, these appear to move in opposite directions as one is greater than one and the other

is less than one. The results suggest that an organization reporting significant program changes is less likely to close than one that does not report such changes while an organization that reports unrelated business income is more likely to fail than one that does not report such income.

The other significant factors administrative costs and revenue concentration all have odds ratios slightly greater than one. This suggests that the unit of measurement may not be significant enough to effect change. Since all these units were measured in percentage, the results are at least consistent in suggesting that any one percent change is unlikely to affect the overall odds greatly. However, this does suggest that as these factors increase, the likelihood of an organization closing or failing also increases which conforms to the presented hypotheses.

Sufficient equity does provide interesting results. The odds ratio is slightly less than one- which is unexpected. This would suggest as sufficient equity increases, the likelihood of the organization failing also increased. However, note that the confidence interval for this variable crosses one, thereby suggesting there may be issues with this variable. For odds ratio, the value of one means there is no difference between groups. When the confidence interval crosses one for an odds ratio, it means there is not enough information to determine that the groups, in this case the successful and the failed nonprofit organizations, are different. Therefore, this variable should not be considered significant (Szumilas, 2010).

Note that age also resulted as a significant factor. The odds ratio for age is less than one which also suggests that as for each one year increase in age, the chances of the organization failing decrease. This confirms the “liability of newness” literature and theories that have been presented.

Note as well the confidence interval for all significant variables, other than presence of changes and unrelated business income is fairly small, as would be expected based on the sample size. The larger confidence intervals for the presence of changes and unrelated business income are not unexpected due to the small number of positive responses received for that question. Overall, those two questions appear to be the least consistently answered. As noted earlier, some organizations reported investment income as unrelated business income. Some organizations had obvious significant programmatic changes based on revenue streams but did not report significant program changes in the question on the Form 990. These two questions do not seem to be consistently answered by organizations and the data gathered from them should be used cautiously. Again, see concerns researcher has raised about some of the data points on the Form 990 and the accuracy of the responses for the more recently added governance questions.

Operating margin, presence of an external audit and board size all proved to be insignificant in all analysis. This was very surprising based on the prior research and theories presented. One reason for this could be the merging of related organizations mixed in with organizations that truly failed. As mentioned earlier, it does appear that some of the failures or closures were consolidations of related organizations and not truly part of the organizational life cycle. Excluding any organization that gifted its assets to a related organization could provide different results from those obtained in this study.

Another issue with operating margin relates to how nonprofits are required to report income and expenses to comply with Generally Accepted Accounting Principles (GAAP) as set by the Financial Accounting Standards Board (FASB). Based on current FASB direction, nonprofits must recognize revenue in the year it is gifted, even if the gift is restricted and is intended to establish an endowment in perpetuity or to be used over multiple years. This can

cause the calculated operating margin to significantly positively influenced in the year of the gift (higher revenue, less expenses, therefore higher operating margin) and in the years when the gift is used to be significantly negatively influenced (lower revenue, more expenses, therefore lower operating margin). Based on the information provided in the current Form 990 there is no way to extrapolate and match the revenue and expenses to the years in which they were used to adjust the operating margin.

### **Two Sample T Test**

Hypothesis 1 and 2 are seeking to understand if there is a relationship between failed and successful organizations in specific financial and governance factors. Another way to assess this would be using a two-sample t test to assess if there are differences between the means of the two groups in each factor. The governance factors include board size, independent member and administrative costs, administrative costs, reporting of changes and unrelated business income. For board size, administrative costs and independent board members, the average of the three observations was calculated and used as the reported average. For changes, audit and unrelated business income, the final year reported was used for the t test. In all cases, the null hypothesis is that there is no difference. For all governance factors except the reported changes, the null hypothesis failed to be rejected. Therefore, in all governance factors, except for the reporting of changes, there is no statistical difference between the means for the two groups.

Table 8 below shows the summary of the data for the governance factors and the t test results.



