

Revenue Diversification in Nonprofit Organizations: A Quantitative Study of the Change
to American Nonprofit Revenue Streams after the Great Recession of 2008

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Abstract

Hundreds of thousands of nonprofit organizations exist in the United States of America, serving many diverse missions and populations. Utilizing a postpositivist world view and a before-after study (a kind of natural experiment), this research investigated the impact of the 2008 global financial collapse on American nonprofit organizations' revenue streams. The researcher collected revenue data from a random sample of American public charities' IRS Forms 990, pre- and post-2008, and statistically analyzed the data to determine if, on average, the recession affected earned income percentages of the participants. The data collected from these IRS Forms was examined using statistical calculations in IBM SPSS. The research indicated that nonprofits' earned income percentages did change post-2008; however, the research did not find predictive value regarding the impact to earned income percentages as compared to census region or revenue size. The lack of robust conclusions derived from this study indicate to the researcher that further investigation is necessary. Perhaps future work will include a more in-depth review of fewer organizations, with more traits in common (like similar missions, geographic location, and size). The findings of the current research may begin to inform future nonprofit executives of the kinds of effects that challenging economic times can have on their organizations, enabling them to be better prepared to manage and lead their institutions.

Keywords: Nonprofit organizations, revenue diversification, leadership, management, 2008 recession, financial administration

The author acknowledges this document was completed in the spirit of the Trinity Washington University policy regarding academic honesty.

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Introduction

While mission-driven organizations date back centuries, modern nonprofits in the United States of America have been providing for the public good for decades. Others emerge every year to innovatively address the needs of the nation. When these organizations fail, no matter the cause, many Americans must look elsewhere for education, cultural experiences, health and human services, as well as for life's most basic of needs: food, water, and shelter. Hall (2004) wrote,

It is difficult to generalize about what nonprofit organizations are, what they do, and how they do it. They vary enormously in scope and scale....their impact is so far-reaching—touching on every aspect of our lives and every level of institutions (p. 4).

With this in mind, understanding the impact of tough economic times and how nonprofit organizations and their executives navigate them has become ever more important.

Statement of the Problem

In 2008, the global economy slid into recession, the impact of which is still being felt by businesses and individuals worldwide. Nonprofit organizations were not immune to this financial crisis. Some were able to weather the economic storm, while others were forced to make drastic changes to their business models. Still others closed down all together. When nonprofit organizations cease to exist, all people suffer because there are fewer schools, museums, health clinics, homeless shelters, and food pantries to serve constituents who have nowhere else to turn.

While there are likely many reasons why nonprofits failed as a result of the 2008 global financial collapse, one possibility is nonprofits' overreliance on contributed income (donations). As Carroll and Stater (2008) suggested in their research, nonprofits with balanced revenue

streams that include contributed and earned income, are less volatile and therefore less susceptible to changing environmental forces. This study aims to investigate the hypothesis that recessionary forces caused nonprofits that survived the global financial collapse of 2008 to diversify their revenue streams. Understanding the existence (or lack thereof) of this phenomenon may provide information to nonprofit executives regarding how they can best prepare their organizations for future economic downturns.

Objective

The researcher's objective in this quantitative study was to investigate whether the revenue streams of nonprofit organizations, on average, experienced change as a result of the 2008 global recession. This study will help inform future nonprofit executives about the potential effects of changing economic forces on their organizations. This information may aid nonprofit executives in navigating through or preparing for future economic recessions when they inevitably occur.

Definition of Key Terms

Revenue diversification: Froelich (1999) defined revenue diversification for nonprofits by stating, "Nonprofit organizations must rely on a variety of activities and resource providers to support their mission-related work" (p. 247). For the purposes of this study, "variety of activities" will mean *contributed*, *earned*, and *investment* revenue streams.

Earned revenue: For the purposes of this research, earned income referred to all income of a nonprofit organization (including income derived from investing activities) other than that which is donated (restricted or unrestricted) to the organization. Earned income can include income derived from program fees, publications sales, advertising, and membership fees, and investments just to name a few (Carroll, D. A. & Stater, K. J., 2008).

Contributed revenue: For the purposes of this research, contributed revenue is defined as any income that is the result of a donation, whether it be restricted or unrestricted, to the nonprofit organization (Carroll, D. A. & Stater, K. J., 2008).

Research Question

The purpose of the following research question was to understand the impact of the 2008 global financial collapse on American nonprofit organizations, as it pertains to revenue diversification. This quantitative research study investigated the following question:

Research question one (RQ1)

Did the global financial collapse of 2008, on average, change American nonprofit organizations revenue streams?

Null hypothesis one (H_01):

The global financial collapse had no effect on the proportions of earned and contributed revenue, as compared to total revenue, of American nonprofit organizations.

Alternate hypothesis one (H_a1_a):

The global financial collapse of 2008 on average changed American nonprofit organizations' proportions of earned and contributed revenue, as compared to total revenue.

Design

This quantitative before-after study took the form of a natural experiment, which is a hybrid between an observational and experimental strategy. According to Remler and Van Ryzin (2015), "In a natural experiment, a researcher looks for and finds a naturally occurring situation in which the independent variable of interest just happens to be exogenous to the outcome (the dependent variable)" (p. 468). The researcher conducted this natural experiment

by using a before-after study approach, whereby nonprofit organizations' revenue data was examined before and after the global financial collapse of 2008.

For the purposes of this study, the independent variable was the global financial collapse of 2008. The nominal definition of the independent variable is profound global economic stress in 2008 indicated by increased levels of unemployment, devaluing of investment values, and reductions in spending by corporations and individuals. Operationally, this variable was measured by collecting and using participant organizations' data, before and after 2008, specifically from the years 2006, 2007, 2009, and 2010. The years 2006 and 2007 were selected to provide a baseline prior to the events of 2008. The years 2009 and 2010 were selected to isolate the nonprofits' true circumstances immediately following the events of 2008, thereby minimizing the effects of environmental forces and factors arising thereafter. By doing so, the researcher attempted to measure, as closely as possible, the impact of the 2008 events on the data.

The dependent variable is revenue diversification in American nonprofit organizations. For the purposes of this study, the researcher operationally defined revenue diversification as the mean earned income percentages, as compared to total revenue, of nonprofit organizations pre- and post-2008. The process to measure this is as follows: divide earned income by total income (for each year), sum the 2006 and 2007 quotients and sum the 2009 and 2010 quotients, then divide each by two; the results are the mean earned income percentages for pre-2008 and post-2008.

The control variables identified in this study included organizational location, competition, and organizational size within the nonprofit organizations included in the sample. Organizational locations were measured by assigning each organization to a census region, based

on the state in which it is located. The four census regions were Northeast (1), South (2), Midwest (3), and West (4). Figure three indicates which states were assigned to which region.

Additionally, organizational size was measured by its pre-2008 average total revenue, and was calculated by averaging 2006 and 2007's total revenue. Once that data was collected from the Guidestar website, average pre-2008 total revenue were assigned to groups one through five, based on revenue size. Group one contained organizations with pre-2008 average total revenue of \$0 - \$99,999.99; group two \$100,000 - \$999,999.99; group three \$1,000,000 - \$4,999,999.99; group four \$5,000,000 - \$9,999,999.99; and group five \$10,000,000 and above. The group designation represented this variable in the ANOVA test. Due to the limitations of the ANOVA test and the difficulty and subjectivity involved in calculating the final control variable, competition was not measured or considered in the statistical analysis of this study.

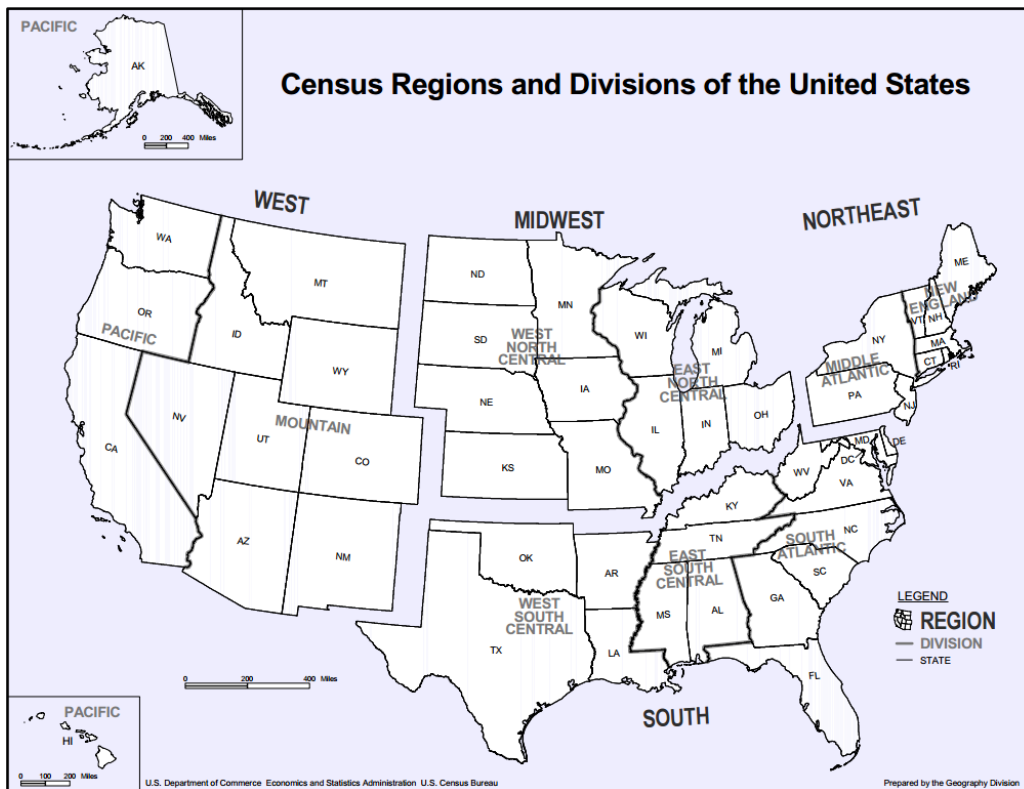


Figure 1. U.S. Census bureau regions map.

Participants

The setting for this study was the United States, which was appropriate as the researcher sought to understand how American nonprofits were affected by the global financial collapse of 2008. The population of this study was all American nonprofit organizations listed on the IRS.gov website and categorized as a Public Charity, as of November 18, 2015. All other IRS classifications were excluded from the population, as they may not be able to collect tax-exempt contributions from American donors. Using this population will ensure access to nonprofit organizations of all sizes and geographical locations, as well as organizations subject to variant levels of donor sophistication, competition, and financial volatility.

From this population of over 800,000 nonprofit organizations, the researcher utilized spreadsheet software to select a simple random sample defined by Remler and Van Ryzin (2015) as

Selecting people (or elements) from a population in such a way that each individual has an equal chance, or probability, of selection...simple random sampling involves assigning random numbers to people or units on a list and then sorting the list by the random number (p. 160).