Table 8

*Summary of Data: Governance Factors*

	Failed Orgs			Successful Orgs			t test results P Value
	Min	Max	Average	Min	Max	Average	
Board Size (average of 3 years)	1	64	12.1	2	46	10.8	0.2101
Independent Members (average of 3 years)	0	64	11.03	0	46	9.9	0.1983
Admin Costs (average of 3 years)	0%	100%	24%	0%	122%	18%	0.296
	Yes	No	Review	Yes	No	Review	
Changes (final year)	24	75	N/A	1	98	N/A	0.000
Audit (final year)	48	37	14	55	27	17	0.7615
Unrelated Business Income (final year)	5	94	N/A	9	90	N/A	0.7021

Sufficient equity, operating margin and revenue concentration were also tested for differences between the averages using a two-sample t test. In all cases, the null hypothesis failed to reject. There are no statistical differences between the means of the two groups relating to financial factors. This may have to do with the fact that the data appears to be influenced by factors external to the individual organization being examined. The range of reported results for the financial factors, as shown below in Table 9 is not as expected. See section for discussion about researcher's concerns relating to the integrity of the data in general.

Table 9

*Summary of Data: Financial Factors*

	Failed Orgs			Successful			t test results P Value
	Min	Max	Average	Min	Max	Average	
Sufficient Equity (average of 3 years)	-3.87	112	3.85	-42.3	256.19	6.46	0.3246
Operating Margin (average of 3 years)	-20315%	327%	-2944%	-2398%	124%	-31%	0.2748
Revenue Concentration (average of 3 years)	0	507%	91%	37%	178%	79%	0.9979

## One Sample T Test Results

Hypothesis 3 suggests that four of the independent variables assessed, specifically number of board members, sufficient equity, revenue concentration and operating margin should show deterioration in the failed organizations in the final three years of operation.

Of the four variables assessed in this hypothesis, only revenue concentration is the only variable that rejects the null hypothesis. Since the hypothesis is that the metric deteriorates, or that revenue becomes less diverse and more concentrated as a nonprofit organization is in financial distress, the null hypothesis for all was based on the first year's average to then assess if the following years showed a deterioration from that first measure.

The revenue concentration for the failed groups does deteriorate- in this case, revenue becomes more concentrated in the years preceding closure. This outcome is supported by resource dependency theory as the organization is becoming less diverse in its revenue and more dependent on single streams of revenue and less able to respond to external changes that may affect those revenue streams. This may also be supported by institutional theory as the legitimacy of the organization in its final years may be in question in the community and also cause an increase in revenue concentration.

The other three variables, specifically sufficient equity, board size and operating margin did not significantly deteriorate in the final years of operating in the failed nonprofit organizations examined. This result might be the case due to the inconsistent reporting of the groups in the final years or the reporting issues previously discussed around recordation of restricted revenue and timing of expenses. See Table 10 below for results:

Table 10

*T Test Results*

Variable	t value	Year 1	
		average	p value
SE	-0.4258	4.24	0.34
BS	-0.8065	12.59	0.21
OM	-1.3687	-0.09	0.09
RC	16.6348	0.82	0.00

**Discussion**

This study was looking at financial and governance factors of nonprofit organizations in an effort to understand first, if there are differences in certain variables between failed and successful nonprofit organizations and second, to see if some of those variables show deterioration in the final years preceding closure. Ultimately, the results are mixed for this study. Revenue concentration appears to be an important factor to look at. Revenue concentration was significant in predicting if an organization would fail or succeed and it also proved to deteriorate in the final years of operations. In other words, organizations with more concentrated revenue were more likely to fail than those that succeeded and as the organization was in the final years of operation, revenue tended to be more concentrated and less diverse than in earlier years. While no overarching framework can be developed from the results, this one factor is clearly a significant factor in nonprofit organizational survival and should be a focus of management.

While this has been hypothesized and theorized, this is one of the few studies that has empirically proven this factor to be an important indicator of financial health for nonprofit organizations by confirming the issue in failed nonprofit organizations. This research bolsters the assessment that revenue concentration is indeed an indicator of financial vulnerability and should

be significant factor in management assessment of risk for any nonprofit organization. In addition, the variable of revenue concentration is supported by both resource dependency theory and institutional theory. Recall that garnering revenue from different sources can be a signal of legitimacy in the community, thus having a lower degree of revenue concentration i.e. a higher degree of revenue diversification, does indeed play an important role in the health and survival of nonprofit organizations.