In order to maintain a confidence level of 95% and a confidence interval of 5%, the researcher used a simple random sample of 384 nonprofit organizations for this study. Once the simple random sample was determined, the revenue data (2006, 2007, 2009 & 2010 earned and total revenue for each organization) was collected from the website www.GuideStar.org. This website is maintained by Guidestar (2016), a charitable organization that collects and retains historical financial data relating to American nonprofit organizations that is easy to locate and understand, as a public service.

Assumptions and Limitations

This quantitative study examined a random sample, drawn from all American public charities, and assessed whether the global financial collapse of 2008, on average, changed nonprofit revenue streams. The research initiated an inquiry into the impact of environmental economic stress on the nonprofit sector in general and the potential implications of that stress on nonprofit organizations' revenue models in particular.

The limitations of the quantitative study included that, as a before-after study, it was not performed in a lab and therefore did not account for other variables and factors that may have influenced the result. Additionally, utilizing an ANOVA test, though appropriate for this study, limits the researcher's ability to include competition as a control variable in the statistical analysis of the data collected.

Summary

Nonprofit organizations are vital to the social fabric of the United States. To that end, studying and understanding the impact that global financial crises can have on nonprofits should be of concern to all Americans. While this study only began the discussion, further research will aid nonprofit executives across the country in better managing their organizations and in preparing for challenging economic times. It is the hope of this researcher that more attention will be given to these and similar issues and that nonprofits will continue to flourish and serve their missions of feeding the hungry, healing the sick, providing education, arts, and culture, and in all other ways contributing to the public good.

Theory

In this chapter, the researcher describes the theory that the global financial collapse of 2008 on average changed American nonprofit organizations revenue streams. The researcher assumes a postpositivist worldview, which Creswell (2014) describes as “a deterministic philosophy in which causes probably determine effects or outcomes” (p. 7). A postpositive worldview is appropriate for this study because of the cause-and-effect relationship described in the theory. In order to accomplish this, the researcher conducted a before-after study, a kind of natural experiment, which Remler and Van Ryzin (2015) also call “one-group pretest-posttest design or just a pre-post comparison” (p. 478).

In this before-after study, the researcher observed what American nonprofits reported as contributed, earned, and total revenue on their 2007 and 2010 IRS Forms 990. The researcher will then measure the nonprofits’ revenue diversification by calculating the mean earned income percentages before and after 2008 and compare the results. Additionally, the researcher used an ANOVA test to determine the significance of the global collapse of 2008 on revenue diversification in American nonprofit organizations.

In the ensuing pages the researcher will provide the study’s theoretical perspective and framework, detailing its dependent, independent, and control variables. This study aimed to provide nonprofit executives with information about how the global financial collapse of 2008 affected nonprofits and in doing so potentially aid their ability to better lead their organizations in the future.

Theoretical Perspective

Historically, nonprofit organizations have provided for the public good for decades by feeding, housing, and clothing the economically challenged, bringing arts programs to children,

providing medicine and healthcare to the sick, and much more. For decades, nonprofit organizations have principally relied on donations, or contributed revenue, to fund these kinds of mission-driven activities. More recently, however, nonprofit organizations have started diversifying their revenue streams to include earned revenue (income from program fees, publications sales and advertising, and rent, just to name a few), as well as income derived from their investments or endowments.

Mastering the balance of these three revenue streams is often the regular task of nonprofit executives. Froelich (1999) stated, “In an ideal world, we might envision nonprofit organizations (NPOs) as collections of committed individuals that fervently pursue a cause” (p. 246). Froelich went on to say that, “we are troubled by the digressive efforts and peripheral activities associated with revenue-seeking behavior....Yet, these are...the facts of life for a nonprofit organization” (1999, p. 246).

Dart’s (2004) research corroborated this perspective. “Few would dispute that nonprofits are both being asked and required to be more business-like in their operation and attitude” (p. 290). Dart (2004) defined business-like activities as “characterized by some blend of profit motivation, the use of managerial and organization design tools developed in for-profit business settings, and broadly framed business thinking to structure and organize activity” (p. 294).

Researchers have spent countless hours and pages debating the phenomenon of revenue diversification in nonprofit institutions. Few, if any, have studied the impact that the global economic decline of 2008 has had on these shifting models. Understanding if the economic decline affected nonprofit revenue diversification and how prepared nonprofit organizations were able to respond to the new economic conditions, speaks to the sectors’ sustainability.

Just as for-profit organizations weather downturns or fail trying, nonprofits must navigate difficult times or cease to exist. Prentice (2015) wrote, “Ever-changing social, political, and economic forces affect the nonprofit sector, and a strong financial position is required to adapt to these forces” (p. 2). The consequences of losing nonprofits unable to adapt could be dire, as there is no governmental safety net to backfill the monumental tasks nonprofits undertake each day.

Amagoh (2015) suggested that through revenue diversification, nonprofit organizations improve their credibility and effectiveness. Amagoh (2015) wrote, “The changing socio-economic-political environment demands that nonprofits diversify their funding sources, which tend to be volatile....funding has implications for the ability to sustain...over the long run” (p. 230). Amagoh (2015) identified an emerging principle of nonprofit executives today: In order to better serve the mission of the organization over the long term, they must adapt revenue models that are less volatile and therefore more credible.

de Vericourt and Lobo (2009) furthered this idea, by theorizing that nonprofit organization leaders who aggressively price profit-driving program services are better able to serve their missions and sustain their organizations, either by conducting investing activities or by using those profits to offset mission-driven program services that are financial loss leaders. To this end, they asked the question: How do nonprofit leaders decide on resource allocation between mission-driven activities and profit-driven activities (that may help fund future mission-driven activities or sustain the organization in the long-term)? de Vericourt and Lobo concluded that “this policy allows the organization to have a higher expected social impact by serving more mission customers” (p. 1126).

Carroll and Stater (2008) investigated the effect of revenue diversification on the financial security of nonprofit organizations. In their article, the authors asserted that nonprofit organizations that increase revenue diversification, especially away from reliance on contributed revenue and towards earned revenue streams, become more stable over time. The research question they sought to address is as follows: “Can nonprofit organizations reduce their volatility by diversifying their revenue structures” (Carroll & Stater, 2008, p. 962).

Through regression analysis, Carroll and Stater (2008) found that increased revenue diversification led to a decrease in financial volatility within nonprofit organizations. Additionally, the authors were able to point specifically to a larger decrease in volatility for organizations that had relied heavily on contributed revenue, and now have diversified revenue, as opposed to organizations that had always had a mixed portfolio of contributed, earned, and investment revenue. The authors stated, “Overall, we find that revenue diversification does exhibit a significant influence over the volatility of revenue structures for nonprofit organizations....if a nonprofit actively diversified its revenue structure, the organization could expect an average reductions in revenue volatility over time” (Carroll & Stater, 2008, p. 964).

Theoretical Framework

Carroll and Stater (2008) found that “Nonprofits can indeed reduce their revenue volatility through diversification, particularly by equalizing their reliance on earned income, investments, and contributed income” (p. 947). With that in mind, this quantitative study sought to investigate the theory that volatility created by the global economic collapse of 2008 caused nonprofit organizations to diversify their revenue streams. For the purposes of this study, the following variables were examined:

Dependent variable

Nonprofit revenue diversification. Froelich (1999) defined revenue diversification for nonprofits by stating, “Nonprofit organizations must rely on a variety of activities and resource providers to support their mission-related work” (p. 247). For the purposes of this study, “variety of activities” meant contributed, earned, and investment revenue streams.

Independent variable one

Economic decline of 2008. Economic performance indicators all identify profound global economic stress in 2008. Some of these indicators included increased levels of unemployment, devaluing of investment values, and reductions in spending by corporations and individuals.

Control variable one

Location. Where the organization was located geographically in the United States.

Control variable two

Competition. Competition, for nonprofit organizations, relates to the number of other nonprofits servicing a similar mission. Additionally, it concerns the number of organizations vying for the same contributed dollars, regardless of mission.

Control variable three

Organization size. For the purposes of this research, organization size was measured by gross revenue.

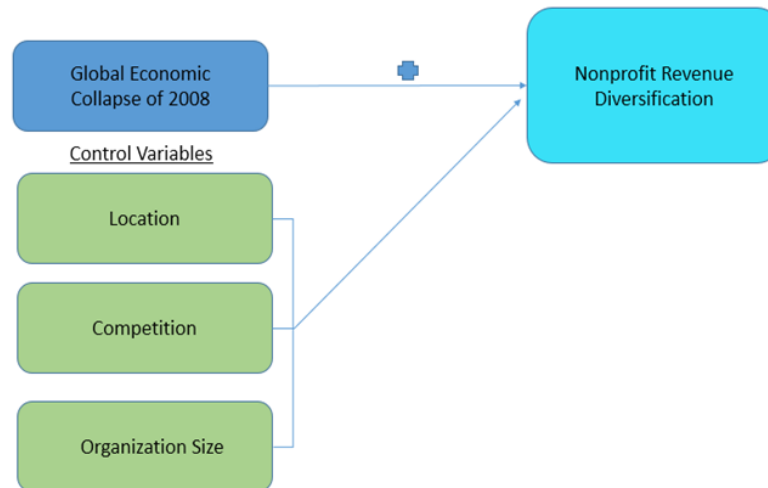


Figure 2. Model of theoretical framework: Nonprofit revenue diversification.

Summary

The decision by nonprofit executives to diversify revenue streams, in recent years, relates to their organizations' level of financial volatility and ability to adapt to changing environments. The preceding research looked specifically at organizations that have diversified revenue and the effects of that diversification before 2008.

Researchers have not addressed how the global economic collapse of 2008 affected nonprofit organizations, in terms of whether or not to reconsider their revenue models in light of the change in environmental circumstances. Additionally, a gap exists in the knowledge of whether or not a nonprofit's level of preparedness—including revenue diversification—has an effect on their ability to weather a downturn in the global economy.

These issues are vital to nonprofit executives and financial managers as they provide a gateway to better planning, preparation, and stability in their respective organizations. Nonprofits with decreased revenue volatility are better able to serve their missions for longer periods of time. This is of great significance to many people, as nonprofits provide monumental

services to society, which has no “back-up plan” to manage the fallout, should nonprofits close their doors.

Analysis

In this chapter, the researcher outlines the data analysis and strategy of our quantitative study of the impact of the global financial collapse of 2008 on revenue diversification in U.S. nonprofit organizations. As part of this discussion, the researcher describes the statistical analysis performed, identifies why specific tests were chosen over others, and indicates what can be learned from those tests in general. As indicated above, the investigation assumes a postpositivist worldview and takes the form of a natural experiment using a before-after study approach. Additionally, this chapter will describe the study's sample. The researcher will discuss how the sample was obtained and identify key features that emerged in the sample as a whole. Finally, this chapter will present the statistical results of the test performed.