When looking for differences between the two groups, the one factor that does appear to be significantly different between the two groups is the reporting of significant changes. Organizations that failed are more likely to have reported significant changes in the final year than those that did not. This does align with the original hypothesis that there would be a statistical difference between the two groups and is supported as well by the logistic regression results and theory previously discussed. Organizations that are failing and closing or in the process of closing are more likely to report significant changes to their operations than organizations that did not fail.

However, it is interesting to look specifically at the question about significant program changes between the failed and successful organizations. Almost one quarter of respondents in failed organizations reported significant changes on the form 990. However, only one successful organization reported significant programmatic changes. While this may be accurate, further research to understand the interpretation of this question might also be useful. It seems possible that that the interpretation of the question relates to negative or downsizing of programs and thus more failed organizations respond positively to this question than successful organizations. Ultimately, this question, like others in the 990 is left open to interpretation of the person

completing the form and thus they may provide difficulty to assess without a clear and consistent definition of what “significant programmatic changes” mean to all completing the form.

Sufficient equity was another surprising result. The confidence interval crossed one, suggesting the variable is not significant. This does not match with the proposed hypothesis or research. However, there may be a few reasons for this that could relate to nonprofit accounting methodology under General Accepted Accounting Principles (GAAP) and is discussed in the conclusion.

When trying to look at financial and governance factors to predict if an organization will fail or succeed, the most important factors appear to be revenue concentration, presence of organizational changes, presence of unrelated business income and administrative costs. Maintaining a diverse stream of revenues should be a primary focus for all nonprofit managers.

### **Reasons for Closure and Related Organizations**

Each organization that closed was confirmed to be closed and then assessed to understand if the closure was due to mission completion. Only one organization was found to have ceased operations due to mission completion. The specific organization found in this study was created to build a memorial to dogs that served in wartime. Once the memorial was completed, the organization ceased operations. This was the only organization in the sample that had clearly achieved its mission and ceased operations due to “problem depletion” as described by Levine (1978). Although this is essentially anecdotal, it is in direct conflict with the self-reported data in research by Hager et al. (2004) that as many as one fifth of organizations close due to mission completion. It is important to note that the one fifth number reported was self-reported and not

verified (Hager et al., 2004), Thus, its distinctly possible that the concept of “problem depletion” may vary from “we solved the problem in our area, to our liking” to “the problem we set to solve has been eradicated or completed.” As highlighted with the concept of significant program changes, without a common definition amongst the respondents, this will continue to be difficult to assess.

For this study, unless the mission of the organization was obviously fulfilled (as in the one organization established to build a specific monument) the problem is not considered depleted. For example, a school closing in this study was not assumed to be closed due to mission completion. However, if an executive of the school was interviewed, they may consider the mission of the school completed and time to close- thus accounting for the different classification of reasons for closure.

In gathering and reviewing the data, it was noted that about forty of the organizations that ceased operations had gifted their assets upon closure to a related organization of some type. For example, upon cessation of operations, a volunteer hospital auxiliary gifted its assets to the main hospital- it is unclear if the work of the hospital auxiliary ceased or if this was an effort of the related organization to “clean” up the number of related organizations it had. This type of closure and transfer was most common amongst hospitals and universities. It is possible excluding organizations that gifted assets to related organizations from the sample of failed organizations may be a future line of research that would then present different findings.

## CONCLUSIONS

This is one of the first empirical studies looking specifically at failed nonprofit organizations. The results are mixed, but they do confirm some of the research today around the financial factors. When looking at the differences between failed and successful organizations revenue concentration, presence of unrelated business income or programmatic changes appear to be significant differences. When looking at failed organizations, revenue concentration appears to deteriorate in the final years of operation significantly.

Resource dependency theory posits that the survival of an organization relies upon its ability to garner resources. Without these resources, the organization is not able to survive. Revenue concentration is the one variable that is significant in both the comparison and the review of only failed organizations and should be a closely watched variable. Diverse revenue streams as exhibited in the variable revenue concentration is an important factor in organizational survival as is having equity to help smooth things out in times of revenue difficulties. This result bolsters the research of others such as Greenlee and Trussel (2000), Chang and Tuckman (1991), and Hager (1999) by empirically proving this in a study that compares failed organizations with successful organizations.