Data Analysis and Strategy

The researcher took the straightforward approach in this quantitative before-after study's data analysis. Remler and Van Ryzin (2015) as "a basic comparison of means...and an appropriate significance test of the difference" (p. 479). These tests were appropriate because the independent variable, the global financial collapse of 2008, was a discrete or categorical variable, which Szafran (2012) defines as having "a finite and usually small number of attributes" (p. 12). Conversely, the dependent variable, revenue diversification in American nonprofit organizations, was a continuous variable defined as having "a large, theoretically infinite, number of attributes" (Szafran, 2012, p. 12).

In order to perform a comparison of the means, the researcher first calculated the pre-2008 and post-2008 mean earned revenue percentages, as described above. The researcher then completed a two-way ANOVA test comparing the change in earned revenue percentages between pre and post-2008, organizational location and organizational size.

An ANOVA test “reaches conclusions about differences in means among three or more populations” (Szafran, 2012, p. 340). The result of this test indicates “the probability of getting the sample result if the null hypothesis is true” (Szafran, 2012, p. 303). This study comports with Szafran’s (2012) further direction relating to the conclusions drawn from this result when he wrote, “we will not take on more than a 5% chance of making such an error. The probability must be .05 or less for us to reject the null hypothesis” (p. 303). To that end, the researcher will only reject the null hypothesis and issue a finding of statistical significance if the result of the two-way ANOVA test is .05 or less.

Additionally, understanding the F statistic or F ratio is necessary when interpreting the results of a two-way ANOVA test. Szafran (2012) describes the F ratio as,

A ratio of variances. The top number or numerator of the F ratio is an estimate of the variance in the population on the dependent variable using what is known as the “between groups” method of estimation. The bottom number or denominator of the F ratio is an alternative estimate of the variance in the population on the dependent variable using the “within-groups” method of estimation” (Szafran, 2012, p. 341).

With this in mind, when the populations that are being compared have similar means, the F statistic will be one or very near one. When the means vary, the F statistic will be greater than one.

In order to answer the research question, the researcher relied on the frequency with which organizations experienced changes in earned income percentages before and after 2008. The ANOVA test indicated whether or not revenue class and census region can be used to predict whether a nonprofit’s earned income percentage changes, after the global recession.

Sample

The population in the study, described above, consisted of 800,833 organizations listed as a public charity on the IRS's website. From that population, the researcher reviewed the financial data of 1,198 organizations, in order to attain a complete sample of 384 nonprofit organizations, which had adequate financial data pre and post-2008. The sample consisted of organizations located in 49 states and the District of Columbia. The only state not represented in the sample is Idaho. Organizations hailed from each of the census regions, with 117 (or 30.5%) from the South. The other three census regions (North, Midwest, and West) were represented, with distributions ranging from 22.1 – 30.5% (see Table 1).

Table 1. *Frequency: Census Region.*

	Frequency	%	Valid %	Cumulative %
	92	24	24	24
1	117	30.5	30.5	54.5
2	90	23.4	23.4	77.9
3	85	22.1	22.1	100
4				
Total	384	100.0	100.0	

The study's population represented organizations with as little as \$0 in pre-2008 average revenue to organizations with pre-2008 average revenue in excess of \$10,000,000. Most organizations in the sample had less than \$100,000 in pre-2008 average revenue, and of particular note is that 91.2% of organizations had average pre-2008 incomes of less than \$5,000,000 (see Table 2).

Table 2. *Frequency: Revenue Class.*

	Frequency	%	Valid %	Cumulative %
1	160	41.7	41.7	41.7
2	145	37.8	37.8	79.5
3	45	11.7	11.7	91.2
4	12	3.1	3.1	94.3
5	22	5.7	5.7	100.0
Total	384	100.0	100.0	

Data Analysis

Two statistical tests were conducted to test and measure whether significant relationships exist between the dependent variable (DV) and each of the independent variables (IV). The results of these tests as they relate to each variable are as follows:

Frequency. The frequency table (Table 3) indicated that of the 384 organizations that make up the sample, 326 (or 84.4%) experienced change when comparing their pre-2008 and post-2008 earned income percentages. A majority of organizations experienced a negative change in revenue, 174 organizations (45.3%). A significant number of organizations also experienced positive Revenue change, 150 organizations (39.1%). Additionally, 60 organizations (or 15.6%) maintained the same earned income percentage pre and post-2008. The descriptive statistics table (Table 5) details the standard deviations of the sample, comparing earned income percentages segregated by revenue class and census region.

Table 3. *Frequency: Change in earned income percentage.*

	Frequency	%	Valid %	Cumulative %
Positive Change	150	39.1	39.1	39.1
Negative change	174	45.3	45.3	84.4
No Change	60	15.6	15.6	100.0
Total	384	100.0	100.0	

Two-Way ANOVA. The Two-Way ANOVA table (Table 4) and plot graph (Figure 3) detail the results of the Two-Way ANOVA performed to determine if revenue class or census region could be used to predict organizations' earned income ratio post-2008, as compared to pre-2008. To understand these results, the corrected model statistics are evaluated first. With an F statistic of 1.04 and significance level of 0.42, the model does not meet the study's standard of a significance of 0.05 or less. To that end, the researcher accepted the null. Therefore, for the purposes of this two-way ANOVA, the results did not indicate a predictive value of revenue

class and census region, as it relates to the sample organizations' pre- and post-2008 earned income ratios.

These results are visually depicted in the plot graph (Figure 3). The graph depicts that across census regions and revenue classes, most of the estimated marginal means are near zero or within plus or minus .100. Census regions are depicted with lines numbered as follows: Northeast (1), South (3), Midwest (3), and West (4). The only outliers were located in census region four (West), at revenue classes three (\$1 million-\$4.99 million) and five (+\$10 million), and census region one (Northeast) at revenue class five. Visually, this indicates that no matter the census region or revenue class, the resulting means were similar and therefore not predictive of the impact of the global recession of 2008 on earned income percentages.

Table 4. *Two-Way ANOVA.*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.930 ^a	19	0.049	1.04	0.42
Intercept	0.012	1	0.012	0.25	0.62
Revenue Class	0.064	4	0.016	0.34	0.85
Census Region	0.128	3	0.043	0.91	0.44
Revenue Class * Census Region	0.446	12	0.037	0.79	0.66
Error	17.192	364	0.047		
Total	18.122	384			
Corrected Total	18.122	383			

Table 5. *Descriptive Statistics: Comparing change in earned revenue to revenue class and census region.*

Revenue Class	Census Region	Mean	Std. Deviation	N
1	1	0.001477	0.2893203	30
	2	-0.00593	0.2048353	51
	3	0.047403	0.1772123	37
	4	-0.03509	0.2208217	42
	Total	0.000136	0.221372	160
2	1	0.032527	0.2122989	42
	2	-0.04265	0.242019	43
	3	0.069562	0.2519828	35
	4	-0.0085	0.1425504	25
	Total	0.012098	0.2240275	145
3	1	0.025093	0.1367424	12
	2	0.046675	0.2919038	14
	3	0.006046	0.0245156	7
	4	-0.12415	0.2332689	12
	Total	-0.01095	0.2201974	45
4	1	-0.0192	.	1
	2	-0.02427	0.0097041	3
	3	-0.04982	0.1649222	6
	4	0.045212	0.15375	2
	Total	-0.02504	0.1255585	12
5	1	0.110719	0.1431352	7
	2	-0.09003	0.1931877	6
	3	-0.01058	0.0206888	5
	4	-0.17348	0.255466	4
	Total	-0.02327	0.1890451	22
	1	0.026819	0.2266831	92
	2	-0.01792	0.2269704	117
	3	0.043101	0.199204	90
	4	-0.04447	0.2041187	85
	Total	0.001226	0.2175212	384

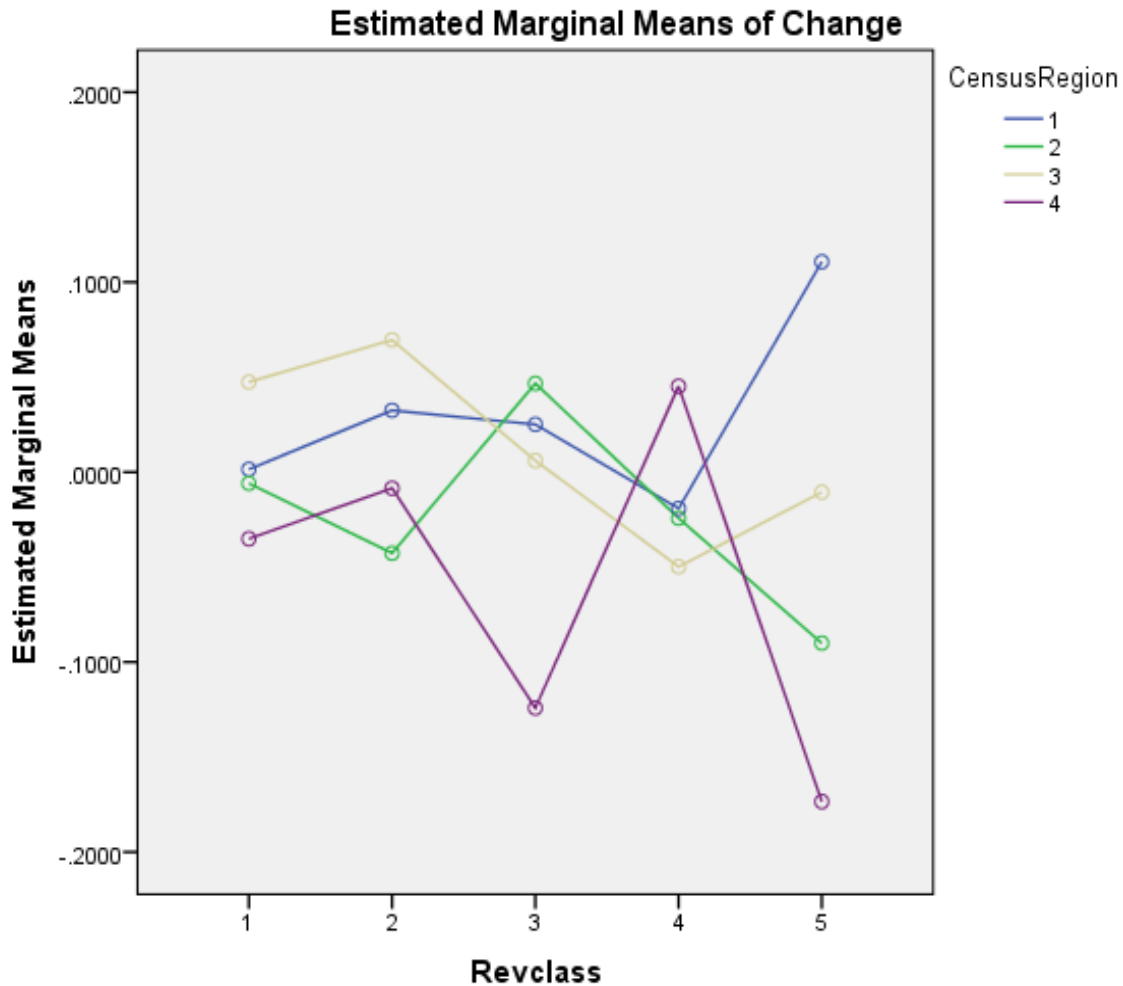


Figure 3. Change in earned income percentage compared to revenue class and census region.