Two of the financial factors surprisingly prove to not be significant- operating margin and sufficient equity. For both of these factors, there may be an accounting reason for this. Per the Financial Accounting Standards Board (FASB) statement 116 when a nonprofit receives a multiyear grant, they are to recognize the revenue immediately related to the entire grant and then recognize the expenses as incurred- even if over a different time period than the revenue. For example, if an organization received a two-year grant for \$100,000, they may incur expenses

of \$50,000 for 2 consecutive years. However, the financials will look like there is an excess of revenue over expenses of \$50,000 in year one, but a deficit of \$50,000 more in expenses than revenue in year two. As a result, the operating margin and equity calculated for both years will be skewed and not especially useful in assessing viability or financial vulnerability of a nonprofit organization.

The governance factors presented more mixed results than the financial factors. In this group of variables, administrative costs, significant organization changes and the presence of unrelated business income proved to be significant predictors of organizational success or failure while board size and having an independent audit did not.

Again, the significant results for administrative costs and unrelated business income bolster prior research on these topics. Specifically the significance of administrative costs relates to research done by Chang and Tuckman (1991) and the significance on unrelated business income relates to research done by Foster and Bradach (2005).

There was little research on what happens to an organization when it undergoes significant programmatic changes, but this is now a starting point. This model does suggest the “liability of newness” of a new idea or significant program change may introduce risk of failure to an organization. However, as also discussed earlier, the question itself does not appear to be answered consistently by organizations. The IRS would be well served to define the term “significant” more clearly to obtain consistent responses across organizations. Currently it is up to each organization’s interpretation of the term “significant” which makes analysis difficult.

There was not a statistical significance for board size as measured by number of board members. Based on the theoretical underpinnings, specifically resource dependency theory, this



is a surprising result. However, perhaps this suggests the need to look further into the make and tenure of board members rather than just the number. It's possible that it may take time for board members to develop the relationships needed to garner resources and therefore the tenure of board members or the connectedness of board members may be the more important factors to the success or failure of a nonprofit organization rather than simply the count of board members. Unfortunately, neither of these pieces of information are available on the IRS Form 990 or otherwise easily accessible for researchers to assess.

Nonprofit organizations, like for profit business, face many challenges to success and viability. Little is understood about why some nonprofit organizations succeed while others fail. Data on failed organizations has proven difficult to obtain as there is no comprehensive listing of organizations that existed but no longer do. Research to date has shown fragmented and conflicting results with little consensus on what factors may contribute to failure of a nonprofit organization.

This research examined financial and governance factors of failed and successful nonprofit organizations to further the understanding of why some nonprofit organizations fail why others succeed. The organizations were identified by looking at IRS master files over time and identifying organizations that were no longer considered active nonprofit organizations by the IRS. The data was gleaned from publicly available IRS Form 990s filed by the organizations.

Results on the logit regression confirmed the significance of revenue concentration, administrative costs, unrelated business income, and significant changes. In comparing the two groups (failed and successful nonprofit organizations) only the acknowledgement of significant programmatic changes appeared to be a significant difference between the groups. Within the

group of failed nonprofit organizations, only revenue concentration showed significant deterioration over the final three years of reporting.

Theoretically both institutional theory and resource dependency theory support the variables in this research. However, based on results, resource dependency theory appears to be the more relevant theory in understanding the differences between successful and failed nonprofit organizations. In the regression analysis, percentage of administrative costs, revenue concentration, and significant organizational changes - three of the four significant variables- were supported by resource dependency theory. In the one sample t test, looking only at the failed organizations, the only significant variable was revenue concentration, supported by resource dependency theory. In the two sample t test comparing the two groups, the only significant factor was the presence of significant programmatic changes which was supported by both institutional and resource dependency theory. Based on the results, while institutional theory is relevant, resource dependency theory appears to play a more significant role in helping to understand what factors may come into play in the success or failure of nonprofit organizations.