Summary

The data collection and statistical analysis for this study were conducted between March 7 and March 28, 2016. Through the use of Excel and IBM's SPSS software, version 22, two statistical tests were performed, a frequency count of organizations that experienced changes in earned income percentages pre- and post-2008 as well as a two-way ANOVA to evaluate if revenue class and census region have a predictive value in understanding the impact of the 2008 global recession on nonprofits' earned income percentages.

Based on the findings presented in Table 3, it is clear that most (83.9%) organizations' earned income percentages changed between the pre- and post-2008 periods. A decline in earned income percentage was recorded for 45.3% of organizations experienced, while 39.1% experienced an increase. Additionally, the results included in Table 4 and Figure 3 reveal that revenue class and census region did not indicate a predictive value in understanding the impact of the 2008 global recession on nonprofits' earned income percentages.

Discussion

Nonprofit organizations touch countless lives across the United States. Among other things, they work to provide meals for the hungry, housing for the homeless, cures for the sick, education and entertainment through the arts and sciences, as well as advance the civil rights of those on the margins of society. Without the work of these more than 800,000 organizations, our country would be less vibrant, innovative, empathetic and likely forced to find new ways to address the contributions made by nonprofits. To that end, studying and understanding how a global recession impacts these organizations is vital to informing and educating current and future nonprofit executives regarding how best to lead their institutions through challenging economic times.

This study was a significant first step, on what is likely a long journey, to understand the impact of the global recession of 2008 on American nonprofit organizations' revenue. This chapter will answer the research question posed by this study, discuss the conclusions of the findings, and outline recommendations for work by future researchers. The following research question guided this study.

Research question one (RQ1)

Did the global financial collapse of 2008, on average, change American nonprofit organizations revenue streams?

Null hypothesis one (H₀1)

The global financial collapse had no effect on the proportions of earned and contributed revenue, as compared to total revenue, of American nonprofit organizations.

Alternate hypothesis one (H_{a1a})

The global financial collapse of 2008 on average changed American nonprofit organizations' proportions of earned and contributed revenue, as compared to total revenue.

The frequency test performed indicated that most (84.4%) nonprofit organizations sampled did experience a change in earned income when comparing the pre- and post-2008 results. To that end, the researcher rejected the null hypothesis, that the global recession of 2008 had no effect on American nonprofits' earned income percentages. However, the results of the two-way ANOVA did not indicate that revenue class and census region have predictive value, in relation to the impact of the global recession of 2008 on earned income percentages.

Conclusions

Despite being able to reject the null hypothesis, this researcher recognizes that this study does not provide much in the way of conclusions pertaining to how American nonprofit organizations were affected by the global recession of 2008. Studies like that of Carroll and Stater (2008), which indicated that nonprofits with diverse revenue streams are less volatile and therefore less susceptible to environmental forces (like recession), influenced the design of this study (and its supporting theoretical framework). If nonprofit executives followed Carroll and Stater's (2008) theory, it stands to reason that many would (or attempt to) diversify revenue streams to balance an ebbing flow of contributed revenue that coincides with recessionary periods. Based on the research conducted in this study, however, this conclusion cannot be reached.

While it is true that 84.4% of organizations sampled experienced a change in earned income after 2008, 45.3% of earned income percentages decreased after the 2008 recession. This means that for nearly 40% of those organizations sampled, contributed income increased—as compared to earned income—in 2009 and 2010. The notion that nonprofits' contributed

revenue would increase, as compared to earned income, in the wake of the 2008 global recession refutes Carroll and Stater's (2008) theory, and instead implies that in the midst of challenging economic times, organizations can survive by continuing to rely, in many cases to an even greater degree, on the generosity of donors.

Additionally, based on the results of the two-way ANOVA test, there is no indication of predictive value of revenue size or census region as they pertain to the impact of the global recession of 2008 on earned income percentages. Noticeably, the 2008 recession hit all geographical regions of the U.S. With that in mind, it is reasonable that census region (location) was not predictive of the impact of the recession on earned income percentages. However, operationally, it is intuitive that nonprofits with larger average total revenue would be more likely to attract and afford executives of significant talent whose management styles may be informed by researchers like Carroll and Stater. To that end, this researcher expected organizations with larger average total revenue to have larger increases in earned income percentages and therefore to better withstand the global financial collapse of 2008. The researcher acknowledges some bias in the assumption that better educated executives would have knowledge of the importance of revenue diversification during challenging economic times. That being said, the results of this study did not bear out that expectation, as larger organizations (based on average revenue) were no more likely than smaller organizations to experience change in earned income percentages as a result of the 2008 recession.

It is the belief of this researcher that the lack of predictive value found, regarding organization size, may be the result of two limitations to this study. The first limitation pertains to the diversity of the sample used. It is often the case that a diverse sample is beneficial when conducting a research project. In this case, it is clear that there is so much diversity in size

(organizations with average revenue of \$0 to over \$10,000,000) and mission that the impact of recession and effective management strategies deployed to contend with the resulting economic hardship may be so vastly different, that studying them all at the same time is too difficult.