While there is potentially great value in understanding why some nonprofit organizations fail while others succeed, the data and resulting understanding has, thus far, proven elusive. The readily available information in the IRS Form 990 presents questions about its accuracy and reliability. This study does empirically confirm a few factors as being significant predictors of failure in nonprofit organization that previously had been identified as indicators of financial vulnerability, specifically unrelated business income, revenue concentration and significant programmatic changes. In addition, this study confirms that organizations that report significant programmatic changes on their Form 990 are more likely to fail than those that do not and that

failed organizations tend to exhibit an increase revenue concentration in the final years of operation of failed nonprofit organizations. While all these factors have been discussed in prior research, this is the first research to empirically confirm them as significant in nonprofit organizations known to have failed.

Ultimately, this is a starting point for future research. Further inquiry into this area should consider qualitative assessments of the failed organizations in addition to the review of available financial and governance information. It is likely the key to understanding nonprofit organizational demise lies somewhere between the quantitative and qualitative methods. The challenge, however, will be in engaging the leaders of failed nonprofits in the interview and research process. Although two decades old at this time, the research done by Hager et al., (1996) highlights the difficulties of locating contact persons related to closed organizations. Almost 30% of the identified organizations could not be located and another 5% refused to be interviewed- over one third of organizations targeted for their study could not be interviewed. Over the life of the study another 22% of the original population dropped out of the study. In the end, 50% of the closed organizations could not be studied. While the advent of the internet may make locating people related to organizations easier, it remains to be seen if they will participate in such studies to further the understanding of the field.

In addition, the IRS Form 990 data should be examined further, specifically the information submitted by failed nonprofit organizations. The Form 990 information is readily available and, as a result, often used in analysis relating to nonprofit organizations. While the data has been studied as a whole and has shown mixed results relating to accuracy, the specific subset of failed organizations and Form 990 info has not been studied nor have there been confirmation studies based on the much expanded and revised Form 990 introduced in 2008.

Based on the anecdotal evidence in this study, it may warrant review of the data against annual financial audit (when available) specifically for failed organizations.

### **Future Research Possibilities**

This research suggests a few areas for future study. First, the independent variable relating to independent board members was disregarded due to multicollinearity issues with the number of board members. Most research addresses board members size and does not necessarily address independent board members. However, it is included as a required field for reporting on the IRS Form 990, so it is deemed to have some level of importance to the reader of the data by the IRS. This is an area that is ripe for further research to understand if the independence of board members has an effect on some of the areas examined in this study. There is a lot of research on boards, but little of it has focused on the independence of boards.

Another area for further research has to do with board size. Based on theory and prior research, board size was expected to be a significant factor in the success or failure of nonprofit organizations. However, the logistic regression model found this factor to not be significant. Perhaps the board size is not the significant factor as much as the connectedness or tenure of the board that reflects its ability to secure resources for the organization. This would be an interesting line of inquiry to understand what factors of board membership impact success or failure of an organization.

As discussed in the results section, additional research into the accuracy and validity of the IRS Form 990 could also be explored. There is sparse research on the accuracy of the data and not much research to understand if the newer Form 990 is an accurate reflection of the actual

operations of the organizations. For example, understanding the different interpretations of the question about significant programmatic changes would be useful to both researchers and also potentially to the IRS to suggest re-wording or definitions for more consistent answers.

In general, research that focuses on failed organizations is lacking and has many possibilities for future research. Admittedly, there are hurdles to obtaining the information that have often prohibited further research into these organizations. It is hard to track down individuals willing to speak about a failed organization and even the conclusion that an organization failed can be a very emotional and touchy subject.

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## VITA

MacKenzie Arbogust graduated with a Ph.D. from the School of Public Service at Old Dominion University in Norfolk, Virginia in 2020. The School of Public Service is located in the Strome College of Business, Constant Hall, Norfolk, VA 23529. During her time at Old Dominion University she was selected to be a Simon Family endowed Scholar and was also selected to be a member of Pi Alpha Alpha, the global honor society for public affairs and administration. MacKenzie received her Master of Business Administration from the McDonough School of Business at Georgetown University in Washington DC in 2006 where she was a Connelly Scholar and a Bachelor of Science in Psychology from the College of William and Mary in Williamsburg, Virginia in 1999. She has worked in the nonprofit sector in roles from Director of Finance to Chief Financial Officer for the past fifteen years.