A second limitation to this study is the assumption that the only reason for an organization's earned income percentage to change from 2006 to 2010, is the impact of the global recession. It is common knowledge that American nonprofit executives often work tirelessly to manage the earned/contributed mix of income for their respective organizations. However, this study does not account for the possibility that other environmental or internal factors might have positively or negatively impacted the earned income of sampled organizations. Additionally, it is possible that the effects of the global recession may have offset the other environmental or internal factors, resulting in no change to earned income percentages.

Recommendations

It is the belief of the researcher that this study was an important first step in better understanding how American nonprofit organizations are impacted by recession. While sweeping conclusions were not drawn from this research, it is clear that organizations across the sector are very diverse and respond differently to external forces. The researcher believes that if this study is repeated, very small volunteer-led organizations (for example parent-teacher groups, little league baseball clubs, and band boosters) should be excluded from the sample. It is the hope of the researcher that from this work, others will begin to distill best practices concerning how to steer organizations through challenging times.

From this work, a next step to inform and enrich nonprofit executives' ability to lead their organizations and represent the sector may include a deeper understanding of fewer, similar (size, mission, and location) organizations. Due to the limitations discussed above, the

researcher believes that a mixed method case study of a smaller sample of organizations (for example, five arts organizations from Washington, D.C. or three institutions of higher education in California) may allow the researcher to interview executives to gain an in-depth understanding of what their organizations may be experiencing both internally and externally, during the recession. The results of the qualitative analysis, through use of in-depth interviews, could be compared to deeper quantitative analysis (for example, comparing calculated volatility ratios or comprehensive financial index ratios) of the sampled organizations. The researcher believes that a deeper understanding of a smaller sample of organizations may provide situational—instead of broad—insight for nonprofit executives. While this research approach is much longer and more time consuming, the findings may be much better suited to inform industry-wide best practices.

Summary

Over the course of America's history, nonprofit organizations have filled the void between citizens' needs and our government's ability to meet those needs. When America or the world encounter recessionary periods, the services provided by many nonprofits become more important than ever. The purpose of this study was to begin a conversation about how to lead nonprofits during challenging times, by first understanding the impact of the global recession of 2008 on nonprofit revenue.

While this study has not led to specific conclusions regarding how recession impacts nonprofits, this researcher believes it was a vital first step in an important long-term process, of developing best practices for the sector and dispelling anecdotal rumors propagated by some in the field. What was made clear was that recession impacts nonprofits very differently and further investigation is needed to better understand this phenomenon. It is the hope of the researcher that work will continue to better understand how recession impacts nonprofits across

industries, missions, size, and geographic location. As Hall (2004) wrote describing the work of nonprofit organizations, “their impact is so far-reaching—touching on every aspect of our lives and every level of institutions” (p. 4). The work of nonprofits is too vital to the United States not to invest in further research and study so that executives may develop and rely on best practices, lead their organizations, and fulfill their noble missions, no matter the economic climate.

References

- Amagoh, F. (2015). Improving the credibility and effectiveness of non-governmental organizations. *Progress in Development Studies*, 15(3), 221-239.
- Arvidson, M., & Lyon, F. (2014). Social impact measurement and non-profit organisations: compliance, resistance, and promotion. *Voluntas: International Journal of Voluntary & Nonprofit Organizations*, 25(4), 869-886.
- Calabrese, T. (2013). Running on empty: the operating reserves of U.S. nonprofit organizations. *Nonprofit Management & Leadership*, 23(3), 281-302.
- Carroll, D. A., & Stater, K. J. (2009). Revenue diversification in nonprofit organizations: does it lead to financial stability? *Journal of Public Administration Research & Theory*, 19(4), 947-966.
- Chad, P. (2014). Organizational change within charities: improved performance via introduction of market orientation and other strategic orientations. *International Review on Public & Non Profit Marketing*, 11(1), 89.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Dart, R. (2004). Being “business-like” in a nonprofit organization: a grounded and inductive theory. *Nonprofit and Voluntary Sector Quarterly*, 33(2), 290-310.
- de Vericourt, F. & Lobo, M. (2009). Resource and revenue management in nonprofit operations. *Operations Research*, 57(5), 1114-1128.
- Froelich, K. A. (1999). Diversification of revenue strategies: evolving resource dependence in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 28(3), 246-268.
- Guidestar. (2016). Retrieved from, <http://www.guidestar.org/rxg/about-us/index.aspx>.
- Hall, P. D. (2004). Historical perspectives on nonprofit organizations in the United States. In R. Herman (Ed.), *The Jossey-Bass Handbook of Nonprofit Management and Leadership* (pp. 1-38). San Francisco, CA: Jossey-Bass.
- Hodge, M. M., & Piccolo, R. F. (2011). Nonprofit board effectiveness, private philanthropy, and financial vulnerability. *Public Administration Quarterly*, 35(4), 520-550.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

- Pfeffer, J. & Salancik, G. R. (1978). *The external control of organizations*. New York, NY: Harper and Row.
- Prentice, C. R. (2015). Understanding nonprofit financial health: exploring the effects of organizational and environmental variables. *Nonprofit and Voluntary Sector Quarterly*, 22, 1-22.
- Remler, D. K. & Van Ryzin, G. G. (2015). *Research methods in practice: strategies for description and causation*. Thousand Oaks: SAGE Publications, Inc.
- Szafran, R. F. (2012). *Answering questions with statistics*. Thousand Oaks: SAGE Publications, Inc.
- United States Census Bureau. (2015). Retrieved from, http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf.