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Twenty-five Years of Giving: Using a National Data Set to Examine Private Support for Higher Education

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Twenty-five Years of Giving: Using a National Data Set to Examine

Private Support for Higher Education

by

Karen A. Frank

Dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Curriculum and Instruction
with a concentration in Higher Education Administration
Department of Leadership, Counseling, Adult, Career and Higher Education
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ABSTRACT

Resource dependencies have increased substantially at colleges and universities over the years due to economic declines, recessionary periods, and decreased funding from state allocations. The purpose of this study was to advance an understanding of private support for higher education as a source of supplementary funding. As the environment continues to become more competitive for outside resources, institutions of higher education can benefit from more substantive and objective research on private voluntary support to better meet their growing needs for additional resources.

Effective financial management requires a greater understanding of the expected size of financial contributions to assist with strategic planning and managing expenditure demands. This is especially true during periods of broad economic downturn when many institutions’ revenue sources simultaneously suffer economic shocks through reduced endowment earnings; reductions in state appropriations; and external pressures by students, parents, and other stakeholders to keep tuition rates low. The same economic pressures that affect institutional revenue sources also affect the receipt of charitable contributions. Thus, the relationship between charitable donations and the economy is central to understanding whether these contributions help to stabilize the volatility of institutional revenues.

This study examined private giving data reported to the Council for Aid to Education’s annual Voluntary Support of Education survey from 1987 to 2012. Only gifts contributed by alumni, foundations, corporations, other individuals, and parents to public and private
baccalaureate, master’s, and doctoral institutions were considered. Giving data were adjusted through the Consumer Price Index, standardized by enrollment, and correlated with selected economic indicators. Multiple linear regression was used to examine each of the four research questions to discover what relationships exist between economic indicators and private giving to higher education by institutional type, institutional classification, and giving source.

This study revealed that differences in private giving exist when correlated to economic indicators. Based on these results, it appears that charitable funding directed to support higher education institutions are based to some extent on resource providers’ ability to expend support at particular times in the economic environment. As observed throughout all four research questions, the Average Duration of Unemployment indicator had a larger impact on charitable giving to higher education than did the Standard & Poor’s 500 Stock Price Index indicator. The results of the Fisher’s $r$ to $z$ transformations indicated that the regression model for alumni giving to public higher education institutions was determined to be the statistically strongest prediction model, followed by the regression model for foundation giving to public institutions.

While fundraising continues to be only one source of additional funding, it cannot be ignored that the generosity of private donors since the earliest days of this country has helped to create, support and sustain the vital functions of colleges and universities. While the pursuit of charitable gifts may have been left primarily to the private institutions over the years, more recent developments in state and government funding patterns to higher education make the constant search for additional support sources a necessity for today’s public higher education institutions as well. Academic leadership has become aware that fiscal flexibility during times of both economic prosperity and economic downturn can be supplemented by the philanthropic
intent of those who are not only interested in an institution’s prestige, but who also understand its impact on students, families, communities, customers, and the economy. Institutions of higher education and their institutional advancement programs can greatly benefit from research studies that provide additional substantive and objective research.
CHAPTER ONE:
INTRODUCTION TO THE STUDY

Overview

The changing financial environment in higher education has been examined closely over the years. What is clear from these studies is that state allocations for higher education have decreased significantly and this decline in funding is not restricted to specific states or regions; it has occurred across the nation (Cheslock & Gianneschi, 2008; College Board, 2013; National Center for Education Statistics, 2013; Speck, 2010; Weerts & Ronca, 2013). Although many institutions have introduced focused efforts to manage expenditures over the last several decades, spending has continued to increase at levels that have surpassed the general cost of living (Toutkoushian, 2003).

In order to provide new classrooms and laboratories, offer more financial aid, integrate the most current technology, augment student services, construct residence and recreation facilities, bring in additional faculty, and enhance many other activities, institutions of higher education (IHEs) find the need to perpetually seek greater resources to support these growing needs in order to stay competitive (Bowen, 1980; Cheslock, 2006; Cheslock & Gianneschi, 2008; Ehrenberg, 2001; Vest, 2007).

The recent call from President Obama to control rising costs or lose federal money has compelled university leaders across the country to consider new strategies to manage their budgets and institutional priorities. Funding declines combined with the simultaneously growing
demands of higher education by students and their parents, communities and governments, as well as other stakeholders have prompted institutional administrators to actively seek alternative funding sources to offset decreased financial support and acquire additional operating dollars for their institutions.

**Background of the Study**

According to the National Center for Education Statistics (2013), the percentage of state tax revenue received as a portion of total spending at public higher education institutions has been on a steep decline for more than thirty years. The College Board (2013) reported that although inflation adjusted state appropriations revealed increases of one percent (1981-1982 to 1991-1992) and nine percent (1991-1992 to 2001-2002), decreases of five percent (2001-2002 to 2006-2007) and an additional 25 percent (2006-2007 to 2011-2012) were noted (Figure 1). This most recent decline included a 10 percent reduction in funding for academic year 2012 alone.

![Figure 1](image_url)

**Figure 1.** Annual percentage changes in state appropriations and public four-year prices over time.
Lately, it has become commonplace to hear university presidents and administrators repeat the often heard lament that his or her institution has gone from being state supported, to state assisted, to state located. Academic leadership across the country assert that funding received through state support is insufficient to meet the goals of a 21st century college or university and now only makes up a mere 10 to 25 percent of their total operating budgets (Supiano, 2008; Vest, 2007). What has driven the insatiable need for resources?

Many changes over the last several decades have impacted operations and expenditures at higher education institutions. In the 1940s, the introduction of the Servicemen’s Reintroduction Act of 1944 (informally referred to as the GI Bill) led to significant increases in new students. By the end of the decade, total enrollment had increased approximately 80 percent in that ten-year span alone (Thelin, 2004). The massive influx of students required IHEs to hire additional faculty and staff as well as construct new classroom spaces, housing facilities, and laboratories in order to accommodate the surge in enrollments.

Student enrollment continued to soar in the 1950s and 1960s and the introduction of federal research programs also had a marked influence on institutional operations. A small group of elite institutions were very successful in garnering federal funding, which according to Thelin (2004), “kindled ambition and imitation” in other colleges and universities (p. 279). However, the costs associated with federal compliance, senior level faculty appointments, new research staffing, library acquisitions, new or updated facilities, and the addition of Ph.D. programs all served to increase institutional expenditures significantly.

In the 1970s, double-digit inflation, flat revenues, the OPEC oil embargo, rising prices of consumer goods and services coupled with the first decline in student enrollment since the introduction of the GI Bill, forced institutions to introduce severe cost-cutting measures such as
deferred maintenance and internal budget reductions. Unlike the 1950s when student enrollment was approximately split between public and private institutions, the 1970s saw a substantial shift in student enrollment with public institutions accounting for approximately 75 percent of the enrollment.

Due to the continued effects of spending reductions, colleges and universities found themselves overextended in both their endowments and annual budgets by the 1980s. The moratorium on spending in the previous decade left colleges and universities with a backlog of deferred maintenance and purchasing needs. To replenish institutional coffers, colleges and universities raised tuition sharply; a practice that continued even after the general economy had recovered (Toutkoushian, 2003). Private and public institutions had begun to depend on students and their parents to provide a larger share of the cost of obtaining a college degree. For public institutions, tuition increases served to make up for declining state appropriations; for private institutions, tuition increases served in part to counterbalance the growing demand for tuition discounting. By the mid-1980s, funding started to flow again and spending was encouraged to make up for years of backlog resulting from drastic cost-cutting measures. However, the decade came to a close with significant cuts to university research and decreased federal spending, the stock market crash, double-digit inflation, and state revenue decreases again in 1989.

While a strong economy in the mid-1980s saw support for higher education grow in real terms despite its declining allocation of state budgets, the end of the Cold War and resultant slowdown in defense spending in the early 1990s contributed to the onset of another recession. The weaker economy along with continued competition for state support by a multitude of other state services such as social welfare, housing, health care, corrections, K-12 education, infrastructure, and environmental remediation made the decline in funding allocations a more
pressing concern for higher education (Hauptman, 1997). Barrow (2010) asserted that the recession of the early 1990s “marked the beginning of a prolonged fiscal crisis in American higher education” (p. 322). Institutions again responded by increasing tuition with the backing of their state governors. However, those same governors provided less endorsement for increases in the need-based aid essential to ensuring access for low-income students. Fortunately, this recession was short-lived and the country went on to see one of the longest periods of growth for many decades with low unemployment, growing productivity, soaring stock prices, and low inflation.

By the early 2000s, the collapse of the dot-com bubble, a series of accounting scandals and the September 11 attacks brought the decade of growth to an end. Enrollment growth increased, rising 25 percent between 2000 and 2008 (Heller, 2011). Tuition prices as a proportion of median income rose from 18 percent in 1980 to 44 percent by 2009 at private institutions, and from 4 percent to 12 percent at public institutions (Heller, 2011).


A report from the Center on Budget and Policy Priorities (2013) revealed that at least 25 states made major cuts to higher education. Some of the most severe impacts observed included:

- Tuition increases of 15 percent in Florida brought the collective increase in tuition up 52 percent since 2009;

- State funding cuts of almost 25 percent in Arizona led to per-student funding at 50 percent below pre-recessionary levels; and,
• Funding reductions of over $1 billion for California’s two university systems saw tuition increase 18 percent over the previous year, which resulted in an 80 percent higher tuition rate at the University of California compared to its 2007-08 tuition level (Oliff, Palacios, Johnson & Leachman, 2013).

Although the recession has ended, both federal and many state governments have encountered substantial budget shortfalls. Public universities put off facility projects; reduced maintenance; and implemented restrictions on travel, salaries, and hiring. Private institutions, which represent approximately 20 percent of colleges and universities, suffered significant losses in endowment earnings, increased financial needs of students, and decreased availability of loans (Zumeta, Breneman, Callan & Finney, 2012). Concurrently, the wealth of many individuals was severely affected by reduced investment returns as a consequence of reductions in corporate profits. The near collapse of the financial market in conjunction with unemployment that rose on average to almost 10 percent made this period one of the biggest downturns in the nation’s history. The effects of the recession have lingered because governments rely on capital gains, corporate earnings, and personal income to accrue revenue.

In addition to reduced resources, many colleges and universities faced increased pressure to lower tuition costs, foster academic excellence, and improve graduation rates at the same time that enrollment demand increased due to the influx of students attempting to gain specific job skills or educational credentials while waiting out the recession and recovery period. Federal and state governments pushed IHEs to increase workforce development programs and job retraining, participate in social and economic projects to stimulate economic recovery, and
expand research and development projects to contribute to employment growth in emerging fields such as biotechnology, green building and construction, and cybersecurity.

According to Cheslock and Gianneschi (2008), decreasing budgets, bans on deficit spending, and the general public’s resistance to tax increases place state legislators in the unpopular position of making value judgments on the importance of particular state services, such as K-12 education, health care, corrections, and higher education. Providing support for a wide array of state services put considerable pressure on states to continue the budgetary routine of constraining appropriations to IHEs. Higher education funding is a discretionary line item in most states and allocations to these institutions are often relegated to the end of the budgeting process, which results in smaller portions of states’ spending directed to IHEs according to Cheslock and Gianneschi (2008). This boom and bust cycle appears to be a continuing trend in higher education where funding flows freely to IHEs during prosperous times and is drastically reduced during times of economic distress. Hovey (1999) posited that higher education has become as a balance wheel for state finances. His hypothesis suggested that when states’ revenues are bountiful, higher education is a politically attractive area to direct allocations; however, when states’ revenues are depressed, higher education becomes a viable option for cuts due to its unique characteristics relative to other state services (Hovey, 1999).

As IHEs’ resource dependencies have increased over the years, their reliance on alternative forms of support has come at the same time that competition for those funds has greatly intensified (Andreoni & Payne, 2011). One way for colleges and universities to obtain additional sources of revenue without raising tuition is to increase their fundraising activities. Private institutions have a long history of raising funds and building endowments through private giving dating back to the creation of these institutions in the earliest days of the country (Thelin,
Public institutions have more traditionally relied on state and government funding. The substantial funding reductions felt by higher education over the last thirty years have led public institutions to make greater efforts to emulate private institutions in their fundraising endeavors.

After a decrease of nearly 15 percent in charitable giving between 2007 and 2009, inflation-adjusted giving in America increased by 2.7 percent in 2010. Even in the worst economic recession since the Great Depression, IHEs have been relatively successful in raising private funds for their respective institutions. The continual search for alternative revenue sources has placed a growing emphasis on private fundraising, making institutional advancement one of the major growth areas in higher education today.

**Statement of the Problem**

The results of economic declines, recessionary periods, and decreased funding from state allocations have increased resource dependencies at colleges and universities. When IHEs cannot raise tuition rates, they must look for additional sources of funding. In the highly competitive environment for outside resources, the practice of private fundraising has become of greater interest to IHEs. According to Rooney (1999), fundraising is relatively inexpensive when compared to the dollars received and this additional source of support also provides institutional leadership with a much needed pool of discretionary dollars. Cheslock and Gianneschi (2008) observed that even though most private support comes in the form of restricted gifts, most of these dollars are “effectively unrestricted” because they are used to underwrite services and activities the institutions would normally provide (p. 210).

It has been asserted that fundraising is a blend of both art and science (Worth, 2010); however, much of what has been the received knowledge in the practice of fundraising has been
based upon anecdotal evidence obtained through a variety of conferences, professional organizations and various information sharing mediums delivered by fundraising practitioners to other fundraising specialists according to Azzaro (2005), Bekkers and Wiepking (2011), Caboni and Proper (2007), and Ehrenberg and Smith (2003). While such information can be useful for development professionals in managing daily interactions and short-term planning, it has traditionally lacked an empirical lens through which the study of the field can be examined.

In response to the growing need for a sound scientific research base, the academic community has responded over recent years by expanding the study of this emerging field as the role of fundraising in higher education grows. Bekkers and Wiepking (2011) and Caboni and Proper (2007), echo Lindahl and Conley’s (2002) sentiments that much work still needs to be done because the field of fundraising needs “a greater base of substantive, objective research rather than a casual acceptance of anecdotal evidence” (p. 91).

**Purpose of the Study**

According to the annual Voluntary Support of Education survey issued by the Council for Aid to Education (CAE) in June 2013, contributions to U.S. colleges and universities in 2012 totaled over $30 billion; up 2.3 percent over the previous year (Figure 2). It was noted that the majority of current fundraising literature in higher education generally looks at funds raised through an alumni lens. This is an important area of study because the majority of private giving has traditionally been generated from alumni sources. More recently, however, there have been some other significant and growing sources of private giving which have gotten little attention in the academic literature to date. For example, in 2012, foundation support exceeded alumni
giving by approximately $1.8 billion, representing almost 30 percent of the total private support to IHEs in 2012.

**Figure 2.** Voluntary support of higher education by source, 2012.

Corporate donations made up approximately 17 percent of giving to higher education in 2012, totaling over $5 billion. Gifts from corporations have accounted for a growing percentage of the contributions to higher education over recent years and have amounted to more than half of alumni giving since 2006. Similarly, gifts from foundations have exceeded alumni contributions since 2007 (Council for Aid to Education, 2013).

The lack of notice of these additional sources of giving may have occurred because much of the readily available literature focusing on this area is produced by practitioners in the field. Scholarly literature tends to focus specifically on alumni giving, tax implications, and the behaviors associated with charitable giving. Other studies are conducted by Ph.D. students in the form of unpublished dissertations that usually focus solely on an individual source of giving (typically alumni) or a particular institution (oftentimes the researcher’s college or university).
Rarely do these dissertation studies address fundraising from a broader spectrum. This study was designed to provide a national perspective of the trends of private support for higher education by examining various giving sources to institutional types and institutional classifications (Figure 3).

![Diagram](chart.png)

**Figure 3.** Private voluntary support for higher education: source, type, and classification.

The secondary data set was obtained with permission from CAE. The CAE’s Voluntary Support of Education survey has been overseen and managed by the Council for Aid to Education as a public service for more than 50 years and is considered the “authoritative source” of information on private giving to higher education because it “consistently captures about 85 percent of the total voluntary support to colleges and universities” across the nation (Council for Aid to Education, 2013, para 3). The data set obtained from this survey was used in aggregate form to examine selected support sources (total giving, alumni giving, foundation giving, corporate giving, other individual giving, and parent giving) in relation to institutional type (public and private) and institutional classification (baccalaureate, master’s, and doctoral).
Significance of the Study

As the focus on fundraising becomes more significant, academic leaders and institutional researchers need information that allows for comparison and evaluation of various aspects and trends of fundraising activities. Given IHEs’ growing need for additional sources of revenue, effective financial management requires a greater understanding of the expected size of financial contributions to assist with strategic planning in managing expenditure demands. This is especially true during periods of broad economic downturn when many IHEs’ revenue sources simultaneously suffer economic shocks through reduced endowment earnings; reductions in state appropriations; and external pressures by students, parents, and other stakeholders to keep tuition rates low. It is noted that the same economic pressures that affect IHE revenue sources may also affect the receipt of charitable contributions. Economic recessions may limit donors’ capacity to contribute as the value of their assets and incomes decline. However, as IHEs struggle to weather economic downturns and loss of revenue from other sources, the demand for charitable contribution increases. Thus, the relationship between charitable donations and the economy is central to understanding whether these contributions help to stabilize the volatility of IHEs’ revenues. This study used a national data set consisting of 25 years of voluntary support to higher education from 1987 to 2012 to examine the selected population and contribute to the academic literature on fundraising in higher education.

Research Questions

Recognizing the need for additional information on private giving to higher education on a national level, this study addressed the following research questions:
1. After adjusting for inflation, what is the relationship between Average Duration of Unemployment; Employees on Nonagricultural Payrolls; and S&P 500 Stock Price Index with private giving to higher education from 1987 to 2012?

2. After adjusting for inflation, what is the relationship between Average Duration of Unemployment; Employees on Nonagricultural Payrolls; and S&P 500 Stock Price Index with private giving to higher education by institutional type (public and private) from 1987 to 2012?

3. After adjusting for inflation, what is the relationship between Average Duration of Unemployment; Employees on Nonagricultural Payrolls; and S&P 500 Stock Price Index with private giving to higher education by institutional classification (public baccalaureate, public master’s, public doctoral, private baccalaureate, private master’s, and private doctoral) from 1987 to 2012?

4. After adjusting for inflation, what is the relationship between Average Duration of Unemployment; Employees on Nonagricultural Payrolls; and S&P 500 Stock Price Index with private giving to higher education by source of giving (alumni, foundation, corporate, other individual, and parent) from 1987 to 2012?

**Definition of Terms**

This study used the definitions created by the Carnegie Foundation for the Advancement of Teaching Classification Descriptions (CFAT) to identify the three distinct classifications of higher education institutions as well as the definitions created by Council for Aid to Education as used in their Voluntary Support of Education (VSE) survey to describe the independent and dependent variables. In addition, definitions created by the Council for Advancement and
Support of Education; United States Department of Labor, Bureau of Labor Statistics; and Board of Governors of the Federal Reserve were used to provide a consistent understanding of the economic indicators and various fundraising terminology.

To facilitate the intended meaning of terms used throughout this study, the following definitions are provided:

Alumni: Former students, full- or part-time, undergraduate or graduate, who have earned some credit toward one of the degrees, certificates, or diplomas offered by the reporting institution (CAE, 2013).

Average Duration of Unemployment (ADU): ADU represents the average length of the time persons classified as unemployed continuously sought employment (Bureau of Labor Statistics, 2014b).

Baccalaureate Colleges: IHEs where baccalaureate degrees represent at least 10 percent of all undergraduate degrees and where fewer than 50 master's degrees or 20 doctoral degrees were awarded during the year; Carnegie classification includes those institutions coded Bac/A&S: Baccalaureate Colleges-Arts & Sciences, Bac/Diverse: Baccalaureate Colleges-Diverse Fields, and Bac/Assoc: Baccalaureate/Associate’s Colleges (CFAT, 2013).

Corporate: Corporations, partnerships, and cooperatives that have been organized for profit-making purposes, including corporations owned by individuals and families and other closely held companies; this category also includes gifts from company-sponsored foundations, gifts from industry trade associations, and corporate matching gifts (CAE, 2013).

Development/Fundraising: The primary purpose is to raise private support through charitable gifts to the institution; development/fundraising units typically include annual fund,
major gifts, principal gifts, gift planning, corporate and foundation relations, central development, constituent development and campaign management (CASE, 2013).

Doctorate-granting Universities: IHEs that awarded at least 20 research doctoral degrees during the update year; Carnegie classification includes those institutions coded RU/VH: Research Universities (very higher research activity), RU/H: Research Universities (high research activity) and DRU: Doctoral Universities; excludes those institutions offering doctoral-level degrees that qualify recipients for entry into professional practice, such as the JD, MD, PharmD, and DPT (CFAT, 2013).

Employees on Nonagricultural Payrolls (ENP): ENP consists of all production and nonsupervisory employees in private services-providing industries, manufacturing, mining, logging, construction, and all private-sector employees on business payrolls (United States Department of Labor, Bureau of Labor Statistics, 2014b)

Enrollment: Total student count at the beginning of the academic year; all students are counted except continuing education (CFAT, 2013).

Foundations: Includes personal and family foundations and as well as other foundations and trusts that are private tax-exempt entities operated exclusively for charitable purposes; does not include company-sponsored foundations, which fall under the category of corporate as defined by the VSE survey categories (CAE, 2013).

Institutional Advancement: Institutional advancement offices are usually responsible for all of an IHE’s external relationships. The four main functional areas include development/fundraising, alumni relations, public relations and media relations (CASE, 2013).

Master's Colleges and Universities: IHEs that awarded at least 50 master's degrees and fewer than 20 doctoral degrees during the update year; Carnegie classification includes those
institutions coded Master’s/L: Master’s Colleges and Universities (larger programs), Master’s/M: Master’s Colleges and Universities (medium programs), and Master’s/S: Master’s Colleges and Universities (smaller programs) (CFAT, 2013).

Other individual: Includes gifts from all individuals who are not classifiable as alumni or parents; includes governing board members (CAE, 2013).

Parent: Includes gifts from individuals (excluding alumni) who are the parent, guardian, or grandparent of current or former students at the reporting institution; alumni affiliation takes precedence over parent status (CAE, 2013).

Standard & Poor’s 500 Stock Price Index (SPI): A weighted index of 500 large-capitalization United States stocks trading on the two largest stock exchanges in the United States (NYSE and NASDAQ); SPI is a compilation of tracked changes in prices and is often considered the industry standard for the measure of performance of the United States’ stock market activity as a whole (Standard & Poor’s Dow Jones Indices, 2014).

Total Giving: Grand total of all private gifts received and reported on the VSE survey (CAE, 2013).

**Limitations**

Utilization of the Voluntary Support of Education survey results in a capture rate of approximately 85 percent of all giving to higher education institutions in the United States. The data set comprises information in terms of total dollars raised, not individual gift amounts. All giving data are in aggregate form; therefore, individual donor characteristics are lost. As is true with most survey data, there may be instances where data errors exist.
Delimitations

This study was limited to public and private baccalaureate, master’s, and doctoral IHEs (according to Carnegie classification) that contributed data to the Voluntary Support of Higher Education annual surveys from 1987 through 2012. These criteria kept the population as homogenous as possible by institutional type and reporting of financial results. Due to the specific selection standards, it cannot be assumed that the results of this study apply to other types of colleges and universities (e.g., associate’s institutions, for-profit institutions, precollege institutions, special focus institutions, and tribal institutions), but the methodology can be used in further studies to analyze those fundraising programs.

This study did not include other forms of private giving such as research contracts and government student financial aid. Further, only private, voluntary support reported in the categories of total, alumni, foundation, corporate, other individual, and parent giving was considered. Private contributions from religious organizations, fundraising consortia, and other organizations were not analyzed as individual categories. Therefore, the results of this study are not necessarily accurate indicators of the overall success of public and private baccalaureate, master’s, and doctoral IHEs in raising private support from such individuals and organizations.

Organization of the Study

A discussion of the literature is presented in the Chapter Two. This section begins with a review of the history of philanthropy in higher education and is followed by theories that inform the study of philanthropy from both social psychological and economic perspectives. Chapter Three outlines the research method, population, and data analysis plan.
CHAPTER TWO: REVIEW OF THE RELATED LITERATURE

Introduction

To fully understand the subject of philanthropy in American higher education, various topics have been examined. The relevant literature related to this research is divided into two sections.

The first section reviews the history of philanthropy in American colleges and universities through five specific time periods: American Origins to the Revolution, Post Revolution to the Civil War, Morrill Land Grant Act to World War II, The Era of Professionalism, and Contemporary Fundraising.

The second section is divided into two phases in order to provide a review of the pertinent theories that inform the study of philanthropy. The first phase presents a discussion of related social psychological theories. The second phase concentrates on economic perspectives pertinent to higher education philanthropy. The two theories noted to be most relevant for the purposes of this study were resource dependence theory and the balance wheel theory.

American Origins to the Revolution

John Harvard is often recognized as America’s first higher education philanthropist. His bequest gift made two years before his death in 1638 to the school in Newtown, Massachusetts was given with the intent “to advance learning and perpetuate it to posterity” (Morison, 1935, p. 18)
The gift of £800 (which was double the amount conferred by the General Court in 1636) and his entire library consisting of approximately 400 volumes made a considerable impact on the burgeoning institution and the school “was exalted to a college and assumed the name of its principal benefactor” (Hall, 1801, p. 19).

Fundraising for American higher education began in 1641 when clergymen Reverend William Hibbens, Thomas Weld, and Hugh Peter were sent overseas by the Massachusetts Bay Colony to raise money for Harvard College (Cash, 2000). The American economy in its earliest days was little able to found and support colleges, consequently, England was frequently solicited for philanthropic contributions (Hughes & Cain, 2003). Reverend Hibbens returned to the colonies within a year bearing contributions in the amount of £500 (Brittingham & Pezzullo, 1990). Weld and Peter sent back word to the college indicating they needed literature that would place both the college and New England in a positive light (Cash, 2000). The result of this request was the promotional pamphlet entitled, “New England’s First Fruits” that enabled the traveling clergymen to share the news of the colony’s first educational institution (Morison, 1935). Now recognized as the forerunner of today’s case statements and fundraising literature, this 26-page brochure was a valuable tool not only for setting forth the goals of the colony’s first college but also for declaring the value the Puritans placed on education (Oliver, 1999). John Harvard’s gift to support higher education also had another significant effect—it compelled others to contribute generously to the college. By 1650, private gifts from individuals amounted to more than three times the support the government had allocated to Harvard (Cash, 2000; McAnear, 1952).

In subsequent years, two other colleges were successfully founded in the colonies; William and Mary in Virginia (1693) and the Collegiate School in Connecticut (1701). All three
colleges received grants and annual subsidies from the King of England; however, this support was inadequate to sustain the colleges and all three institutions regularly found themselves chronically underfunded (Sears, 1990). The colonial colleges had supporters in England, which up to that time, had been the only reliable source of significant philanthropic gifts (Ashcraft, 2002; Drezner, 2011; Oliver, 1999; Sears, 1990). The colleges came to realize that their survival rested on the interest of kind-hearted citizens who had the ability to make small contributions, occasional bequests, and gifts of material goods that could be converted into much needed cash (McAnear, 1952).

In Connecticut, ten ministers provided the initial support of books for a library at the Collegiate School in New Haven in 1716 and Cotton Mather, a college official, had influenced Elihu Yale, a Boston-born Englishman living in London, to donate to the fledgling college (Curti & Nash, 1965). Mr. Yale’s gift of more than 400 books, a painting of King George I, and the earnings of nine bales of hay, while modest in value, was enough to create an enduring memorial (Cash, 2000; Oliver, 1999; Sears, 1990). Mr. Mather suggested that the school change its name to honor its benefactor and thereby increase the odds that Mr. Yale would give another large contribution to the institution (Brittingham & Pezzullo, 1990). The college was renamed as Yale College in 1718.

Harvard, Yale, and William and Mary were the only colleges in the colonies until 1745. In the period leading up to the Revolutionary War six more colleges were founded:

1. College of New Jersey (now Princeton University), 1746
2. College of Philadelphia (now the University of Pennsylvania), 1749
3. King's College (now Columbia University), 1754
4. Rhode Island College (now Brown University), 1764
5. Queen's College (now Rutgers University), 1766

6. Dartmouth College (established as an academy in Connecticut), 1769.

Each of the new institutions needed funding so they also sent their fundraising agents to England, which had the both the economic ability and philanthropic traditions to support the colleges’ founding and growth (Cash, 2000). The exception was Queen’s College which, as a Dutch Reformed institution, sent its fundraising agent to Holland (Curti & Nash, 1965). Cutlip (1965) noted the early colleges were sustained by a growing public interest in the value of higher education that led multitudes of American and British citizens to provide individual cash donations. The founders and administrators of the newer schools became very adept at translating the importance of an education into the need for financial support. The fundraising process had started to become more organized and systematic methods for personal solicitation by college agents were developed to increase fundraising success (McAnear, 1952). While organized fundraising for higher education is largely a development of the American twentieth century, it is clear it had its earliest roots in colonial America and became an American tradition after the founding of these colleges (Curti & Nash, 1965; Drezner, 2011; Rudolph, 1990).

Fundraising during this period was conducted through two methods. For those identified as having the appropriate capacity, personal solicitations were often presented using the public subscription method. Gifts attained through this manner were often of a substantial nature and directed toward the general operations of the institution (Cutlip, 1965). For the less well-to-do, lotteries were used attract support from those who did not have the financial means to support a college. Tickets usually cost up to 30 shillings, placing the cost of a winning ticket within the reach of a greater proportion of the population (Cash, 2000). However, this practice fell out of
favor by 1768 as it contained a considerable amount of risk for both the colleges and the ticket purchasers if a substantial amount of tickets were not sold successfully (Cash, 2000).

A good portion of the gifts received came in cash, but it was also common to receive noncash gifts. As noted previously, the American economy was in its infancy and money was scarce. The receipt of private gifts was often uneven and didn’t necessarily reflect the actual needs of the colleges; however, these gifts still made up a significant portion of the institutional finances and fostered a dependence on this type of support (Sears, 1990). Noncash gifts were most often books from a personal library or land, but also they arrived in the form of grain collections, candles, chickens, blankets, lumber, and other dry goods (Cash, 2000; Drezner, 2011). Cash gifts, whether large or small, were usually given without restrictions and college leaders preferred to use them toward the construction of facilities, student scholarships or faculty salaries rather than invest them in endowments (Curti & Nash, 1965; Drezner, 2011).

Solicitation of philanthropic support for the colonial colleges continued in England right up to the eve of the American Revolution when Princeton was still sending college solicitors to Great Britain (Brittingham & Pezzullo, 1990). By the start of the war in 1775, serious financial concerns arose at the colonial colleges. The newer college founders had secured capital for buildings, equipment, and libraries of books but only King’s College had built an endowment sufficient to operate with a balanced budget (Sears, 1990). The potential for new gifts had grown dim and was further impacted by the withdrawal of British support. The greatest issued faced by institutional leaders was the acquisition of enough money to operate the colleges. Since student tuition only covered a portion of the overall costs, the colonial colleges found themselves operating in the deficit in the 1770s (Sears, 1990). Private gifts became of utmost importance in making up the difference between student revenue and the colleges’ expenses (McAnear, 1952;
Oliver 1999); however, both the method and nature of raising private support had to adapt to issues of an inconsistent economy, sectarian rivalries, and the emerging idea of public versus private education (Cash, 2000; Cutlip, 1965; Hofstadter & Smith, 1961).

Post Revolution to the Civil War

American higher education experienced dramatic growth in the period following the American Revolution. Of the 23 states that joined the original 13 colonies, 21 willingly took the opportunity to start new colleges (Cutlip, 1965). Americans had noticed both the economic and political success of the college-educated and showed great interest in creating their own educational opportunities (Sears, 1990). In 1779, almost 1,000 citizens of northern New York signed a petition to create their own college (Tewksbury, 1972) and they persisted in that effort for 16 years until the Board of Regents of the State of New York granted Union College its charter (Fortenbaugh, 1978).

Fundraising was often used to attract community interest in starting new colleges. Each of the states approached the creation of new IHEs in their own individual way. State legislatures typically provided a gift of land or simply conferred a charter, and local community leaders were very active in their attempts to garner written or implied contracts with potential benefactors (Sears, 1990). But the founding of these institutions did not come with any guarantee of continuing financial support, thus every new college in this time period began with financial challenges (Zunz, 2012). The country’s economic status was not well developed and per capita incomes had risen slowly in the period between the end of the Revolution and 1820 with wages barely keeping up with the cost of living (Cash, 2000; Hughes & Cain, 2003).
There were no large gifts from wealthy benefactors at the beginning, rather, most colleges found regular financial support through the many small gifts collected by subscription. For example, Williams College received some subscription gifts and a small bequest from Colonel Ephraim Williams (1793); Bowdoin College received 1,000 acres and $1,000 from James Bowdoin (1794); Middlebury received $4,000 raised by Connecticut citizens (1800); Amherst received a small initial subscription in 1812 and became a college through a collection of additional subscription gifts totaling just over $52,000 (1821); and Marietta College obtained $8,000 through public subscription and was able to build a second facility through a $2 public subscription campaign (Cutlip, 1965; Hans, 1983; Hofstader & Smith; 1961; Oliver, 1999; Sears, 1990). Every class of citizen was tapped for contributions and local college agents found success in concentrating their fundraising efforts in the areas from which most of their students had come, which was usually about a 40 to 60 mile radius of the college (Oliver, 1999).

Bremner (1988) observed that the concept of giving with others had become an important facet of American philanthropy as citizens focused on the new concern of creating economic advancement and community development initiatives. This interest drove the success of subscription appeals and formed the basis for the development of structured fundraising campaigns. College leaders discovered they could regularly turn to the surrounding community for support as the interest in higher education grew (Cash, 2000; Curti & Nash, 1965). When subscription gifts were not available, other noncash gifts were still gladly accepted as these tangible items often provided valuable resources to burgeoning institutions whose needs were great (Cash, 2000; Herman, 2011). In addition to the subscription campaigns conducted by college agents, college students formed groups to raise financial support for what they perceived to be the needs of their institutions (Breneman, 1994; Brittingham & Pezzullo, 1990; Rudolph,
Their efforts, while perhaps reflecting the students’ self-interest, proved to be of great importance to colleges in that they created the foundation for developing alumni associations and promoting the concept of giving with others (Bremner, 1988). The mid-1800s saw rapid growth and empowerment of alumni associations which provided valuable assistance in both fundraising and advancing the interests of the colleges (Cook & Lasher, 1996; Korvas, 1984). Alumni associations were charged with preserving college traditions and soon became active in student recruitment, legislative lobbying and serving in the representation of college governance (Hans, 1983; Miller, 1993).

To survive this time period, however, colleges could not rely solely on public subscriptions. Institutions continued to count on the impact of personal solicitation and, just like the presidents and trustees during the colonial period, institutional leadership at the new colleges played an important role in managing the financial health of their colleges. Personal solicitations by presidents, trustees, college administrators, and friends of the new institutions became very important in the development of fundraising strategies and methods (Cash, 2000). College administrators and agents were expected to travel on fundraising expeditions and typically focused their efforts eastward armed with the identification of a specific need and two strong reasons why it was incumbent on affluent citizens in eastern states to support the new institutions (Curti & Nash, 1965, Cutlip, 1965). First, was the potential danger the colonial states faced if western states developed without an educated population and, second, was the fact that the success of the first colonial colleges had depended heavily on the support of others (specifically, the English philanthropists) in helping them get their start (Hofstader & Smith, 1961; Oliver, 1999).
Something new began to take place around the middle of the century. A growing interest in the education of women had developed in the country. Mary Lyon became one of the first educational fundraisers through her development of a solicitation campaign that brought in gifts ranging from six cents to $1,000 which provided the support to open Mount Holyoke Female Seminary (Curti & Nash, 1965; Miller, 1993). The transition from mostly small contributions to the advent of six-figure gifts had also begun to appear. Matthew Vassar’s landmark gift of $408,000 (approximately $11,000,000 in 2013 dollars) created the first fully endowed institution dedicated to the education of women. Similarly, Sophia Smith decided that bequeathing her inheritance to found a women’s college was the best way to establish opportunities for women that were equal to those afforded to young men (James, James & Boyer, 1971). Smith College was chartered in 1871 and became the largest member of the original Seven Sisters Colleges. In 1885, Bryn Mawr was founded by five young women from Baltimore, one of whom (Mary Elizabeth Garrett) had contributed $400,000 to found the institution (Sander, 2008).

Before the Civil War there were almost 200 colleges in the United States, most of them requiring financial support, which depended on the acquisition of private contributions (Brittingham & Pezzullo, 1990; Hofstader & Smith, 1961). State legislators and public officials had come to view IHEs as significant community and economic assets, and local community leaders had developed broad-based interests in creating new institutions. Hundreds of colleges had been founded during this time period; however, there were too many colleges and not enough resources to support them all (Thelin, 2004). Scholars have disagreed on the exact number of how many new colleges failed; Tewskbury (1972) suggested an 81 percent mortality rate; Naylor (1973) suggested the figure was closer to 60 percent.
By the end of the war, America had evolved from an agrarian society to the early beginnings of an industrial society. An ardent sense of democracy had grown, and along with it, great wealth started to appear. Higher education in the 19th century experienced a considerable period of growth, in spite of the limited availability of resources, and the most successful colleges were those where the leaders were well-skilled in the practice of fundraising (Drezner, 2011; Rudolph, 1990).

Morrill Land Grant Act to Post World War II

The Morrill Land Grant Act shaped a new pattern of federal aid for higher education; it gave rise to colleges that offered both practical and scientific curricula, provided for a more equitable distribution of public resources, infused funding, and eventually created access for many more Americans to enroll in higher education. By 1889, the formation of this act had provided aid to 48 state colleges; 33 of which had not existed beforehand (Cash, 2000). Local communities expressed great interest in attracting new federally supported state colleges and universities and willingly signed up for subscriptions of cash and other noncash gifts (Cash, 2000).

The Morrill Act placed additional demands on the traditional college; the new emphasis on research and the introduction of the elective system saw college operating costs increase threefold (Rudolph, 1990; Thelin, 2004). Colleges took this opportunity to use athletic events to increase alumni interest and also created job referral programs to help educate alumni in the concept of responsibility to their alma mater (Miller, 1993).

Gift solicitation for higher education saw minimal returns during the Civil War but made a strong comeback in the years soon after. Personal appeals were made to those with the
capacity to donate significant support for institutions. These industrialists, businessmen and entrepreneurs had amassed unprecedented prosperity and several showed great interest in founding institutions, some of which would bear their names. Most notable were:

- Washington Duke who used his influence to have Trinity College moved to Durham, North Carolina. His gift of $100,000 in 1892 stipulated that the college allow women to enroll (King, 1991);
- Ezra Cornell whose gift of his farm and $500,000 resulted in the creation of Cornell University in 1865 (Brittingham & Pezzullo, 1990);
- Cornelius Vanderbilt who had planned to establish a university in Staten Island, New York but was convinced by a Tennessee church leader to give $1,000,000 to endow a university in that state instead (Bruce, 2003);
- Andrew Carnegie whose gifts of $2 million in 1900 and $2 million in 1902 to found the Carnegie Institute of Technology and Carnegie Institution, respectively, were just two of the contributions he made to these and other schools (Cutlip, 1965);
- Johns Hopkins, a childless bachelor, whose bequest of $7 million in 1879 was made to found a university and hospital in Baltimore, Maryland (Curti & Nash, 1965);
- Leland Stanford and his wife, Jane, whose gifts of almost $40 million were made to found Stanford in 1885 in memory of their only child, Leland, who passed away from typhoid fever (Stanford Estate Worth Seven Millions, 1905);
- John D. Rockefeller, who provided major funding for a small college in Atlanta in 1884 for African American women (which was renamed Spelman College in honor of his in-laws who were ardent abolitionists); and his later gift of $80 million in 1890 to create the University of Chicago (Goldin, 1988).
Some of the major philanthropists of this period were particularly responsible for the growth of fundraising for higher education (Miller, 1993). Both Carnegie and Rockefeller used their gifts to dictate fundraising policy and practices. Prior to their involvement, the majority of fundraising initiatives were sporadic and had little or no structure (Powell & Steinberg, 2006). The participation of these two men redefined the responsibilities of academic institutions to involve donors in many facets of the gift acceptance process, from the construction of academic programs to the development of institutional policies (Brittingham & Pezzullo, 1990).

Rockefeller’s interest in working with capital campaigns resulted in the creation of leadership giving levels which eventually became the prototype for giving clubs (Miller, 1993). In Rockefeller’s (1909) book, Random Reminiscences of Men and Events, he describes the ultimate goal of philanthropy should not simply center on a cause, but instead find a way to cure the root of the cause at its source:

> The best philanthropy, the help that does the most good and the least harm, the help that nourishes civilization at its very root, that most widely disseminates health, righteousness, and happiness, is not what is usually called charity. It is, in my judgment, the investment of effort or time or money, carefully considered with relation to the power of employing people at a remunerative wage, to expand and develop the resources at hand, and to give opportunity for progress and healthful labour where it did not exist before. No mere money-giving is comparable to this in its lasting and beneficial results. (p. 141)

Carnegie’s (1962) essay, The Gospel of Wealth, developed the concept of stewardship in his description of the responsibility of the newly prosperous to deal with the issues of wealth inequality:
This, then, is held to be the duty of the man of wealth: To set an example of modest, unostentatious living, shunning display or extravagance; to provide moderately for the legitimate wants of those dependent upon him; and after doing so, to consider all surplus revenues which came to him simply as trust funds, which he is called upon to administer, and strictly bound as a matter of duty to administer in the manner in his judgment, is best calculated to produce the most beneficial results to the community—the man of wealth thus becoming the mere trustee and agent for his poorer brethren, bringing to their service his superior wisdom, experience, and ability to administer, doing for them better than they would or could do for themselves. (p. 25)

Carnegie believed it was incumbent upon the rich to redistribute their surplus wealth but not through the traditional approach of using bequests to direct wealth only to one’s heirs or to the state for public purposes (Powell & Steinberg, 2006). Instead, Carnegie stressed that it was the responsibility of the fortunate to redistribute their wealth in both a thoughtful and responsible manner to ensure those dollars resulted in the greatest net benefit to society (Cash, 2000).

The post-Civil War era would not be complete without making note of the educational conditions of the African American population. Similar to the conditions women faced in the pre-war era, the newly freed slaves had little access to higher education. There was a small contingent of self-educated African Americans in the country in 1865, but there were few institutions in the North and none in the South in which they could enroll to obtain a formal education (Thelin, 2004). After the war, religious organizations in the North quickly began to organize fundraising campaigns (Gasman, 2002). Thousands of small contributions raised in this manner formed the corpus of the American Missionary Association’s philanthropic resources.
which allowed them to found Hampton Institute (Virginia), Talladega College (Alabama), Fisk University (Tennessee), Howard University (Washington, D.C.), Atlanta University (Georgia), and Claflin University (South Carolina) by 1870 (Curti & Nash, 1965).

The late nineteenth century saw the pattern of private giving to state universities change as it adapted to the evolving nature of higher education. The increase in outright gifts and bequests made not only by the wealthy but now also by alumni, campus and community groups, charitable and cultural institutions, and professors all reinforced the role of private voluntary support for state institutions (Herman, 2011). A growing population of literate citizens, increased interest in public affairs, and advances in publishing and mass media by the turn of the century proved advantageous to those academic leaders amenable to using public relations to increase public support (Cash, 2000). Veysey (1965) noted university leaders used these tactics to bring together their constituents through expressions of inspiring and heartening testimony that spoke to the value of their institutions. Slowly, a small group of university and college presidents initiated publicity campaigns, developed press bureaus, and created publications designed to build popular support for their institutions (Veysey, 1965). As these publicity initiatives grew so did the competition for increased financial support (Richards & Sherratt, 1981). Alumni groups had begun to recognize their responsibilities as publicists and financial supporters. By World War I they formed a national association, the Association of Alumni Secretaries, which was the predecessor of the American Alumni Council (Cash, 2000).

The success of raising money for the war effort had a significant impact on the field of fundraising. The development of intensive campaigns and new techniques led to the emergence of fundraising consultants and professional fundraising companies (Brittingham & Pezzullo, 1990; Cutlip, 1965). For example, John Price Jones, a private fundraiser, was recruited by his
alma mater to lead the Harvard Endowment Fund Campaign after the war (Curti & Nash, 1965). Jones sought to develop enthusiasm for giving through a public relations campaign that reflected the nature of the institution (Drezner, 2011). After his success in surpassing his campaign goal of $10 million by an additional $4.2 million in 1919, he went on to found the John Price Jones Company, a professional fundraising organization (Brittingham & Pezzullo, 1990). Some other pioneering colleges and universities of this time began to employ development officers and appoint vice-presidents to coordinate fundraising, alumni affairs and public relations (Cook & Lasher, 1996).

By 1920, fundraising consultants had become commonplace and capital campaigns were the main focus of raising money for academic institutions. However, many times these campaigns did not integrate their fundraising activities with the objectives of the institutions which resulted in short-term rather than long-term fundraising goals (Miller, 1993). Hampton Institute and Tuskegee Institute took a unique approach in 1924 and combined resources to develop cohesive efforts to raise money for African American colleges (Gasman, 2002). Rockefeller’s $1 million outright gift and $1 million challenge grant, George Eastman’s $2 million gift, and the multitude of gifts from other northern industrialists and African American philanthropists made the fundraising effort highly successful (Curti & Nash, 1965; Oliver, 1999).

The devastating effects of the Great Depression had a significant impact on the ability of development officers and fundraising consultants to raise money for academic institutions, which induced some to use unscrupulous or high-pressure techniques on potential donors (Brittingham & Pezzullo, 1990). In response to this troubling circumstance, nine of the major fundraising firms joined together in 1935 to found the American Association of Fundraising Counsel for the purpose of discussing professional ethics (Brittingham & Pezzullo, 1990).
African American IHEs faced a crisis in financing in the early 1940s due to the reduction of donations and gifts caused by the lingering effects of the depression and the beginning of World War II (Gasman, 2007). In response, the United Negro College Fund was established in 1943 to address the dismal financial situation at African American institutions (Oliver, 1999). The fundraising cooperative was immediately successful; 27 colleges independently raised $100,000 and in 1944 the first united campaign, the United College Drive, brought in over $765,000 (Gasman, 2007; Tucker, 2002).

In the period following World War II, great strains were felt throughout higher education due to the overwhelming number of students enrolling under the Serviceman’s Readjustment Act of 1944. Colleges and universities began hire their first fundraisers to manage the influx of G. I. Bill funds, which allowed them to retain a recovery fee on those monies for the institutions’ many newly created needs (Miller, 1993). Fundraising efforts saw marked progress during this time. In 1940, $40.5 million had been raised through private voluntary support; by 1953 that number swelled to over $191 million representing an increase of 373% in just 13 years (Miller, 1993).

Some institutions found a way to capitalize on the more recent success in fundraising. For example, The United Negro College Fund conducted its first endowment and capital campaign in 1954 (Capital Funds Campaign) for its member institutions (Tucker, 2002). Chaired by John Rockefeller, Jr. and assisted by professional counsel from the well-known fundraising firm, Marts and Lundy, the campaign attracted an impressive list of corporate leaders and raised $25 million by 1957 (Gasman, 2007; Tucker, 2002).

Other institutions found themselves the recipients of growing corporate investment in education as business leaders embarked on an aggressive movement to promote corporate
philanthropy (Holder, 1967). The elimination of legal barriers and acceptance of business executives serving in leadership roles on university boards led to the emergence of company foundations and a growing source of charitable contributions (Herman, 2011).

**The Era of Professionalism**

Fundraising for American higher education had come a long way since colonial times and the era of professionalism had dawned by the mid-1950s. Recognizing the need to address the evolution of the professional fundraising field, the American Association of Fundraising Counsel opened an office in New York and hired an executive director to disseminate its Fair Practice Code to guide its membership (Brittingham & Pezzullo, 1990).

Another significant event in the field of fundraising occurred in 1958. More than 70 college presidents, development officers, business representatives, industry leaders and university trustees gathered at an historic three-day conference at the Greenbrier Hotel in West Virginia. The meeting was cosponsored by the American Alumni Council and the American College Public Relations Association with the goal of coordinating institutional efforts to support continuing growth and development of higher education fundraising (Cook & Lasher, 1996). According to Richards and Sherratt (1981), the resultant document, *The Greenbrier Report*, was considered to be the most important “advancement document of the decade” because it recommended that the individual areas of external affairs, fundraising, communications, and alumni relations all be brought together to serve under the heading of “institutional advancement” with a vice-president or chief administrator as the officer in charge of operations (p. 11).
In the 1960s and 1970s, the clear trend toward professionalism in fundraising translated into the growing use of procedural and systematic alumni programming with greater attention on focused solicitation and cultivation techniques (Sears, 1990). While the rise of giving clubs had begun to take root in some public IHEs (Korvas, 1984), the private IHEs had the older and more sophisticated fundraising efforts, some of which included planned giving offices, capital campaigns, or other indicators of advanced programming (Curti & Nash, 1965; McAnear, 1952; Miller, 1993; Rudolph, 1990). This period saw more private and public universities, followed by the public colleges, begin to create institutional advancement offices to house new or existing areas such as alumni relations, public relations, and fundraising offices (Brittingham & Pezzullo, 1990). According to Cook and Lasher (1996), the American College Public Relations Association and the American Alumni Council combined operations in 1974 to become the Council for Advancement and Support of Education whose mission was to serve as the “primary professional society for all areas of institutional advancement” (p. 36).

Cook (1997) and Drezner (2011) believe the role of the president in higher education fundraising evolved during this period with the release of three important publications in 1975. First, The President’s Role in Development (Association of American Colleges, 1975) revealed the concern of the country’s higher education leadership over the changing expectations for the role of institutional presidents in the area of fundraising and institutional advancement. Second, the release of a study from the Commission on Private Philanthropy and Public Needs (1975) entitled, Giving in America, documented the significance of American philanthropy and called for the creation of a national committee on philanthropy, advocated for tax law changes to encourage private contributions, and urged for a broader policy on corporate giving (Bremner, 1988). Third, the milestone essay, The Management of Decline, written by economist Kenneth
Boulding (1975), stressed the need for a new generation of academic leadership to manage the predicted evolution of a period of decline in the American economy forecast to occur in the following fifty to one hundred years. Based on those concerns, many public colleges and universities began to engage in private fundraising to find the necessary resources to fulfill institutional aspirations. This course of action created additional stress on institutional leadership because previously held gentlemen’s agreements between public and private institutions against broadside fundraising for private support could no longer remain in effect. Private funding support became a mechanism for competitive advantage and some felt the increased dependence on private dollars had weakened the distinction between the public and private institutions (Altbach, Gumport & Johnstone, 2001).

According to Breneman (1994), a 1979 study found that approximately half of the colleges and universities during the period from 1974 to 1979 reported they were either planning a campaign or conducting a campaign. Goals reported by those IHEs in campaigns totaled $8.5 billion, resulting in average campaign goals of $7 million for public IHEs and $15 million for private IHEs; 18 institutions also reported participation in campaigns of $100 million or more (Cook, 1997). Keller (1983) indicated the vast majority of IHEs at this time were dangerously unstable and faced the very real possibility of facing severe cost-cutting measures as just over 40 IHEs were at or above the $100 million endowment mark and fewer than 200 IHEs possessed endowments at or above the $10 million level.

In the 1980s, tuition rates increased approximately 10 percent or more at the majority of IHEs for almost every year of the decade (Geiger, 2004). Even though the stock market saw average annual gains, most IHE campuses still found revenues deficient which created a growing pressure on academic leaders to acquire additional support through various mechanisms, most
notably, capital campaigns (Cook, 1997). Breneman (1994) reported that prior to the 1980s, many small private IHEs did not have well-developed fundraising programs but they were able to make significant advancements through campaign launches and volunteer support organizations.

Advancements in technology during this period brought the majority of public institutions into the fundraising arena due to the increasing need for equipment, technical expertise, expanded curricular programming, and reduced or limited federal and state financing to support these efforts (Korvas, 1984; Miller, 1993). By 1984, the number of public IHEs entering or conducting campaigns had doubled and their campaign goals increased almost 50 percent, while the goals of the private institutions’ campaigns had only increased by 30 percent (Cook, 1997).

Fundraising professionalism continued with increased attention directed to the procedures and techniques of fundraising. Concerns regarding ethical behavior and federal regulations related to charitable giving also surfaced (Korvas, 1984). The Tax Reform Act of 1986 (TRA), PL. 99-514 not only increased the individual cost of making charitable contributions but also reduced the ability to itemize, which made it more difficult for a number of individuals to obtain deductions for philanthropic gifts (Andreoni, 1998; Andreoni, 2006b, Boris & Steuerle, 2006; Prewitt, 1999; Schiff, 1990;). IHEs reevaluated their fundraising strategies and techniques to offset the federal effort that made giving less financially beneficial, and by 1988 more than 65 IHEs were attempting to raise $100 million or more through restructured fundraising initiatives (Brittingham & Pezzullo, 1990; Miller 1993).

By 1990, campaign goals of $1 billion were rare but no longer astounding. Geiger (2004) noted that fundraising campaigns had become widespread; 38 of the 55 AAU universities were in
the process of conducting or planning campaigns, with six institutions setting billion-dollar
goals. Fundraising had become institutionalized at public IHEs and more university foundations
were created as repositories to accept private funds and house these monies separately from state
funding. Institutional advancement offices at many institutions served to streamline fundraising
efforts, incorporate them into the institutions’ administrative structures, and assist presidents
with development processes (Cash, 2000).

**Contemporary Fundraising**

In 2001, the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), PL. 107-16, was enacted to give income tax relief to families and raise the economy out of
recession. EGTRRA was designed to create a new 10 percent tax bracket for households with
incomes below $35,000, repeal gift and estate taxes, and provide greater tax deductions for
saving and educational expenses. While EGTRRA focused on personal taxes, the Jobs and
Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), PL. 108-27 focused on investment
taxes with the goal of stimulating business spending and growing employment. President Obama
signed the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010
(2010 Tax Relief Act), PL 111-213 to extend certain provisions of EGTRRA and JGTRRA
through 2012. This extension also included a college tuition tax credit that was partially paid for
by a 35 percent inheritance tax on those with estates worth $5 million per individual or $10
million per family. The cuts were extended again by the American Taxpayer Relief Act in 2013
(Tax Relief Act), PL. 111-312 as part of the strategy to avoid the fiscal cliff.

There have been many discussions as to whether changes in charitable tax deductions
have impacted giving. In the 1980s, economists’ studies predicted drastic declines in charitable
donations would occur as the result of the sharp reductions in marginal tax rates. In spite of their dire forecasts, charitable giving during this timeframe essentially continued in the same manner as earlier years. Andreoni (2006b) noted that these economic analyses had failed to anticipate the strategic responses of fundraising professionals, which led to the errant predictions about the effects of the tax law changes. While scholars agree that charitable giving may be responsive to a lower cost of giving, alterations in marginal tax rates do not necessarily impact the size of charitable contributions (Andreoni, 2006b; Auten, Clotfelter & Schmalbeck, 2000; Bakija, 2013; Drezner, 2006). Most of the current theoretical and empirical analyses conducted on the consequences of changes in tax law on charitable giving still do not take into account the active role the field of fundraising plays in raising charitable donations.

Fundraising has grown more sophisticated over the last several years and changes in the perception of institutional advancement have been noted throughout university administration (Sturgis, 2005). It is no longer unusual to see increased cooperation within and among IHEs in regard to the advancement function. Successful strategies for enhancing advancement programs have grown to include: effective management of institutional assets; greater educational marketing efforts; inclusion of a focus on institutional prestige; restructured activities to address broader markets; design of high quality public relations programs; introduction of outreach opportunities; development of cost-effective fundraising campaigns to achieve maximum results; and coordination of resources, objectives and contacts (Bass, 2010; Drezner, 2011; Richards & Sherratt, 1981). At the same time, advancement programs continue to dedicate considerable time to the perpetual building of prospect pools, introduction of stewardship activities, and provision of continual staff training (Hiles, 2010).
Today, billion-dollar campaigns are launched by specialized staff with multi-million dollar budgets through consultation with professional fundraising consultants who assist in the design and management of feasibility studies, case statements, fundraising strategies, internal audits of organizational preparedness, staffing, and on-site training (Brittingham & Pezzullo, 1990; Lindahl, 2008). While there are four distinct campaign models (traditional capital, single-purpose, major gifts, and comprehensive), the majority of campaigns today are actually comprehensive campaigns (Dove, 2001; Lindahl, 2008).

Due to these large and multi-year efforts, fundraising has become a shared responsibility among a broad spectrum of academic leadership (Hodson, 2010). Schloss and Cragg (2012) noted that fundraising has become one of the more demanding and visible duties required of academic leadership. Because finances are strongly tied to the role of academic leaders, fundraising ability now plays a larger role in employment considerations. According to Hodson (2010), the success or failure of a university or college is often evaluated on its financial solvency which includes the amount of private support raised. While many other activities or initiatives may lack immediate or consistent measures of success, campaigns are both visible and measurable and, as such, they provide a direct and tangible measure of leadership achievement. The fundraising role of many university presidents from previous decades centered on hiring staff to raise private support; however, presidents today understand their critical role in strengthening and expanding the experience and expertise of their professional fundraising staffs (Hodson, 2010; Satterwhite, 2004).

Cook (1997) noted that fundraising has become a key indicator of presidential success and suggested that some past presidents are recognized more for their fundraising ability than for their improvement in an institution’s level of quality. The achievement of campaign goals or
acquiring more donors and support than a predecessor are ways to for a president to create a legacy and to strengthen the relationship between financial performance and compensation. Hartley and Godin’s (2009) survey of presidential career patterns found almost 20 percent of first-time presidents at private IHEs felt unprepared for fundraising responsibilities compared to 28 percent of first-time presidents at public IHEs. A study entitled, The Report of the AGB Task Force on the State of the Presidency in American Higher Education, found that 91 percent of presidents reported working on fundraising weekly, 53 percent reported daily fundraising activity, and that one of the five most important duties of today’s presidents is fundraising (Association of Governing Boards of Universities and Colleges, 2006). Additionally, The American College President 2012, released by the America Council on Education revealed that similar to their 2001 survey, presidents from all areas of higher education continued to indicate that most of their time is spent on fundraising, community engagement, strategic planning, and budget management (Cook, 2012).

But it is not only the president who is focused on an IHE’s fundraising efforts. In this era of constrained resources and state funding declines, fundraising requires a host of academic and professional staff to identify, cultivate and steward potential sources of future revenue. These staff members include the chief development officer, academic deans, faculty, institutional foundation boards, and professional fundraising staff.

The chief development officer position has become more common at universities and colleges. They often fill many roles concurrently such as: fundraiser, manager, catalyst, and leader (Worth & Asp, 1994). Chief development officers form strong connections with potential donors and find appropriate giving strategies for them; they focus on internal mechanisms of the larger fundraising process and direct special attention to donor research and resource
management; they focus on long-term institutional advancement planning; and they consistently remind trustees, presidents, and staff of their fundraising responsibilities (Worth & Asp, 1994).

Deans provide academic and administrative leadership to their units. Traditionally, their main duty was to ensure the quality of their academic programs; however, their responsibilities have evolved over more recent years to include budget management, fundraising, and external relations (Wolverton, Gmelch, & Wolverton, 2000). Hodson (2010) suggested this evolution is due to changes in how education is funded. Issues of rising costs, declines in state funding, and tuition caps create greater pressure on academic deans to become active in acquiring private support from donors to finance research, recruit students, retain talented faculty, and keep technology current (Wolverton et al., 2000). Similar to university presidents, academic deans determine their fundraising priorities and take care to align them with the institution’s strategic priorities. More so than university presidents, however, deans are better positioned to recognize prospects as they are closer to students (who will become alumni) and their parents (who may be alumni) as well as industry leaders and corporate executives (who are interested in potential graduates, current/potential customers, or the benefits of institutional research). Flores (1993) noted that academic deans can clearly articulate how additional funding will directly benefit their programs.

Faculty are very helpful in fundraising because they are the center of the academic life of the institution and are often better positioned to share more specific details on what is taking place in a college’s classrooms or labs (Flores, 1993). Alumni often feel the strongest connection to faculty when remembering their time and connection with the institution. Faculty can also offer valuable assistance when accompanying the dean or professional fundraising staff
on donor solicitations and provide valuable assistance in crafting the case for philanthropic support (Weidner, 2008).

Institutional foundation boards are also important to the success of fundraising programs. In a paper by the Association of Governing Boards, Simic (1998) noted that most foundations at educational institutions serve to promote higher education and encourage the advancement of teaching and public service through private support for the institutions’ academic and student development priorities. Foundation boards are typically charged with the receipt and oversight of private gifts of cash, securities, services, property, and pledges of future gifts (e.g., bequests, charitable trusts, and gift annuities) contributed to support the activities of IHEs (Sturgis, 2005). Not only are foundation boards responsible for conducting fund management in accordance with state and other applicable laws, but they also have a fiduciary responsibility to abide by the intent and restrictions placed on charitable gifts by donors.

Professional fundraising personnel are vital in organizing donor and prospect interactions with the president and academic leadership. They provide the structural foundation for the fundraising process by identifying potential candidates for cultivation and solicitation; researching the affinity, affiliation, and capacity of prospects; creating case statements; briefing the president and academic leadership; scheduling contacts; and coordinating follow-up activities and opportunities for future solicitation (Hodson, 2010).

In addition to these groups, some of the larger IHE fundraising operations also include the use of market researchers, campaign strategists, planned giving specialists, investment professionals, tax attorneys, financial planners, and communication departments. Taken together, these academic leaders, professional staff, and other providers permit IHEs to embark on continually increasing fundraising goals. For example, New York University has just
announced a $1 billion campaign for financial aid, Rice University recently surpassed its $1 billion goal, University of Virginia exceeded its $3 billion target, The Johns Hopkins University is currently in a $4.5 billion campaign, Stanford University just completed a $6.2 billion campaign, University of Southern California is actively participating in a $6 billion effort and, most recently, Harvard University has announced the largest educational fundraising campaign to date of $6.5 billion (Gardner, 2013).

Private support for higher education continues to become more important as IHEs search for resources to make up for state allocation shortfalls. According to Brittingham and Pezzullo (1990), “To some, voluntary support provides resources for survival; for most, it has become a source of discretionary income that can support vitality, innovation, and excellence” (p.14).

The following section provides a review of the literature on theories that inform the field of philanthropy from both social psychological and economic perspectives.

**Theories that Inform the Study of Philanthropy**

A review of the scholarly literature reveals the most significant research on philanthropy is housed in the areas of sociology, economics, and psychology. Additional studies of philanthropy were also found in the humanities, social sciences, education, finance, medicine, nonprofit management, anthropology, and marketing. These studies tended to look at philanthropic motivation through behavioral predictors of giving and focused on a diverse array of perspectives including: past giving, the cost of fundraising, altruism, fundraising effectiveness, fundraisers’ impact on giving, personal values and trust, reciprocity, conditional cooperation, organizational culture and quality, and donor segmentation and data mining. Scholars have added to the growing philanthropic knowledge base by using a variety of research
methods such as empirical data analysis, field experiments, historical analysis, personal reflections, laboratory experiments, structured interviews, and focus groups.

The research on charitable giving reveals that philanthropy is a multifaceted concept and suggests that mixed motives are the rule rather than the exception (Katz, 1999). Schneewind (1996) cautioned that any theory of philanthropy based exclusively on only one motive or discipline will inexorably fall short in capturing the essential aspect of reality. Therefore, the following section highlights some of the more prominent studies on charitable giving and philanthropy.

**Theories in Social Psychology**

Social psychology is an interdisciplinary field that spans the gap between psychology and sociology and allows for the study of how individuals’ thoughts, behaviors, and feelings are influenced by the imagined, implied, or actual presence of others (Fiske, Gilbert, & Lindzey, 2010). Social psychology looks at the way beliefs, intentions, and goals are constructed and how these psychological factors influence our interactions with others, which makes this field the natural starting point for the study of philanthropic perspectives according to Drezner (2011).

**Social Identity Theory.** Social identity theory is characterized by the core idea that people tend to engage in group membership as an affirmation of self-esteem. However, membership in a group is not simply enough; it is the belonging to the “right” group that provides the sense of social identity (Stets & Burke, 2000). Tajfel and Turner (2004) found that the groups people belong to are an important source of pride and create a sense of belonging in the social world. Thompson (2010) noticed that individuals are likely to participate in activities that align with their sensibilities and support the organizations that represent those ideals.
Individuals become cognitive representatives of the community and, as such, they can exploit that community association to create a sense of social distinction that reinforces commonalities between group members and recognizes differences in nongroup members (Fosfuri, Giarratana & Roca, 2011; Hogg, Terry & White, 1995). Research by Stets and Burke (2000) revealed that people who assume a community-centered identity show a measure of homogeneity in their actions and perceptions, a higher level of commitment to the community, and increased engagement in social activities. Reingen (1982), Amaldoss and Jain (2002), and Forehand, Deshpandé and Reed (2002) have shown that behavior is often affected by what others have done especially when they share a similar sense of community.

Social identity eases the need to reduce psychological distance to others (Henderson, Huang & Chang, 2012) and this adjustment allows donors to assume specific actions and attitudes that indicate external identification to the general public and internal identification to oneself (Crane & Ruebottom, 2011). A shared sense of social identification has been noted as particularly influential on donor behavior (Reingen, 1982). For example, Kumru and Vesterlund (2010) found that donors recognized contributions made by others as an indicator of the quality of an organization and they also discovered that others’ contributions influence one’s own contributions. Mael and Ashforth (1992), Thompson (2010) and Drezner (2011) agreed that alumni associations provide this sense of community where members have become immersed in the identification of an institution’s history and culture, and their sense of social identity with the organization influences their philanthropic support.

**Organizational Identity Theory.** Closely related to social identity theory, the research on organizational identity theory suggests that members’ individual identities and their organizational identities are closely linked (Ashforth & Mael, 1989; Mael & Ashforth, 1992).
Whetten (2006) referred to organizational identification as the sense of belonging or perceived unity with an organization where individuals strongly identify with an organization; so much so, that they experience those organizational successes and failures as their own.

Organizational identity is particularly strong in alumni fundraising where members’ affiliation and activity characteristics, emotional attachment, and loyalty are noted as very strong indictors of alumni giving to their alma maters (Ashforth & Mael, 1989; Drezner, 2011; Mael & Ashforth, 1992). Caboni (2010), like Mael and Ashforth (1992), demonstrated alumni perceptions of organizational distinctiveness, competitive excellence and organizational prestige had a significant impact on alumni who strongly identified with their college or university. Caboni (2010) also concluded that alumni giving motives arise from fond memories, respectful feelings and close connections with other alumni. Leslie and Ramey (1988) observed that institutional prestige and tradition were factors that influenced alumni giving. Drezner (2011) reported that sentimentality, having a support system, length of time at the institution, and overall satisfaction also had positive effects on alumni giving. Mael and Ashforth (1992) warned, however, that internal competition by an institution to inspire alumni participation and identity had the negative effect of reduced alumni giving when multiple departments vied for alumni involvement and support without a focused effort. Other scholars have discovered that increased student involvement in college and university activities had a positive effect on alumni contributions (Bruggink and Siddiqui, 1995; Holmes, 2009; Okunade, Wunnava, Walsh & Raymond, 1994; Weerts & Ronca, 2009). For example, Monks (2003) determined that satisfaction with one’s undergraduate experience was the most important indicator of alumni support and also observed that those who felt very satisfied gave more than 2.5 times as much as alumni who reported lesser levels of satisfaction.
While much of the work in organizational identity related to philanthropy focused on alumni giving, a study by Schervish and Havens (2001) looked at organizational identity in relation to charitable giving through a survey of affluent donors (those reporting wealth of $5 million or above) and found that when these donors felt stronger affiliations and alignment of values with the charitable organization, they made larger contributions. The researchers also found that respondents gave 57 percent of their contributions to those organizations of which they were volunteers or members and they gave larger average amounts and higher percentages of their incomes (Schervish & Havens, 2001).

**Social Exchange Theory.** Social exchange theory has its roots in both social psychology and economics. This theory postulates that social change and stability are developed through cost-benefit analysis and the comparison of alternatives. Cascione (2003) explained that giving gifts is a societal phenomenon seen in the earliest days of human culture where tribal societies exchanged gifts between clans as a form of commerce, trust, and alliance. According to the seminal work by Mauss (1967), gift giving was highly competitive and those who gave larger or more elaborate gifts were demonstrating their power and wealth as well as creating obligations for expected reciprocity.

From the social psychological perspective, social exchange theory is at work when individuals’ voluntary actions are driven by the expected returns of those actions (Homans & Merton, 1961; Thompson, 2010). This theory is what creates a relationship between the nonprofit organization and their donors (Lindahl, 2010). Kelly (1998) described social exchange theory’s application to philanthropy simply as a social relation where donors have resources and needs, and recipients have needs and resources. Similarly, Culbertson, Jeffers, Stone and Terrell (2012) contended that while social exchange theory builds on the basic economic proposition
that people will usually work or pay only when they receive a return that justifies their input, it is unlike a market exchange in that the benefits both given and received are not fully captured by the participants themselves as some benefits flow out into society.

Several studies have focused on the application of social exchange theory to philanthropic motivations. Kelly (1998) noted that contemporary scholars view philanthropy as a social exchange because they believe making a gift is not a one-way act. Hollander (1990) studied the influence that social approval had on voluntary actions and discovered that that social exchange theory was not effectual in raising the level of voluntary cooperation; however, the allure of recognition and acceptance by others for voluntary actions did have an effect among groups of people who knew each other. Cook and Lasher (1996) also observed social exchange theory in their examination of the interdependent relationships of alumni and their IHEs when alumni felt their interests were congruent with the interests and needs of the institution. Kelly (1998) and Harbaugh (1998) found the dual motivations noted in social exchange theory explain two levels of donors’ incentive to participate in charitable actions, namely, through the provision of a common good and the receipt of a private good in return.

**Self-image Theory.** Kerr, Garst, Lewandowski, and Harris (1997) demonstrated that making a promise to others had the effect of encouraging contributions in an experimental situation. They noticed both cognitive dissonance and feelings of guilt in noncontributors and also observed that donors experienced guilt when they reduced their current level of giving (Kerr et al., 1997). Smith and McSweeney’s (2007) study suggested that those who thought they would feel guilty for not contributing were actually more likely to contribute. Similarly, Sargeant, West & Ford (2004) noticed that donors recognized there would be ramifications for the recipient organization if they withdrew financial support.
Bekkers and Wiepking (2011) advised that while there are various self-image motivators, most self-image studies have concentrated on the concepts of helpfulness or altruism. Two studies noted increased contributions from those who are more active (Todd & Lawson, 1999) and more extroverted (Bekkers, 2010). Ickes, Kidd & Berkowitz (1976) suggested self-image theory stimulates giving because people give when it enhances their self-esteem. It was noted in one study, however, that giving and self-esteem enrichment was negatively correlated in older adults (Mathur, 1996).

**Efficacy Theory.** Efficacy theory in philanthropy refers to the intangible outcomes donors obtain when they perceive their gifts make an impact on the entity they support. Two studies tested donor perception through the provision of information regarding philanthropic effectiveness and the results showed increased results in gifting (Jackson & Matthews, 1995; Parsons, 2007). In addition, Parsons (2007) noted private giving was also positively correlated with the organizational efficiency of the entity. When prospective donors do not believe that a gift will have an impact, they are less likely to donate according to Duncan (2004), Mathur (1996), and Smith and McSweeney (2007).

Bekkers and Wiepking (2011) asserted that efficacy is the primary reason that economists study the effects of seed money and leadership gifts. The leadership effect (also referred to as the modeling effect) is noted when the awareness of gifts by others is taken as an indicator of confidence in the recipient entity and results in subsequent contributions (Andreoni, 2006a; Reingen, 1982;). Kumru and Vesterlund (2010) confirmed that contributions from high status donors led others to increase contributions resulting in a net effect of an 80 percent increase in total gifts; however, they noted the leadership effect was not evident through observation of contributions from low status donors. Finally, endorsements of charitable organizations by high
status individuals appeared likely to lead to higher contributions through the legitimizing effect as observers perceived greater confidence in the entity (Kumru & Vesterlund, 2010; Bekkers & Wiepking, 2011).

**Theories in Economics**

Economics is the branch of social science that centers on the production and distribution of resources and their management. Economic theory focuses how individuals react to certain economic situations. Economists believe that individuals choose their own behaviors and select options that they perceive to be the best decision for them (Paulsen & Toutkoushian, 2006). Known as the axiom of rationality, this assumption provides the theoretical framework from which models of behavior are derived by economists (Andreoni, 2001).

According to Duncan (2004), economists study the field of philanthropy through two perspectives: “the public goods model in which donors give motivated by what their gifts accomplish, and the private consumption model in which donors give motivated by how giving makes them feel” (p. 2159).

Economists have developed many theories that provide some insight relevant to philanthropy. Some of these theories include price theory; game theory and cooperation; altruism, warm-glow and crowding out, resource dependence theory, and the balance wheel theory. These theories are reviewed in the following section.

**Price Theory.** A quantifiable value is needed in order to assess the ebb and flow of supply and demand. The oldest and most commonly used standard is price. Price theory gauges the change of price over time and the relationship between price and other measurable variables. A large body of empirical and theoretical literature in economics considers voluntary
charitable giving as one area in which individuals select consumption levels based on cost and income limitations (Cunningham & Cochi-Ficano, 2002).

Auten et al. (2000) showed fluctuations in contributions due to changes in tax deduction regulations tended to be lower than estimates produced in earlier studies; however, they discovered that changes in charitable giving regulations had a large persistent price effect and a smaller transitory price effect. A meta-analysis by Peloza and Steel (2005) revealed that while generally negative, there was wide variation noted in assessments of tax price on charitable giving due to the choice of statistical methods employed and extent of the samples selected. A more recent study by Bakija (2013) confirmed that the donative behavior of high income people was particularly responsive to tax incentives. Yetman and Yetman (2013) acknowledged that donors to private education, arts and culture, private foundations, and environmental preservation were very responsive to tax incentives which indicated a strong donor income effect because these entities typically obtain more than 90 percent of their contributions from those with incomes at or above the $100,000 level. Mayo and Tinsley (2009) found that 80 percent of the charitable gifts given by wealthy households ($1 million and above) came from just five percent of that population; meaning that 95 percent of the wealthiest households were responsible for relatively less charitable giving than lower income households.

**Game Theory and Cooperation.** What social psychologists call social situations theory, economists call game theory. Game theory and cooperation serve as a formal ways to analyze interactions among a group of rational beings who behave strategically (Axelrod, 1984). In regard to philanthropy, this theory explains the power of economic agents and the equilibrium of interactions (Croson, 2007). Economists believe a contributor’s utility is complemented by
the utility of others; individual satisfaction increases because contributing to another repays the donor’s loss in some way (Almadoss & Jain, 2002; Becker, 1974; Kolm & Ythier, 2006).

Game theory and cooperation in philanthropy has been studied using naturally occurring empirical data and experimental data from lab settings. Eckel and Grossman (2003) compared the use of matching monies to a comparable rebate of donors’ contributions and found that matching dollars led to appreciably larger gifts than the repayment option; a more recent follow-up study served to confirmed their earlier findings (Li, Eckel, Grossman & Brown, 2011). List and Lucking-Reiley (2002) tested the influence of seed money on the rates of contributions at a major research university and ascertained that it raised donors’ average gifts as well as their participation rates. A follow-up study conducted in 2008 by Rondeau and List also confirmed those results. Frey and Meier (2004) found that offering a smaller amount of seed money (25 percent) did not increase giving but offering a higher amount (50 percent) resulted in increased giving.

**Altruism, Warm-glow and Crowding Out.** Economists dominate the study of altruism and suggest the reason donors provide charitable gifts to organizations is because they are interested in the organization’s services or the benefits they derive from their contributions.

A meta-analysis of over 500 articles on philanthropy and charitable giving revealed that the scholarly literature in economics generally agrees that altruism yields tangible consequences, altruistic behaviors start with donors and are usually directed to charitable groups, and the results of these behaviors go to beneficiaries (Bekkers & Wiepking, 2011). Many economists have also argued that donors give solely for private goods benefits as opposed to those public goods theorists that focus on altruism as the primary motive (Cornes & Sandler, 1984; Kingma, 1997; Palfrey & Prisbrey, 1997; Steinberg, 1991; Sugden, 1984).
Andreoni (1990) theorized that another reason for engagement in charitable behavior rests in the form of mutual benefit, which he defined as the internal or external value donors receive through their participation in giving or contributing to assist other people or organizations. He labeled this theory as “warm-glow” to include the concept of the positive emotional feelings donors attain from helping others (Andreoni, 1990). According to Harbaugh (1998), warm-glow extends beyond the mere expression of sympathy; instead, it stems from the possibility of addressing or correcting an unrecognized or unrewarded endeavor. Many studies have been conducted to investigate donors’ giving preferences from various perspectives, and warm-glow has been noted as a core economic motivation for this behavior (Andreoni, 2006b; Ariely, Bracha and Meier, 2009; Duncan, 2004). While warm-glow appears to be essentially unobservable, Mayo and Tinsley (2009) suggested it is beneficial to interpret both positive and negative residuals and use those results to test empirical significance of ascription preferences in measuring the warm-glow effect in wealthy households.

In the public goods model, economists assume that a need satisfied for one does not reduce the accessibility of the good for others, stressing the idea that the public goods model does not devolve into a zero-sum game (Axelrod, 1984) because donors’ contributions made to benefit others come from an altruistic concern to enlarge the public good (Henderson et al., 2012). However, according to Croson (2007), Kumru and Vesterlund (2010), and Sugden (1984), pure altruism and public good as viewed through an economic lens leads individuals who become aware of increased contributions by others to reduce their own contributions. Known as crowding out this theory explains that increased spending on a public good results in the reduction of private investment in that public good (Andreoni & Payne, 2011; Steinberg, 1991). The results of several empirical studies revealed that crowding out exists (Auten et al., 2000;
Doyle, 2010; Kingma & McClelland, 1995; Krasteva & Yildirim, 2013; Korenok, Millner & Razzolino, 2013); however, the results are mixed. Some studies found no evidence of the crowding out effect (Brooks, 2007; Kropf & Knack, 2003) while other studies found crowding in effects (Bolle & Otto, 2010; Okten & Weisbrod, 2000; Sokolowski, 2013). According to Bekkers and Wiepking (2011), the variation of results in these studies implies there are other motivators beside altruism that lead donors to contribute.

**Resource Dependence Theory.** Resource dependence theory represents a political economy model (Zald, 1970) and its emphasis on resource exchange explains organizational and inter-organizational behaviors in terms of the vital resources crucial for organizational operations and survival (Johnson, 1995). Its distinctiveness from other organizational theories is found in the attention it gives to resources – resource needs, resource scarcity, and resource exchange between other organizations or entities. As an open systems theory, resource dependence theory suggests that organizations will both react to and become reliant upon the entities in their environments that maintain control over the vital resources they need but have limited opportunity to access (Froelich, 1999). This dependence results in asymmetrical exchanges and power relations between organizations which drives organizational leaders to use a variety of strategies to manage external dependencies and constraints (Cantor & Courant, 2003).

According to Pfeffer and Salancik (2003), resource dependence theory posits that an organization’s ability to survive is based on acquiring and maintaining resources. An organization that controls all of its operational components would have no cause for concern; however, as no organization is completely self-contained it must rely on other relationships and interorganizational connections in order to guarantee the necessary flow of resources (Kezar,
2001). It is not the organization’s dependency on the environment that causes the problem; the problem is that the environment itself is not reliable. The supply of available resources grows or declines as new organizations or entities pass in and out of the environment. As the environment fluctuates, an organization must be prepared to change strategies in order to adapt to its surroundings (Casciaro & Piskorski, 2005). This is especially true in the case of negative change that could ultimately lead to organizational decline or even extinction. To ensure survival, an organization must be prepared to change its approach to the environment and learn to depend on other entities.

Organizations try to reduce this dependency; however, independence is not always possible. In order to reduce existing reliance on a limited base of resource providers, organizations have the opportunity to enhance their survival through the development of relationships with other entities. According to Pfeffer and Salancik (2003) there are three reasons for establishing such linkages:

1. Organizational leaders need to ensure the continued survival of the organization. Given the scarcity and concentration of a particular resource, behavioral alterations are required in ways that make the flow of resources more reliable. Linkages with other entities provide the organization with information that improves its ability to acquire resources;

2. Organizational leaders attempt to reduce the impact of external constraints on internal organizational discretion. Linkages provide an opportunity to obtain commitments of support from important entities in the environment; and,

3. Organizational leaders understand environmental constraints limit organizations’ degrees of freedom and they seek to maximize autonomy and discretion for the
purpose of enriching present and future adaptability. Linkages permit the organization to legitimize its role in the environment.

These reasons emphasize the implicit view of organizations as entities that are driven by the need to adapt and suggest organizational leaders seek ways to lessen the disruptive effects of external dependence for the overall sustainability of their organizations (Froelich, 1999). While it is understood that most IHEs do not act from a profit maximizing goal, economic scholars suggest there are a variety of alternate goals IHE pursue such as reputation, revenue expansion, cost reduction, and growth of discretionary income (Garvin, 1980; Paulsen, 2013). According to Paulsen and Toutkoushian (2006), economists see colleges and universities as similar to other organizations because IHEs also rely on an “input-production-output model” to provide services (p. 19). IHEs use inputs in the form of students and faculty in the production of teaching and research and the output comes in the form of educated citizens; books; patents; cultural events; and services to the community, government and other entities (Paulsen & Toutkoushian, 2006).

IHEs receive revenue from their customers and others to pay for production costs, and the acquisition of additional financial resources allows an institution to purchase more inputs or factors of production (Paulsen & Toutkoushian, 2006). Harris (1990) believes Pfeffer and Salancik’s three reasons for establishing linkages are applied to IHEs in the following way:

1. Acquisition of information allows IHEs to understand charitable foundation interests; corporate philanthropic goals, hiring needs and research objectives; as well as the interests of other stakeholders such as alumni, parents, and community members in order to develop strategies for acquiring philanthropic support from these groups;

2. Commitments of support are unlikely to come from those with no linkages to a particular university or college; therefore, IHEs regularly find ways to increase
potential supporters’ involvement in institutional activities in order to build a growing pool of engaged prospects; and,

3. IHEs establish legitimacy in the environment through the appointment of foundation officers, corporate executives, successful business leaders, and notable alumni to its governing and foundation boards which, in turn, provides credibility not only to the IHE but also to the well-known people who have lent their names and expertise to the institution.

Katz and Kahn (1978) believe the linkages an institution has established in its environment will influence its success and allow it to manage interdependencies as they arise. A study by Richards and Sherratt (1981) confirmed both the importance of an institution’s linkages to other organizations and the use of formal development functions to enhance resource acquisition. Leslie and Ramey (1988) also noted the importance of institutional linkages and relative prestige in their study of factors affecting IHEs’ ability to raise private support. When faced with uncertainty such as reductions in state allocations and/or federal funding, Harris (1990) asserted that IHEs attempt to deal rationally with the issue and look to similar IHEs to decide how to manage.

**State Appropriations and the Balance Wheel Theory.** The United States is recovering from what is considered to be the worst economic downturn since the Great Depression. States’ obligations to education and healthcare continue to grow; however, their capacity to allocate funding has been hampered by both slow economic growth and weak tax collections that were noted as 5.5 percent below pre-recession levels according to the Center on Budget and Policy Priorities (2013).
Shaw and Heller (2007) remarked that boom and bust financial cycles have created dynamic budget challenges for institutions of higher education (2007). While Bruininks, Keeney and Thorpe (2010) also recognized that the challenges IHEs face have been intensified by the economic situation, they acknowledged that these issues are not the solely the result of the most recent recession. They asserted that changes in demographics and spending priorities combined with increased accountability demands and external competition has created a new normal for higher education in which it is imperative that IHEs both create and adopt clear visions for future viability (Bruininks, et. al, 2010).

State tax efforts directed to higher education peaked in the late 1970s. By the start of the 1980s through the late 1990s, the ratio of IHE expenditures at public institutions decreased from 70 cents to 55 cents per dollar spent and led to concerns that public IHEs would fall behind private IHEs (Curs, Bhandari & Steiger, 2011; Ehrenberg, 2006, Tandberg, 2010). Zusman (2005) observed that state appropriations cuts to IHEs during the 1990-1991 economic recession were unequalled in constant dollars since World War II.

Since the 1990s, appropriations to IHEs have decreased during economic recessions and have not fully recovered even when the economy improved (Curs et al, 2011). Greer & Klein (2010) noted that overall state allocations were at 50 percent in 1978-1979 but had decreased to 36 percent by 1999-2000, and suffered a further decline down to 27 percent by the year 2005-2006.

Between 1977 and 2009, IHEs’ state allocations per $1,000 in personal income decreased from $8.50 to $6.50 (Greer & Klein, 2010; Kane, Orszag & Gunter, 2003). Zusman (2005) pointed out that state support per public IHE student in 2004 was 12 percent less than it was in
1989. Additionally, he noted that 23 states allocated less funding in 2004 than in 2003, irrespective of either enrollment growth or inflation (Zusman, 2005).

It has become apparent that as state appropriations decrease, tuitions increase. In inflation adjusted dollars, the period from 1979 and 2009 saw fees and tuition at public baccalaureate IHEs grow approximately 325 percent (Greer & Klein, 2010). It is also important to note that while enrollment stabilized in 2012, reductions in state appropriations combined with an increase in inflation resulted in a nine percent decrease in state support (in constant dollars) per student from 2011; the lowest level in the 25 years shown in the State Higher Education Finance Report (State Higher Education Executive Officers Report, 2013).

It does not appear the situation will improve in the immediate future. According to the National Governors Association (2013), state spending in 2013 is still below the 2007-2008 pre-recession peak and lower real spending in 2013 indicated that state resources have not grown substantially enough to counter the effects of the funding declines and inflation due to the recession. According to the National Association of State Budget Officers (2013), although revenue collections have increased more than originally anticipated in 2013, years of constrained budgets, numerous demands on states and federal spending cuts due to sequestration will prolong recovery efforts.

Fluctuations in economic conditions highlight the reason state funding for IHEs is an enduring interest area for researchers in higher education. Some earlier studies include the work of Clotfelter (1976) who discovered that states with greater rates of out-migration graduates provide less funding for student-related costs and lower per capita expenditures; and Peterson (1976) who conducted an analysis of the political characteristics of states and concluded that socioeconomic influences, interparty competition and voter turnout, professionalization of the
legislature, and higher education environment were important factors in predicting state appropriations to higher education. Leslie and Ramey (1986) discovered through a time series analysis that the link between enrollment and state funding was the strongest in the 1960s but had declined over time.

A study by Golding and Katz (1998) revealed that states with historically large private IHE markets were less likely to support public higher education. Toutkoushian and Hollis (1998) demonstrated that average faculty salaries and the percent of the population under age 18 had an impact on state appropriation levels. Koshal and Koshal (2000) noticed a give-and-take relationship where decreased appropriations effected increases in tuition, but increases in tuition led to decreases in appropriations. A state’s previous level of indebtedness was a predictor of the share of state funding for higher education allocations between 1993 and 1995 according to Okunade (2004). Using data from 1969 to 1994, Humphreys (2000) found that income had both a positive and significant effect on IHE allocations and determined that higher education appropriations were more likely to be cut during recessionary periods than other budget categories. Cheslock and Hughes (2011) found the use of funding formulas for general appropriations and private giving to public universities were associated with higher general fund appropriations. Ness and Tandberg (2013) confirmed Cheslock and Hughes’ (2011) results and also concluded that funding formulas and private giving were associated with higher capital spending.

More recently, many studies have examined factors associated with higher education allocations that focus on the role of tax support for higher education, differences in funding of research universities, the role of politics, states’ share of appropriations, state financial aid
spending, differences across states, economic growth of the private higher education sector, and capital expenditures for higher education.

While there are many other factors that have been studied in relation to state appropriations for higher education, a particularly important area in the literature considers funding for IHEs in relation to other state budget categories. As higher education is usually the largest discretionary line in most state budgets, scholars believe that reductions in allocations can be explained to some extent by the increased need to fund other budget lines such as K-12 education, corrections, and Medicaid (Curs et al., 2011; Delaney & Doyle, 2007; Ehrenberg, 2006; Hovey, 1999; Kane, Orzag & Peter, 2003; Ness & Tandberg, 2013; Rizzo, 2007; Tandberg, 2010; Titus 2009; Toutkoushian & Hollis, 1998).

In a report for the National Center for Public Policy and Higher Education, Hovey (1999) observed that higher education often receives larger increases in state allocations than other programs when financial conditions are good but serves as a balance wheel during economic declines, experiencing disproportionate reductions relative to other state funded entities. Hovey (1999) posited the designation as a balance wheel was due to the following perceived traits of IHEs when compared to other state services:

1. Unlike other state agencies, IHEs maintain separate budgets and reserves which leads to the perception they have fiscal flexibility and can weather temporary fiscal crises;
2. Higher education is believed to have greater ability to address budget declines through employee pay alterations than either K-12 or other state agencies;
3. Higher education has greater capability to adjust to spending concerns through manipulation of class size and number of courses offered than other programs whose spending levels are more fixed; and,
4. Higher education can maintain or increase spending by transferring a higher percentage of cost to consumers, and they also have the ability to acquire additional sources of revenue unlike other state agencies.

Several studies have been conducted that align with Hovey’s hypothesis. Rizzo (2007) used a broad panel data set assembled from over 30 different sources between 1977 and 2001 to investigate how the average share of state allocations to public IHEs has changed over the years. He found that after a sharp increase in the early 1970s, allocations declined from 22.6 percent to 16.4 percent. Additionally, he stated that court-mandated K-12 equalization programs were responsible for approximately one-third of the total spending increase which came at the expense of secondary education (Rizzo, 2007). Tandberg (2010) used secondary data from the 50 states during the period of 1976 to 2004 to forecast state appropriations for public higher education per $1,000 of personal income. He observed that unified governments provided more substantial allocations to K-12 education in relation to higher education and they reduced higher education funding in times of economic shocks (Tandberg, 2010).

The impact of state funding for corrections was analyzed by Schiraldi and Ziedenberg (2002) using the National Association of State Budget Officers’ Annual State Expenditure reports from 1985 to 2000. The results of their study showed that corrections spending, as a share of total state and local government funding, increased at six times the rate of state funding provided to higher education (Schiraldi & Ziedenberg, 2002).

Kane et al. (2003) analyzed whether increases in Medicaid funding resulted in decreased allocations for higher education support at the state level using state level data from 1977 through 2001 and found a negative relationship between both Medicaid and unemployment spending on higher education per capita. They performed a separate series of state-specific
regression analyses and found the negative relationship between Medicaid and higher education appropriations has grown stronger over time, making Medicaid a significant factor in explaining the decline in allocations (Kane et al., 2003). Additionally, the combination of reductions in state funding along with political restrictions on increasing tuition at public IHEs has resulted in discernible declines in both educational and general spending per student at public schools in comparison to private schools (Kane et al., 2003). Okunade’s (2004) study used data from all 50 states for the periods 1993-1994 and 1994-1995 to statistically model the determinants of state appropriations to public baccalaureate IHEs. The results of his analysis revealed that while prison budgets complement state appropriations for higher education, Medicaid spending competes with state allocations to public higher education (Okunade, 2004). Ness and Tandberg (2013) used fixed-effects panel data in an analysis of state allocations to IHEs from 1988 to 2004 and concluded that the share of state spending directed to Medicaid had a negative and significant effect on general fund expenditures.

In 2007, Delaney and Doyle directly tested Hovey’s balance wheel model and found strong evidence of a nonlinear relationship between state appropriations to higher education and state expenditures from 1992 to 2004. They also discovered that the balance wheel model did not apply to K-12 education, corrections or health care, thereby offering a confirmation of Hovey’s hypothesis (Delaney & Doyle, 2007). They expanded on their earlier work by conducting a follow-up study in 2011 that included extensive controls for political, economic, and higher education infrastructure factors as well as an expanded time frame of higher education funding patterns from 1985 to 2004 (Delaney & Doyle, 2011). Again, they found that even when controlling for the additional three factors, the fundamental balance wheel relationship between higher education and other state agencies resulted in greater allocations to
higher education during times of economic prosperity but larger cuts during periods of economic downturn (Delaney & Doyle, 2011).

Institutions of higher education across the United States are competing for dwindling public support due not only to the latest economic recession but also to the changing nature of state and federal spending policies over the last 30 years according to Bruininks et al. (2010). Greer and Klein (2010) suggested it is not feasible to presume that states can continue as the primary basis of funding for public IHEs nor is it reasonable to continue to pass on the costs to students who will either become burdened by unmanageable loan repayments or priced out of higher education.

Policymakers are under continual fiscal stress as demands for funding support for state services continue to grow (Bhatt, Rork & Walker, 2011). The volatility in state budgeting for higher education poses consistent challenges for both states and higher education because it hinders long-term planning and creates uncertainty (Delaney & Doyle, 2011). According to Bruininks et al. (2010), the new reality in higher education appears to be one where the same demands for research, outreach and education exist, albeit with less public support to fund those activities. Ehrenberg (2001) advised that public institutions will have to continue to diversify revenue sources and noted the search for endowments and use of annual fundraising campaigns will continue to grow. Private IHEs face their own monetary pressures as financial aid has become a larger share of tuition at many institutions. Tuition increases at these institutions relative to the rate of inflation tends to draw unfavorable views of pricing policies. Ehrenberg (2001) suggested that private IHEs also expand their revenue streams and become less driven by undergraduate tuition.
Summary

In this chapter, literature regarding the origin of philanthropy in American higher education was presented. From the first gift by John Harvard in 1636 to the sophisticated fundraising campaigns of today, philanthropy has been an important facet in the growth of higher education in American. The practice of higher education fundraising that began in the earliest days of this country has provided many benefits including the founding and development of new colleges and universities, the first access opportunities for women and African Americans, the advent of educational endowments and institutional foundations, and most importantly, the opportunity for legions of students to obtain a higher education through the private support raised for scholarship programs.

The literature review also presented a review of the theories that inform the study of philanthropy. The literature revealed that philanthropy is a multi-disciplinary area of study that derives significant knowledge and understanding from the areas of sociology, psychology, and economics. Philanthropic study has been based on a diverse array of perspectives and often focuses on past giving, altruism, fundraising cost and effectiveness, donors’ personal values and trust, organizational culture and quality, reciprocity, and donor motivation. The literature suggested that a theory of philanthropy based exclusively on one discipline or motive will not capture the essential aspect of reality (Schneewind, 1996).

In the final component, several of the more prominent social psychological theories considered were social identity theory, organizational identity theory, social exchange theory, self-image theory, and efficacy theory. Economic perspectives selected as particularly relevant to this study were price theory; game theory and cooperation; altruism, warm-glow and crowding out; resource dependence theory, and the balance wheel theory.
Chapter Three presents a description of the methods utilized to provide an analysis of IHEs’ fundraising results using a national data set comprising 25 years of voluntary support to higher education from 1987 to 2012.
CHAPTER THREE: METHODS

Introduction

Decreased funding combined with the growing demands of higher education by parents, students and their parents, communities and government, as well as other stakeholders has prompted institutional administrators to actively seek alternative funding opportunities to offset declining state and federal support in order to acquire additional resources. This study used a national data set consisting of 25 years of voluntary support to higher education from 1987 to 2012 and three economic indicator variables (Average Duration of Unemployment [ADU]; Employees on Nonagricultural Payrolls [ENP]; and Standard & Poor’s 500 Index [SPI]) in order to answer the following research questions:

1. After adjusting for inflation, what is the relationship between ADU, ENP, and SPI with private giving to higher education from 1987 to 2012?

2. After adjusting for inflation, what is the relationship between ADU, ENP, and SPI with private giving to higher education by institutional type (public and private) from 1987 to 2012?

3. After adjusting for inflation, what is the relationship between ADU, ENP, and SPI with private giving to higher education by institutional classification (public doctoral, public master’s, public baccalaureate, private doctoral, private master’s, and private baccalaureate) from 1987 to 2012?
4. After adjusting for inflation, what is the relationship between ADU, ENP, and SPI with private giving to higher education by source of giving (alumni, foundation, corporate, other individual, and parent) from 1987 to 2012?

Research Method and Design Appropriateness

This study used a quantitative research design to analyze secondary data. The statistical analysis selected to examine each of the research questions was multiple linear regression. The continuous dependent variable for each research question was private giving to higher education. The decision to utilize student enrollment as a denominator recognized the use of this value to equalize the size of institutions across institutions of varying size. In order to address the effects of inflation over the 25 year span of this study, all private giving data were adjusted through the Consumer Price Index (United States Department of Labor, Bureau of Labor Statistics, 2014a).

Usage of Secondary Data

Secondary databases can provide useful sources of large sample sets of giving data. One major advantage of using secondary data is the extent of data available from studies conducted on a large national scale which allows institutional researchers to cover a broader geographic scope. In addition, many of these data sets are longitudinal which affords the opportunity to examine changes and trends over time. A second advantage is noted in data collection processes performed with professional expertise that may not be readily available to smaller research studies (Brown & Saunders, 2008). The third advantage comes in the form of cost and resource savings. Analysis of secondary data saves the time and expense of collecting data, particularly
for quantitative studies, and can provide a much larger set of data than an individual researcher may be able to collect. Finally, when studies are focused on a national scale, the large data sets offered by national databases can furnish the power needed to effect generalizations of the findings (Hilton & Beaton, 1992).

A disadvantage of using secondary data is that the data collection process was not developed by the researcher opting to use secondary data; consequently, identification of any problems encountered during the collection process (e.g., respondent errors in completing survey questions) may not be detected. Due to the lack of this first-hand knowledge, it may be difficult for the researcher to identify bias as the survey instrument was developed and tested by others (Brown & Saunders, 2008). A second disadvantage results from the fact that the data were not collected specifically to answer the researcher’s own questions; hence, the researcher is limited to using only the data that exist in the data set.

**Variables of Interest: Economic Indicators**

The business cycle represents a graphical representation of economic activity. Defined by Burns and Mitchell for the National Bureau of Economic Research (Burns & Mitchell, 1947):

Business cycles are a type of fluctuation found in the aggregate economic activity of nations that organize their work mainly in business enterprises: a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions, contractions, and revivals which merge into the expansion phase of the next cycle (p. 3).

As no two business cycles are exactly the same, durations of contractions and expansions have varied greatly. Over the past thirty years, expansions were noted to extend from 120
months (1991 to 2001) to 12 months (1981 to 1982) and contractions ranged from 8 months (July 1990 to March 1991) to 18 months (December 2007 to June 2009). Additionally, significant differences have been noted in the amplitude of peaks and troughs from cycle to cycle.

Economic indicators are categorized according to how they relate to the business cycle. The selected indicators used in this study have been constructed by the United States Department of Labor, Bureau of Labor and Statistics; and Standard & Poor’s Dow Jones Indices (2014). Indicators that predict turning points and future conditions are classified as leading; those that identify the current economy and conditions in the process of developing are classified as coincident, and those that confirm a turning has occurred are classified as lagging (United States Department of Commerce, 2014).

The following three primary economic indicators (one from each category of leading, coincident, and lagging) were used to provide a context for examining trends of private giving to higher education from 1987 to 2012:

1. **Average Duration of Unemployment (ADU):** ADU is a closely watched gauge of the health of the economy. It serves as a lagging economic indicator because it measures the number of full weeks since the most recent employment for persons on layoff status. As ADU increases, consumer concern increases which serves to depress spending and limit economic growth. ADU provides an in-progress measure of joblessness; a rising rate is interpreted as an indication of a weakening economy, which may result in wage inflation and reduction in interest rates (U.S. Department of Labor, Bureau of Labor Statistics, 2014b). The steepest increases generally occur after an economic downturn has begun; decreases are noted to occur after an economic recovery has already begun.
2. Employees on Nonagricultural Payrolls (ENP): A coincident indicator, ENP provides a highly reliable assessment of change in nonagricultural payroll employment. Data were collected by the Bureau of Labor Statistics from approximately 160,000 businesses. Change in this number serves as one of the primary figures in the BLS’s monthly Employment Situation Report (United States Department of Labor, Bureau of Labor Statistics, 2014b). These data serve as an important indicator of the strength of the labor market and provide an early snapshot of the national economy.

3. Standard & Poor’s 500 Index (SPI): The SPI is designed to provide a weighted index of the prices of 500 publicly owned stocks. Stock prices generally reflect the informed expectancies of knowledgeable investors and traders. Increases in equity prices indicate larger corporate profitability implying a growing economy; decreases in equity prices indicate lower profitability expectations, thereby denoting a slower economy. As a leading indicator, SPI is one of the most commonly used benchmarks to interpret the overall performance of U.S. equity markets, consumer confidence and future business projections.

In order to address the effects of inflation over the 25 year span of this study, all private giving data were adjusted through the Consumer Price Index (CPI). The CPI is used to track the consumer level change in price of a weighted packet of goods and services that typically comprise monthly household purchases. The index reflects how much the packet has increased in value since the base year of 1984. There are two basic versions of the index: the CPI-U, which constitutes the buying patterns of all urban consumers, and the CPI-W, which measures
only those urban households that include a clerical worker or wage earner (U.S. Department of Labor, Bureau of Labor Statistics, 2014a). This study used the CPI-U for inflation adjustment.

**Population**

The study population was limited to public and private doctoral, master’s, and baccalaureate IHEs (according to Carnegie classification) that participated in the Voluntary Support of Higher Education (VSE) annual survey from 1987 through 2012. These criteria kept the population as homogenous as possible by institutional type and reporting of financial results. Due to the specific selection standards, all other institutions reporting fundraising data to the VSE were excluded (e.g., associate’s institutions, for-profit institutions, pre-college institutions, special focus institutions, and tribal institutions).

This study did not include other forms of income or support such as research contracts and government student financial aid. Further, only private, voluntary support reported in the categories of total, alumni, foundation, corporate, other individual, and parent giving were considered. Private giving from religious organizations, fundraising consortia, and other organizations were not analyzed as individual categories.

**Sampling Design/Participant Selection**

For the purposes of this study, all associate degree granting institutions, for-profit institutions, pre-college institutions, special focus institutions, and tribal institutions were filtered out of the data set. Additionally, sixteen higher education systems that reported giving data in aggregate form were excluded.
The statistical analysis selected to examine each of the research questions was a multiple linear regression. To determine the appropriate sample size for multiple linear regression, G*Power was utilized. For a multiple linear regression with six predictors, using an alpha of .05, a medium effect size \((f = .15)\), and a power of .80, the minimum required sample size to achieve empirical validity was calculated to be 77 participants.

The Institutional Review Board (IRB) was contacted to ascertain the need for certification. The IRB was informed in writing that this study would rely solely on secondary data collected by a third-party organization and no information on individual donors would be included in the data set. Further, institutional data were treated in aggregate form and individual institutions were afforded protection from disclosure.

**Data Collection**

Data reported to the VSE were amassed from institutions’ fundraising results achieved per academic year. Completion of the VSE survey is based on the rigidly prescribed standards in the *CASE Management and Reporting Standards: Standards for Annual Giving and Campaigns in Educational Fundraising* policy (CASE, 2009). These standards are frequently used as benchmarks for external accreditation to examine institutions’ advancement operations.

There are three versions of the higher education survey; full, partial, and minimal. The minimal version contains questions an institution must answer in order to participate; the full and partial surveys include the required questions on the minimal survey as well as some additional detail and requirements (CAE, 2013). Data requested for this study relied only on answers to questions housed in the minimal survey to allow for the maximum number of participants.
Survey data are submitted by chief advancement officers and are typically screened and authorized by institutional vice presidents prior to submission. It is noted that participation in the VSE survey is voluntary and, at this time, formal reliability and validity studies do not appear in the literature. The survey opens annually on July 1 and closes on October 1. By January 1, data are downloaded for analysis and reviewed by the Council for Aid to Education (CAE) to identify and follow up with any institution whose data do not appear consistent with national trends or historical reporting (CAE, 2013). The official results are released in February and the annual VSE publication is published the following spring.

Instrumentation

The Council for Aid to Education (CAE) was the first organization in the United States to provide national statistics on private support for IHEs and it manages the Voluntary Support of Education survey as a public service (CAE, 2013). The VSE survey is recognized as the authoritative source on private support for higher education as it encompasses approximately 85 percent of total private giving to colleges and universities in the United States (CAE, 2013). The first VSE study was conducted in 1957 and the annual survey results continue to provide a central source for IHEs to monitor private support to colleges and universities. VSE has maintained longitudinal statistics on charitable support for higher education dating back to 1969 and is recognized as the definitive source on private giving by higher education policy experts. The most recent ten years of data are available to participating institutions through CAE’s proprietary Data Miner web-based application. Survey results allow subscribers to strategically measure fundraising performance in relation to peer institutions and to determine areas of fundraising strengths or weaknesses by individual institutions.
Data Analysis

Data were transferred to SPSS 22.0 for analysis and cleaned to ascertain that all data met the inclusion criteria. The inclusion criteria required that all institutions were classified according to the following Carnegie classifications: baccalaureate – arts & sciences, associates, and diverse; master’s – larger, medium, and small programs; and doctoral – research, research/high activity, and research/very high activity. Other institutional classifications were removed from the data set. A visual examination of the data was conducted to identify missing cases. Continuous variables were assessed for univariate outliers. To assess for univariate outliers, z scores were created and values more than 3.29 standard deviations away from the mean were considered outliers (Tabachnick & Fidell, 2012). All univariate outliers and missing cases were removed from the data set.

Prior to conducting the statistical analyses, monetary data were adjusted for inflation using the Consumer Price Index.

Descriptive statistics were developed to describe the sample population. Frequencies and percentages were conducted for institutional type and institutional classification. Means and standard deviations were calculated for the following private giving categories: total, alumni, foundation, corporate, other individual, and parent, using student enrollment as a denominator to equalize the size of institutions across institutions of varying size. Means and standard deviations are also presented for ADU, ENP, and SPI.

Prior to addressing the research questions, a Pearson correlation matrix was conducted to determine what statistical relationships existed, if any, among the independent variables of the
study (SPI, ADR, and ENP) and total giving (adjusted for inflation and standardized by enrollment). Statistical significance was determined using an alpha value of .05.

**Research Question 1.** After adjusting for inflation, what is the relationship between ADU, ENP, and SPI with private giving to higher education from 1987 to 2012?

To assess research question one, and to determine if, after adjusting for inflation, there was a relationship between ADU, ENP, and SPI with private giving to higher education, a multiple linear regression was conducted. The multiple linear regression is the appropriate analysis when the goal of research is to determine the extent of the relationship among a set of continuous predictor variables on a continuous outcome variable (Pallant, 2010). The predictor variables in the model were ADU, ENP, and SPI. All predictor variables were measured from archival data. The dependent variable in the analysis was private giving to higher education. It was treated as a continuous variable. The overall model was assessed together as predictors in a regression model. If the model was found to be significant, individual predictor variables were examined to determine the unique contribution they had to the dependent variable. The overall regression model was assessed with the $F$ test and the $R^2$ was used to determine the amount of variance in private giving that was attributed to ADU, ENP, and SPI. The $t$ test was used to assess the significance of the individual predictor variables. For each significant predictor, a one unit increase in the predictor variable resulted in an increase or decrease in private giving by the number of unstandardized beta units.

Prior to analysis, the assumptions of normality, homoscedasticity, and absence of multicollinearity were assessed. Normality of the residuals was examined with a p-p plot and homoscedasticity was assessed with a residuals scatterplot (Stevens, 2009). The presence of multicollinearity was assessed with Variance Inflation Factors (VIFs), where a VIF value above
10.00 indicates the presence of multicollinearity (Tabachnick & Fidell, 2012). Statistical significance was determined using an alpha of .05 for analysis.

**Research Question 2.** After adjusting for inflation, what is the relationship ADU, ENP, and SPI with private giving to higher education by institutional type (public and private) from 1987 to 2012?

To assess research question two, and to determine if, after adjusting for inflation, there was a relationship between ADU, ENP, and SPI with private giving to higher education by institutional type (public and private), two multiple linear regressions were conducted. One regression was conducted for each dependent variable. The dependent variables in the analyses were total private giving to public universities and total private giving to private universities. Both variables were treated as continuous data. The predictor variables in the model were ADU, ENP, and SPI. All predictor variables were measured from archival data. Analyses was conducted as presented for research question one.

After the regression analyses were conducted, a Fisher’s $r$ to $z$ transformation was conducted. The $r$ to $z$ transformation is the appropriate analysis when the goal of research is to compare two regression models. To compare the $r$ values obtained in the regression analyses, and to show whether or not a difference exists between those values, the $r$ values were converted to $z$ scores and the $z$ values were compared for their statistical significance. The transformation was utilized to determine if there were differences in the amount of variance in private giving to institutional type (public and private).

**Research Question 3.** After adjusting for inflation, what is the relationship between ADU, ENP, and SPI with private giving to higher education by institutional
classification (public doctoral, public master’s, public baccalaureate, private doctoral, private master’s, and private baccalaureate) from 1987 to 2012?

To assess research question three, and to determine if, after adjusting for inflation, there was a relationship between ADU, ENP, and SPI with private giving to higher education by institutional classification, six multiple linear regressions were conducted. One regression was conducted for each dependent variable. The dependent variable in the analyses was private giving to the following institutional classifications: public doctoral, public master’s, public baccalaureate, private doctoral, private master’s, and private baccalaureate. All dependent variables were treated as continuous data. The predictor variables in the model were ADU, ENP, and SPI. All predictor variables were measured from archival data. Analyses were conducted as presented for research question one.

After the regression analyses were conducted, 15 Fisher’s $r$ to $z$ transformations were conducted. The transformation was utilized to determine if there were differences in the amount of variance in private giving to institutional classification (public doctoral, public master’s, public baccalaureate, private doctoral, private master’s, and private baccalaureate). Each type was compared.

**Research Question 4.** After adjusting for inflation, what is the relationship between ADU, ENP, and SPI with private giving to higher education by source of giving (alumni, foundation, corporate, other individual, and parent) to public and private institutions from 1987 to 2012?

To assess research question four, and to determine if, after adjusting for inflation, there was a relationship between ADU, ENP, and SPI with private giving to higher education by source of giving (alumni, foundation, corporate, other individual, and parent) to public and
private institutions, ten multiple linear regressions were conducted. One regression was conducted for each dependent variable. The dependent variables in the analyses were private giving by the following sources of giving to both public and private institutions: alumni, foundation, corporate, other individual, and parent. All dependent variables were treated as continuous data. The predictor variables in the model were ADU, ENP, and SPI. All predictor variables were measured from archival data. Analyses were conducted as presented for research question one.

After the regression analyses were conducted, 45 Fisher’s $r$ to $z$ transformations were conducted. The transformation was utilized to determine if there were differences in the amount of variance in private giving by source of giving (alumni, foundation, corporate, other individual, and parent) to public and private institutions and to determine which model offered stronger predictive value. Each type was compared.

**Summary**

This section included both the presentation of the design and setting in which the study occurred. Utilizing a quantitative research design to analyze secondary data from a national data set, this study determined if significant differences in 25 years of voluntary support to higher education exist by institutional type, institutional classification, and by giving source. The appropriate sample size was calculated and determined to be 77 participants. Finally, the data analysis techniques were described in detail.
CHAPTER FOUR

RESULTS

Introduction

This chapter presents the findings from the data collected as part of this study. The researcher employed a quantitative research design using analysis of secondary data on private giving to higher education gathered by the Voluntary Support of Education Survey from 1987 to 2012. The researcher sought to answer the four research questions regarding the relationship between selected economic indicators and private giving to higher education. The researcher will first discuss the data screening process, followed by the respondents’ demographic information and conclude with a detailed statistical analysis of each of the research questions.

Description of the Research Sample

The researcher gathered a total of 27,372 cases from 1987 to 2012 for this study. The data set was screened for inclusion criteria and univariate outliers. Those cases with excessive missing data were removed from the data set as well as those cases that did not fit into the following Carnegie classifications: baccalaureate – arts & sciences, associates, and diverse; master’s – larger, medium, and small programs; and doctoral – research, research/high activity, and research/very high activity. After cases with excessive missing data and those cases that did not fit in the aforementioned institutional list were removed from the study, 21,030 cases remained in the data set; univariate outliers were then assessed for the giving variables. The
researcher adjusted the giving variables of the study (total, alumni, foundation, corporate, other individual, and parent) for inflation, then standardized by enrollment.

The continuous variables were assessed for univariate outliers via the examination of standardized values, or z scores on the data set of 21,030 cases. Outliers are defined as standardized values below -3.29 or above 3.29 (Tabachnick & Fidell, 2012). The variables the researcher assessed included S&P 500 Stock Price Index (SPI), employees on non-agricultural payroll (ENP), average duration of unemployment (ADU), and total giving, alumni giving, foundation giving, corporate giving, other individual giving, and parent giving. No outliers were found for SPI, ENP, or ADU, but 336 outliers were found for total giving, 405 for alumni giving, 233 for foundation giving, 277 for corporate giving, 254 for other giving, and 191 for parent giving. All cases with outliers were removed from the data set, leaving a total of 19,965 cases. Some of the outlying cases overlapped (i.e., some of the same cases with outlying scores from alumni giving also had outlying scores for parent giving). Because of this overlap, the total number of cases removed from the data set was not a total of each of the aforementioned frequencies of outlying scores. In other words, 1,696 outlying scores were removed, but a total of 1,696 cases were not removed because of the overlap of cases with multiple outlying scores from different variables. Additionally, two cases of enrollment had a value of zero in the data set; they were removed from the study. Finally, the researcher conducted analyses on the remaining 19,963 cases with non-missing data.

**Descriptive Statistics**

Of the 19,963 cases examined in the study, 12,655 were from private institutions (63%) while 7,308 cases (37%) were from public institutions. Master’s institutions reported the highest
number of cases, followed by baccalaureate, then doctoral. Table 1 presents frequencies and percentages for the type of institution and degree classification.

Table 1

*Frequencies and Percentages for Type and Classification*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>7308</td>
<td>37</td>
</tr>
<tr>
<td>Private</td>
<td>12655</td>
<td>63</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
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<td></td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>6724</td>
<td>34</td>
</tr>
<tr>
<td>Master’s</td>
<td>8470</td>
<td>42</td>
</tr>
<tr>
<td>Doctoral</td>
<td>4769</td>
<td>24</td>
</tr>
</tbody>
</table>

SPI values ranged from 265.88 to 1,477.19, with an average of 873.18 (SD = 408.50). ADU values ranged from 11.90 to 39.43, with an average of 18.57 (SD = 7.29). ENP values ranged from 102,244.73 to 137,978.91, with an average of 123,254.19 (SD = 11,317.31). Table 2 presents the descriptive statistics (ranges, means, and standard deviations) for the continuous variables of interest; Figures 4–7 present the figures on the variables’ means.

Table 2

*Descriptive Statistics for Predictor Variables: SPI, ENP, and ADU*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPI</td>
<td>265.88</td>
<td>1477.19</td>
<td>873.18</td>
<td>408.50</td>
</tr>
<tr>
<td>ADU</td>
<td>11.90</td>
<td>39.43</td>
<td>18.57</td>
<td>7.29</td>
</tr>
<tr>
<td>ENP</td>
<td>102244.73</td>
<td>137978.91</td>
<td>123254.19</td>
<td>11317.31</td>
</tr>
</tbody>
</table>

Total giving units ranged from 0.22 to 23,584.86, with an average of 3,095.79 (SD = 3,353.76). Of the remaining giving variables, alumni giving had the largest average (M = 1,056.16) followed by other individual (M = 695.64). Enrollment ranged from 117.00 to
97,001.00, with an average of 7,524.07 ($SD = 9,026.22$). Table 3 presents descriptive statistics for this data.

Table 3

Descriptive Statistics for Total Giving, Alumni Giving, Foundation Giving, Corporate Giving, Other Individual Giving, and Parent Giving Units, Enrollment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min.</th>
<th>Max.</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total giving</td>
<td>0.22</td>
<td>23584.86</td>
<td>3095.79</td>
<td>3353.76</td>
</tr>
<tr>
<td>Alumni giving</td>
<td>0.00</td>
<td>10537.98</td>
<td>1056.16</td>
<td>1644.91</td>
</tr>
<tr>
<td>Foundation giving</td>
<td>0.00</td>
<td>7610.30</td>
<td>634.59</td>
<td>1008.36</td>
</tr>
<tr>
<td>Corporate giving</td>
<td>0.00</td>
<td>2885.37</td>
<td>345.96</td>
<td>398.49</td>
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<tr>
<td>Other individual giving</td>
<td>0.00</td>
<td>7484.00</td>
<td>695.64</td>
<td>957.36</td>
</tr>
<tr>
<td>Parent giving</td>
<td>0.00</td>
<td>1554.09</td>
<td>92.25</td>
<td>196.80</td>
</tr>
<tr>
<td>Enrollment</td>
<td>117.00</td>
<td>97001.00</td>
<td>7524.07</td>
<td>9026.22</td>
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</tbody>
</table>

Figure 4. SPI means from 1987 to 2012.
Figure 5. ADU means from 1987 to 2012.

Figure 6. Total giving means from 1987 to 2012.
Prior to addressing the research questions, the researcher conducted a Pearson correlation matrix to determine what statistical relationships exist, if any, among the independent variables in this study (SPI, ADU, and ENP) and total giving. Statistical significance was determined using an alpha value of .05. The results of the Pearson correlation matrix indicated that these variables were significantly related to one another; the $p$ values were above .05. Of the correlations conducted, the largest correlation existed between two of the independent variables: SPI and ENP, $r = .96, p < .001$. Because this correlation is extremely high and indicates the presence of multicollinearity (a violation for the regression analyses proposed for research questions 1–4), the correlations on total giving for these two independent variables were compared. The correlation between SPI and total giving was slightly larger, $r = .06$ (rounded from .061), than the correlation between ENP and total giving, $r = .06$ (rounded from .055).

![Graph showing giving sources](image)

**Figure 7.** Giving sources’ means for alumni, foundation, corporate, other individual, and parent from 1987 to 2012.

**Statistical Analysis**

Prior to addressing the research questions, the researcher conducted a Pearson correlation matrix to determine what statistical relationships exist, if any, among the independent variables in this study (SPI, ADU, and ENP) and total giving. Statistical significance was determined using an alpha value of .05. The results of the Pearson correlation matrix indicated that these variables were significantly related to one another; the $p$ values were above .05. Of the correlations conducted, the largest correlation existed between two of the independent variables: SPI and ENP, $r = .96, p < .001$. Because this correlation is extremely high and indicates the presence of multicollinearity (a violation for the regression analyses proposed for research questions 1–4), the correlations on total giving for these two independent variables were compared. The correlation between SPI and total giving was slightly larger, $r = .06$ (rounded from .061), than the correlation between ENP and total giving, $r = .06$ (rounded from .055).
Because the relationship between SPI and total giving was larger, ENP was removed from the proposed analyses for research questions 1–4; ENP was not further examined in the study. Table 4 presents the results of the correlation matrix.

Table 4

Pearson Correlation Matrix among SPI, ADU, ENP, and Total Giving

<table>
<thead>
<tr>
<th>Variable</th>
<th>SPI</th>
<th>ADU</th>
<th>ENP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADU</td>
<td>.39**</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>ENP</td>
<td>.96**</td>
<td>.40**</td>
<td>—</td>
</tr>
<tr>
<td>Total giving</td>
<td>.06**</td>
<td>-.03**</td>
<td>.06**</td>
</tr>
</tbody>
</table>

Note. * p < .05, ** p < .01.

Research Question 1

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education from 1987 to 2012?

To address research question one, the researcher conducted a multiple linear regression to determine if SPI and ADU predict total giving (ENP was not included in the regression due to the presence of multicollinearity). Statistical significance was determined using an alpha level of .05. Prior to analyses, the researcher assessed the assumptions of the regression—normality of the residuals, homoscedasticity, and absence of multicollinearity. Normality of the residuals was examined with a p-p plot and deviation from normality was found (Figure 5).
However, the $F$ statistic can be robust to violations of normality for large sample sizes (Stevens, 2009). Homoscedasticity was assessed with a residuals scatterplot and no non-random pattern was found; thus, the assumption of homoscedasticity was met (Appendix C). The presence of multicollinearity was assessed with Variance Inflation Factors (VIFs), where a VIF value above 10.00 indicates the presence of multicollinearity (Tabachnick & Fidell, 2012). No VIF values were above 10.00 and thus the assumption was met.

The results of the multiple linear regression were statistically significant, $F(2, 19960) = 67.48, p < .001, R^2 = .01$, indicating that SPI and ADU predict total giving, and account for ($R^2$) 1\% of the variance in total giving. Because the regression model was found to be statistically significant, the individual predictors were examined to determine if they offered a significant, unique contribution toward predicting total giving. SPI offered a significant, unique contribution
toward predicting total giving, $B = 0.69$, $p < .001$: as SPI increases by one unit, total giving increases by $(B)$ 0.69 units. ADU also offered a significant, unique contribution toward predicting total giving, $B = -27.31$, $p < .001$: as ADU increases by one unit, total giving decreases by $(B)$ 27.31 units. The researcher rejected the null hypothesis–no relationship exists between the independent variables with private giving to a higher education. Table 5 presents the results of the regression analysis; Figures 9 and 10 visually illustrate the associations.

Table 5

*Regression Analysis for SPI and ADU Predicting Total Giving*

<table>
<thead>
<tr>
<th>Model</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPI</td>
<td>0.69</td>
<td>0.06</td>
<td>.09</td>
<td>11.02</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>-27.31</td>
<td>3.53</td>
<td>-.06</td>
<td>-7.73</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
</tbody>
</table>

*Note. $F(2, 19960) = 67.48$, $p < .001$, $R^2 = .01$.*

*Figure 9.* SPI and total giving means from 1987 to 2012.
Figure 10. ADU and total giving means from 1987 to 2012.

Research Question 2

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education by institutional type (public and private) from 1987 to 2012?

To address the second research question, the researcher conducted two multiple linear regressions to determine if SPI and ADU predict total giving by university type (public and private); one regression was conducted per university type. ENP was not included in the regressions due to the extremely high correlation with SPI, which indicated a violation for the regression analyses. Statistical significance was determined using an alpha level of .05. Prior to analyses, the researcher assessed the assumptions of the regression—normality of the residuals, homoscedasticity, and absence of multicollinearity. Normality of the residuals and homoscedasticity were examined with scatterplots (Stevens, 2009). A larger deviation from normality was seen in giving to public IHEs than in giving to private IHEs (Appendix D).
Homoscedasticity was assessed with residual scatterplots and no non-random pattern was found; thus, the assumption of homoscedasticity was met (Appendix E). The presence of multicollinearity was assessed with Variance Inflation Factors (VIFs), where a VIF value above 10.0 indicates the presence of multicollinearity (Tabachnick & Fidell, 2012). No VIF values were above 10.0 and thus the assumption was met.

The results of the multiple linear regression for public universities were statistically significant, $F(2, 7305) = 96.52, p < .001, R^2 = .03$, indicating that SPI and ADU predict total giving to public universities, and account for ($R^2$) 3% of the variance in total giving. Because the regression model for giving to public universities was found to be statistically significant, the individual predictors were examined to determine if they offered a significant, unique contribution toward predicting total giving. SPI offered a significant, unique contribution toward predicting total giving, $B = 0.65, p < .001$: as SPI increases by one unit, total giving increases by $(B)$ 0.65 units to public universities. ADU also offered a significant, unique contribution toward predicting total giving, $B = -6.93, p < .05$: as ADU increases by one unit, total giving decreases by $(B)$ 6.93 units to public universities.

The results of the multiple linear regression for giving to private universities were also statistically significant, $F(2, 12652) = 79.08, p < .001, R^2 = .01$, indicating that SPI and ADU predict total giving to private universities, and account for ($R^2$) 1% of the variance in total giving. Because the regression model for giving to private universities was found to be statistically significant, the individual predictors were examined to determine if they offered a significant, unique contribution toward predicting total giving. SPI offered a significant, unique contribution toward predicting total giving, $B = 1.05, p < .001$: as SPI increases by one unit, total giving increases by $(B)$ 1.05 units to private universities. ADU also offered a significant, unique
contribution toward predicting total giving, $B = -30.28$, $p < .001$: as ADU increases by one unit, total giving decreases by $(B)$ 30.28 units to private universities. The researcher rejected the null hypothesis—no relationship exists between the independent variables with private giving to a higher education by university type. Table 6 presents the results of the regression analyses.

Table 6

Regression Analyses for SPI and ADU Predicting Total Giving by University Type (Public and Private)

<table>
<thead>
<tr>
<th>Model</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.65</td>
<td>0.05</td>
<td>.17</td>
<td>13.63</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>-6.93</td>
<td>2.49</td>
<td>-.04</td>
<td>-2.78</td>
<td>.006</td>
<td>1.18</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>1.05</td>
<td>0.08</td>
<td>.12</td>
<td>12.50</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
<tr>
<td>ADU</td>
<td>-30.28</td>
<td>4.88</td>
<td>-.06</td>
<td>-6.20</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
</tbody>
</table>

*Note.* Public: $F(2, 7305) = 96.52$, $p < .001$, $R^2 = .03$. Private: $F(2, 12652) = 79.08$, $p < .001$, $R^2 = .01$.

Additionally, the researcher conducted a Fisher’s $r$ to $z$ transformation to compare the two regression models and to determine which regression model was a better predictor of total giving. Statistical significance was determined using an alpha value of .05. The $r$ values used were the square root values of the coefficients of determination ($R^2$); these coefficients determined how much variance in the dependent variable was explained by the set of predictors for each regression model. The $r$ value for the public university was $(\sqrt{.03}) .17$ and the $r$ value for the private university was $(\sqrt{.01}) .10$. A Fisher’s $r$ to $z$ transformation takes into account the sample sizes ($N$) used from the regression analyses that produced the $R^2$ values. This $N$ differs from the total sample size of the variable’s cases by one case ($N_{\text{of sample}} - 1 = N_{\text{total for regression}}$). For the Fisher’s $r$ to $z$ transformations outlined in the study, the total sample sizes were based on the
N used in the regression analyses. The regression on total giving to public and private IHEs had the following sample sizes: 7307 and 12654, respectively. The result of the Fisher’s r to z analysis on total giving to public and private IHEs was statistically significant, \( z = 4.85, p < .001 \), indicating that the public university regression model was a statistically stronger predictor of total giving than the private university regression model.

**Research Question 3**

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education by institutional classification (public doctoral, public master’s, public baccalaureate, private doctoral, private master’s, and private baccalaureate) from 1987 to 2012?

To address research question three, the researcher conducted six multiple linear regressions to determine if SPI and ADU (ENP was not assessed due to the presence of multicollinearity) predict total giving by university type (public and private) and by classification type (baccalaureate, master’s, and doctoral). One regression was conducted per university and classification type. Statistical significance was determined using an alpha level of .05. Prior to analyses, the researcher assessed the assumptions of the regression—normality of the residuals, homoscedasticity, and absence of multicollinearity. Normality of the residuals was examined with p-p plots and the largest deviation of normality was found in total giving to public baccalaureate IHEs; the least amount of deviation from normality was seen in total giving to private baccalaureate IHEs (Appendix F).

Homoscedasticity was assessed with residuals scatterplots and no non-random pattern was found; thus, the assumption of homoscedasticity was met (Appendix G). The presence of
multicollinearity was assessed with Variance Inflation Factors (VIFs), where a VIF value above 10.00 indicates the presence of multicollinearity (Tabachnick & Fidell, 2012). No VIF values were above 10.00 and thus the assumption was met.

The results of the multiple linear regressions for giving to public universities were statistically significant for each classification type, indicating that SPI and ADU predict total giving by all classification types to public universities: baccalaureate, $F(2, 730) = 8.68, p < .001, R^2 = .02$; master’s, $F(2, 3518) = 97.81, p < .001, R^2 = .05$; and doctoral, $F(2, 3051) = 84.57, p < .001, R^2 = .05$. These findings indicate that SPI and ADU account for $(R^2)$ 2% of the variance in total giving to public baccalaureate university classifications and 5% of the variance in total giving to public master’s and doctoral university classifications. Because these regression models were found to be statistically significant, the individual predictors were examined to determine if they offered a significant, unique contribution toward predicting total giving. For giving to public baccalaureate, only SPI offered a significant, unique contribution toward predicting total giving, $B = 0.54, p < .001$: as SPI increases by one unit, total giving increases by $(B) 0.54$ units.

For giving to public master’s, both SPI ($B = 0.28, p < .001$) and ADU ($B = -4.32, p < .001$) offered significant, unique contributions toward predicting total giving: as SPI increases, total giving increases by $(B) .28$ units and as ADU increases, total giving decreases by $(B) 4.32$ units. For giving to public doctoral, only SPI offered a significant, unique contribution toward predicting total giving, $B = 1.14, p < .001$: as SPI increases by one unit, total giving increases by $(B) 1.14$ units. Figures 11 and 12 visually illustrate the associations between the independent and dependent variables for public IHEs by classification.
Figure 11. SPI with total giving to public IHEs means from 1987 to 2012 for baccalaureate, master’s, and doctoral.

Figure 12. ADU with total giving to public IHEs means from 1987 to 2012 for baccalaureate, master’s, and doctoral.
The results of the multiple linear regressions for giving to private universities were also statistically significant for each classification type, indicating that SPI and ADU predict total giving for all classification types to private universities: baccalaureate, \( F(2, 5988) = 54.47, p < .001, R^2 = .02 \); master’s, \( F(2, 4946) = 57.20, p < .001, R^2 = .02 \); and doctoral, \( F(2, 1712) = 13.14, p < .001, R^2 = .02 \). These findings indicate that SPI and ADU account for (\( R^2 \)) 2% of the variance in total giving to each private classification type. Because these regression models were found to be statistically significant, the individual predictors were examined to determine if they offered a significant, unique contribution toward predicting total giving. For giving to private baccalaureate, both SPI (\( B = 1.28, p < .001 \)) and ADU (\( B = -33.63, p < .001 \)) offered significant, unique contributions toward predicting total giving: as SPI increases, total giving increases by \((B) 1.28 \) units and as ADU increases, total giving decreases by \((B) 33.63 \) units. For giving to private master’s, both SPI (\( B = 0.74, p < .001 \)) and ADU (\( B = -32.53, p < .001 \)) offered significant, unique contributions toward predicting total giving: as SPI increases, total giving increases by \((B) .74 \) units and as ADU increases, total giving decreases by \((B) 32.53 \) units. For giving to private doctoral, only SPI offered a significant, unique contribution toward predicting total giving, \( B = 1.52, p < .001 \): as SPI increases by one unit, total giving increases by \((B) 1.52 \) units. Figures 13 and 14 visually illustrate the associations between the independent and dependent variables for private IHEs by classification.
Figure 13. SPI with total giving to private IHEs means from 1987 to 2012 for baccalaureate, master’s, and doctoral.

Figure 14. ADU with total giving to private IHEs means from 1987 to 2012 for baccalaureate, master’s, and doctoral.
The researcher rejected the null hypothesis—no relationship exists between the independent variables with private giving to a higher education by university and classification type. Table 7 presents the results of the regression analyses.

Table 7

*Regression Analyses for SPI and ADU Predicting Total Giving by University Type (Public and Private) and Classification Type (Baccalaureate, Master’s, and Doctoral)*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE</th>
<th>(\beta)</th>
<th>t</th>
<th>p</th>
<th>VIF</th>
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<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.54</td>
<td>0.15</td>
<td>.15</td>
<td>3.64</td>
<td>&lt; .001</td>
<td>1.24</td>
</tr>
<tr>
<td>ADU</td>
<td>1.63</td>
<td>7.55</td>
<td>.01</td>
<td>0.22</td>
<td>.830</td>
<td>1.24</td>
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<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.28</td>
<td>0.02</td>
<td>.25</td>
<td>13.93</td>
<td>&lt; .001</td>
<td>1.17</td>
</tr>
<tr>
<td>ADU</td>
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<td>-.07</td>
<td>-4.13</td>
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<tr>
<td>SPI</td>
<td>1.14</td>
<td>0.09</td>
<td>.24</td>
<td>12.60</td>
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<td>1.17</td>
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<td>-1.77</td>
<td>.077</td>
<td>1.17</td>
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<td></td>
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</tr>
<tr>
<td>SPI</td>
<td>1.28</td>
<td>0.12</td>
<td>.15</td>
<td>10.42</td>
<td>&lt; .001</td>
<td>1.19</td>
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<tr>
<td>ADU</td>
<td>-33.63</td>
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<td>-.07</td>
<td>-4.69</td>
<td>&lt; .001</td>
<td>1.19</td>
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<td>Private master’s</td>
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<tr>
<td>SPI</td>
<td>0.74</td>
<td>0.07</td>
<td>.15</td>
<td>9.94</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>-32.53</td>
<td>4.34</td>
<td>-.11</td>
<td>-7.50</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>Private doctoral</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>1.52</td>
<td>0.30</td>
<td>.13</td>
<td>5.10</td>
<td>&lt; .001</td>
<td>1.20</td>
</tr>
<tr>
<td>ADU</td>
<td>-27.20</td>
<td>16.82</td>
<td>-.04</td>
<td>-1.62</td>
<td>.106</td>
<td>1.20</td>
</tr>
</tbody>
</table>

*Note.* Public baccalaureate: \(F(2, 730) = 8.68, p < .001, R^2 = .02\). Public master’s: \(F(2, 3518) = 97.81, p < .001, R^2 = .05\). Public doctoral: \(F(2, 3051) = 84.57, p < .001, R^2 = .05\). Private baccalaureate: \(F(2, 5988) = 54.47, p < .001, R^2 = .02\). Private master’s: \(F(2, 4946) = 57.20, p < .001, R^2 = .02\). Private doctoral: \(F(2, 1712) = 13.14, p < .001, R^2 = .02\).
Additionally, 15 Fisher’s $r$ to $z$ transformations were conducted to compare the six regression models to determine which model offered a statistically, significantly stronger contribution toward predicting total giving. Statistical significance was determined using an alpha value of .05. The $r$ values used were the square root values of the coefficients of determination ($R^2$); these coefficients determined how much variance on the dependent variable was explained by the set of predictors for each regression model. All private classifications as well as public baccalaureate had an $r$ value of (√.02) .14. Giving to public master’s and doctoral had an $r$ value of (√.05) .22. The transformations took into account the sample sizes as well.

Of the 15 analyses conducted, eight were found to be statistically significant. No statistically significant differences in contribution to total giving were found among the three private classifications when compared to each other. No statistically significant differences were found when giving to the three private classifications were compared to giving to public baccalaureate IHEs. Giving to public master’s offered a statistically stronger model for predicting total giving than the giving to public baccalaureate model and all three private classification models. Giving to public doctoral offered a statistically stronger model for predicting total giving than did giving to public baccalaureate and giving to all three private classifications. Table 8 presents the results of the analyses.
Table 8

_**Fisher’s r to z Transformations between Public and Private Classification Types (Baccalaureate, Master’s, and Doctoral) from the Regressions on Total Giving**_

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
<th></th>
<th></th>
<th>Private</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baccalaureate</td>
<td>Master’s</td>
<td>Doctoral</td>
<td>Baccalaureate</td>
<td>Master’s</td>
<td>Doctoral</td>
</tr>
<tr>
<td>N</td>
<td>732</td>
<td>3520</td>
<td>3053</td>
<td>5990</td>
<td>4948</td>
<td>1714</td>
</tr>
</tbody>
</table>

Public

- Baccalaureate: —
- Master’s: 2.03*
- Doctoral: 2.01*

Private

- Baccalaureate: 0.00 3.89** 3.72** —
- Master’s: 0.00 3.75** 3.59** 0.00 —
- Doctoral: 0.00 2.81** 2.74** 0.00 0.00 —

*Note.* Absolute z score statistics for comparisons of regression models are presented in the table.

* p < .05, ** p < .01

**Research Question 4**

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education by source of giving (alumni, foundation, corporate, other individual, and parent) to public and private institutions from 1987 to 2012?

To address research question four, the researcher conducted 10 multiple linear regressions to determine if SPI and ADU predict the five giving sources (alumni, foundation, corporate, other individual, and parent) by university type (public and private). ENP was again excluded from the regressions due the extremely high correlation with SPI. One regression was conducted per university type for each giving source. Statistical significance was determined using an alpha level of .05. Prior to analyses, the researcher assessed the assumptions of the regression—normality of the residuals, homoscedasticity, and absence of multicollinearity.
Normality of the residuals was examined with p-p plots and the greatest deviation from normality was found in parent giving to public IHEs followed by foundation giving to public IHEs; comparatively, alumni giving to private IHEs and foundation giving to private IHE exhibited lesser deviations from normality (Appendix H).

The $F$ statistic is noted to be robust to violations of normality for large sample sizes (Stevens, 2009). Homoscedasticity was assessed with residuals scatterplots and no non-random pattern was found; thus, the assumption of homoscedasticity was met (Appendix I). The presence of multicollinearity was assessed with Variance Inflation Factors (VIFs), where a VIF value above 10.00 indicates the presence of multicollinearity (Tabachnick & Fidell, 2012). No VIF values were above 10.00 and thus the assumption was met.

The results of the multiple linear regressions for public universities were statistically significant, indicating that SPI and ADU predict each of the five giving types to public universities: alumni: $F(2, 7305) = 54.28, p < .001, R^2 = .02$; foundation: $F(2, 7305) = 96.40, p < .001, R^2 = .03$; corporate: $F(2, 7305) = 26.75, p < .001, R^2 = .01$; other individual: $F(2, 7305) = 91.19, p < .001, R^2 = .02$; and parent: $F(2, 7305) = 42.88, p < .001, R^2 = .01$. These findings indicate that SPI and ADU account for ($R^2$) 1% of the variance in corporate giving and parent giving, 2% of the variance in alumni giving and other individual giving, and 3% of the variance in foundation giving.

Because these regression models on giving to public IHEs were found to be statistically significant, the individual predictors were examined to determine if they offered a significant, unique contribution toward predicting the dependent variables for public institutions. For alumni giving to public IHEs, both SPI ($B = 0.18, p < .001$) and ADU ($B = -2.30, p = .013$) offered significant, unique contributions: as SPI increases, alumni giving increases by ($B$) .18 units and
as ADU increases, alumni giving decreases by \( (B) \) 2.30 units. For foundation giving to public IHEs, only SPI offered a significant, unique contribution, \( B = 0.19, p < .001 \): as SPI increases by one unit, foundation giving increases by \( (B) \).19 units. For corporate giving to public IHEs, both SPI \( (B = 0.08, p < .001) \) and ADU \( (B = -2.13, p < .001) \) offered significant, unique contributions: as SPI increases, corporate giving increases by \( (B) \).08 units and as ADU increases, corporate giving decreases by \( (B) \) 2.13 units. For other individual giving to public IHEs, both SPI \( (B = 0.15, p < .001) \) and ADU \( (B = -3.45, p < .001) \) offered significant, unique contributions: as SPI increases, other individual giving increases by \( (B) \).15 units and as ADU increases, other individual giving decreases by \( (B) \) 3.45 units. For parent giving to public IHEs, only SPI offered a significant, unique contribution, \( B = 0.01, p < .001 \): as SPI increases by one unit, parent giving increases by \( (B) \).01 units.

The results of the multiple linear regressions for giving to private universities were statistically significant, indicating that SPI and ADU predict each of the five giving types to private universities: alumni: \( F(2, 12652) = 86.06, p < .001, R^2 = .01 \); foundation: \( F(2, 12652) = 119.62, p < .001, R^2 = .02 \); corporate: \( F(2, 12652) = 29.74, p < .001, R^2 = .01 \); other individual: \( F(2, 12652) = 65.34, p < .001, R^2 = .01 \); and parent: \( F(2, 12652) = 73.34, p < .001, R^2 = .01 \). These findings indicate that SPI and ADU account for \( R^2 \) 1% of the variance in alumni giving, corporate giving, other individual giving, and parent giving; and 2% of the variance in foundation giving.

Because these private regression models were found to be statistically significant, the individual predictors were examined to determine if they offered a significant, unique contribution toward predicting the dependent variables for giving to private IHEs. For alumni giving to private IHEs, both SPI \( (B = 0.57, p < .001) \) and ADU \( (B = -8.22, p = .001) \) offered
significant, unique contributions: as SPI increases, alumni giving increases by \((B) 0.57\) units and as ADU increases, alumni giving decreases by \((B) 8.22\) units. For foundation giving to private IHEs, only SPI offered a significant, unique contribution, \(B = 0.38, p < .001\): as SPI increases by one unit, foundation giving increases by \((B) 0.38\) units. For corporate giving to private IHEs, only ADU offered a significant, unique contribution, \(B = -3.65, p < .001\): as ADU increases by one unit, corporate giving decreases by \((B) 3.65\) units. For other individual giving to private IHEs, both SPI \((B = 0.16, p < .001)\) and ADU \((B = 0.16, p < .001)\) offered significant, unique contributions: as SPI increases, other individual giving increases by \((B) 0.16\) units and as ADU increases, other individual giving decreases by \((B) 16.70\) units. For parent giving to private IHEs, both SPI \((B = 0.05, p < .001)\) and ADU \((B = 0.73, p = .022)\) offered significant, unique contributions: as SPI increases, parent giving increases by \((B) 0.05\) units and as ADU increases, parent giving increases by \((B) 0.73\) units. The researcher rejected the null hypothesis—no relationship exists between the independent variables and giving sources to higher education by university type. Table 9 presents the results of the regression analyses; Figures 15 – 16 visually illustrate the associations between the independent and dependent variables; Figures 17 – 20 illustrate the associations between the independent and dependent variables, by university type (public and private).
Table 9

Regression Analyses for SPI and ADU predicting Alumni, Foundation, Corporate, Other Individual, and Parent Giving by University Type (Public and Private)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public alumni</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.18</td>
<td>0.02</td>
<td>.13</td>
<td>10.29</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>-2.30</td>
<td>0.93</td>
<td>-.03</td>
<td>-2.48</td>
<td>.013</td>
<td>1.18</td>
</tr>
<tr>
<td>Public foundation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.19</td>
<td>0.02</td>
<td>.16</td>
<td>12.52</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>0.56</td>
<td>0.79</td>
<td>.01</td>
<td>0.71</td>
<td>.480</td>
<td>1.18</td>
</tr>
<tr>
<td>Public corporate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.08</td>
<td>0.01</td>
<td>.09</td>
<td>7.27</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>-2.13</td>
<td>0.61</td>
<td>-.04</td>
<td>-3.51</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>Public other individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.15</td>
<td>0.01</td>
<td>.17</td>
<td>13.47</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>-3.45</td>
<td>0.57</td>
<td>-.08</td>
<td>-6.04</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>Public parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.01</td>
<td>0.00</td>
<td>.10</td>
<td>7.79</td>
<td>&lt; .001</td>
<td>1.18</td>
</tr>
<tr>
<td>ADU</td>
<td>0.12</td>
<td>0.08</td>
<td>.02</td>
<td>1.62</td>
<td>.106</td>
<td>1.18</td>
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<td>Private alumni</td>
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<td></td>
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</tr>
<tr>
<td>SPI</td>
<td>0.57</td>
<td>0.04</td>
<td>.13</td>
<td>12.95</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
<tr>
<td>ADU</td>
<td>-8.22</td>
<td>2.56</td>
<td>-.03</td>
<td>-3.21</td>
<td>.001</td>
<td>1.19</td>
</tr>
<tr>
<td>Private foundation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.38</td>
<td>0.03</td>
<td>.14</td>
<td>14.16</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
<tr>
<td>ADU</td>
<td>0.17</td>
<td>1.56</td>
<td>.00</td>
<td>0.11</td>
<td>.915</td>
<td>1.19</td>
</tr>
<tr>
<td>Private corporate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>-0.01</td>
<td>0.01</td>
<td>-.01</td>
<td>-1.20</td>
<td>.228</td>
<td>1.19</td>
</tr>
<tr>
<td>ADU</td>
<td>-3.65</td>
<td>0.56</td>
<td>-.06</td>
<td>-6.52</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
<tr>
<td>Private other individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.16</td>
<td>0.03</td>
<td>.06</td>
<td>6.33</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
<tr>
<td>ADU</td>
<td>-16.70</td>
<td>1.49</td>
<td>-.11</td>
<td>-11.25</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
<tr>
<td>Private parent</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPI</td>
<td>0.05</td>
<td>0.01</td>
<td>.10</td>
<td>10.01</td>
<td>&lt; .001</td>
<td>1.19</td>
</tr>
<tr>
<td>ADU</td>
<td>0.73</td>
<td>0.32</td>
<td>.02</td>
<td>2.30</td>
<td>.022</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Note. Public alumni: $F(2, 7305) = 54.28, p < .001, R^2 = .02$. Public foundation: $F(2, 7305) = 96.40, p < .001, R^2 = .03$. Public corporate: $F(2, 7305) = 26.75, p < .001, R^2 = .01$. Public other
individual: $F(2, 7305) = 91.19, p < .001, R^2 = .02$. Public parent: $F(2, 7305) = 42.88, p < .001, R^2 = .01$. Private alumni: $F(2, 12652) = 86.06, p < .001, R^2 = .01$. Private foundation: $F(2, 12652) = 119.62, p < .001, R^2 = .02$. Private corporate: $F(2, 12652) = 29.74, p < .001, R^2 = .01$. Private other individual: $F(2, 12652) = 65.34, p < .001, R^2 = .01$. Private parent: $F(2, 12652) = 73.34, p < .001, R^2 = .01$.

Figure 15. SPI with alumni, foundation, corporate, other individual, and parent giving means from 1987 to 2012.
**Figure 16.** ADU with alumni, foundation, corporate, other individual, and parent giving means from 1987 to 2012.

**Figure 17.** SPI with alumni, foundation, corporate, other individual, and parent giving means from 1987 to 2012 for public IHEs.
**Figure 18.** SPI with alumni, foundation, corporate, other individual, and parent giving means from 1987 to 2012 for private IHEs.

**Figure 19.** ADU with alumni, foundation, corporate, other individual, and parent giving means from 1987 to 2012 for public IHEs.
Figure 20. ADU with alumni, foundation, corporate, other individual, and parent giving means from 1987 to 2012 for private IHEs.

Additionally, 45 Fisher’s $r$ to $z$ transformations were conducted to compare the 10 regression models to determine which regression model was a stronger predictor of the five giving sources. Statistical significance was determined using an alpha value of .05. The $r$ values used were the square root values of the coefficients of determination ($R^2$); these coefficients determined how much variance on the dependent variable was explained by the set of predictors for each regression model. Corporate and parent giving to public IHEs, as well as alumni, corporate, other individual and parent giving to private IHEs had an $r$ value of $(\sqrt{.01}) .10$. Alumni and other individual giving to public IHEs, along with foundation giving to private IHEs had an $r$ value of $(\sqrt{.02}) .14$. Foundation giving to public IHEs had an $r$ value of $(\sqrt{.03}) .17$. The transformations took into account the sample sizes as well: all giving to public institutions had a sample size of 7,307 and all giving to private institutions had a sample size of 12,654.
Of the 45 analyses conducted, 25 were found to be statistically significant. Table 10 presents the results of the analyses.

However, given that the sample sizes were the same among public giving and among private giving, the significant values were redundant. The regression model on alumni giving to public IHEs was statistically stronger than parent and corporate giving to public IHEs. The regression model on foundation giving to public IHEs was statistically stronger than the regression model for corporate giving to public IHEs and the regression models for all giving sources to private IHEs. The regression model on foundation giving to private IHEs was statistically stronger than the models for corporate and parent giving to public IHEs as well as the models for alumni, other individual, and parent giving to private IHEs; it was also statistically weaker than the model for foundation giving to public IHEs.

Summary

This chapter summarized the research sample and data analysis used in this study. The researcher’s purpose of this chapter was to analyze the results using statistical techniques consistent with the research questions in order to gain insight into the supplemental resource support that comes to institutions of higher education through private giving efforts. The researcher sought to answer the four research questions to discover what relationships exist between economic indicators and private giving to higher education.
Table 10

Fisher’s $r$ to $z$ Transformations between Public and Private Classification Types from the Regressions on the Five Giving Sources

<table>
<thead>
<tr>
<th>Public</th>
<th>Alumni</th>
<th>Foundation</th>
<th>Corporate</th>
<th>Other individual</th>
<th>Parent</th>
<th>Private</th>
<th>Alumni</th>
<th>Foundation</th>
<th>Corporate</th>
<th>Other individual</th>
<th>Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alumni</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>Alumni</td>
<td>—</td>
<td>Foundation</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>Corporate</td>
<td>1.86</td>
<td>2.45*</td>
<td>1.86</td>
<td>2.45*</td>
<td>—</td>
<td>Foundation</td>
<td>0.00</td>
<td>2.76**</td>
<td>2.76**</td>
<td>2.76**</td>
<td>3.23**</td>
</tr>
<tr>
<td>Other individual</td>
<td>0.00</td>
<td>1.86</td>
<td>2.45*</td>
<td>2.45*</td>
<td>—</td>
<td>Corporate</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.23**</td>
<td>—</td>
</tr>
<tr>
<td>Parent</td>
<td>2.45*</td>
<td>4.31**</td>
<td>0.00</td>
<td>2.45*</td>
<td>—</td>
<td>Other individual</td>
<td>0.00</td>
<td>0.00</td>
<td>3.23**</td>
<td>0.00</td>
<td>—</td>
</tr>
<tr>
<td>Private</td>
<td>2.76**</td>
<td>4.85**</td>
<td>0.00</td>
<td>2.76**</td>
<td>0.00</td>
<td>Alumni</td>
<td>0.00</td>
<td>Foundation</td>
<td>0.00</td>
<td>2.76**</td>
<td>3.23**</td>
</tr>
<tr>
<td>Foundation</td>
<td>0.00</td>
<td>2.76**</td>
<td>2.76**</td>
<td>0.00</td>
<td>2.76**</td>
<td>Foundation</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.23**</td>
<td>—</td>
</tr>
<tr>
<td>Corporate</td>
<td>2.76**</td>
<td>4.85**</td>
<td>0.00</td>
<td>2.76**</td>
<td>0.00</td>
<td>Corporate</td>
<td>0.00</td>
<td>0.00</td>
<td>3.23**</td>
<td>0.00</td>
<td>—</td>
</tr>
<tr>
<td>Other individual</td>
<td>2.76**</td>
<td>4.85**</td>
<td>0.00</td>
<td>2.76**</td>
<td>0.00</td>
<td>Other individual</td>
<td>0.00</td>
<td>0.00</td>
<td>3.23**</td>
<td>0.00</td>
<td>—</td>
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<tr>
<td>Parent</td>
<td>2.76**</td>
<td>4.85**</td>
<td>0.00</td>
<td>2.76**</td>
<td>0.00</td>
<td>Parent</td>
<td>0.00</td>
<td>0.00</td>
<td>3.23**</td>
<td>0.00</td>
<td>—</td>
</tr>
</tbody>
</table>

Note. Absolute $z$ score statistics for comparisons of regression models are presented in the table. * $p < .05$, ** $p < .01$
CHAPTER FIVE

DISCUSSION

Introduction

The results of economic declines, recessionary periods and decreased funding from state allocations have increased higher education institutions’ need for supplementary funding to address resource dependencies at colleges and universities. As these dependencies have increased over the years, IHEs’ reliance on alternative forms of support have come at the same time that competition for those funds has greatly intensified (Andreoni & Payne, 2011). When IHEs cannot raise tuition rates, they must look for other avenues to obtain additional support. In the highly competitive environment for outside resources, the practice of private fundraising has become of greater interest to IHEs.

The purpose of this study was to increase the understanding of private giving to higher education balanced against selected economic indicators that may have the effect of increasing or decreasing charitable contributions to IHEs. This study advanced a method to evaluate private support to higher education by institutional type, institutional classification and giving source using data reported to the Voluntary Support of Education Survey in order to yield a structure for institutional leaders to consider and compare their organizations’ fundraising outcomes based on national results realized over the past twenty-five years.

This final chapter presents a summary of the study, discussion and implications, and recommendations for future research.
Summary of the Findings

The majority of cases reported in this data set were from private baccalaureate IHEs (5991), followed by private master’s IHEs (4949). The fewest number of cases reported came from public baccalaureate institutions (733). Frequencies and percentages for type of institution and degree classification are presented in Table 11.

Table 11

Frequencies by Institutional Classification

<table>
<thead>
<tr>
<th>Demographic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Baccalaureate</td>
<td>733</td>
<td>4</td>
</tr>
<tr>
<td>Master’s</td>
<td>3521</td>
<td>18</td>
</tr>
<tr>
<td>Doctoral</td>
<td>3054</td>
<td>15</td>
</tr>
<tr>
<td>Private Baccalaureate</td>
<td>5991</td>
<td>30</td>
</tr>
<tr>
<td>Master’s</td>
<td>4949</td>
<td>25</td>
</tr>
<tr>
<td>Doctoral</td>
<td>1715</td>
<td>9</td>
</tr>
</tbody>
</table>

*Note.* Percentages may not total 100 due to rounding error.

This study employed a quantitative research design to analyze secondary data. Prior to addressing the research questions, a Pearson correlation matrix was conducted to determine if any statistical relationships existed among the independent variables in this study (Average Duration of Unemployment, Employees on Nonagricultural Payrolls, and the Standard & Poor’s 500 Stock Price Index) and total giving. The results of the Pearson correlation matrix indicated that the variables were significantly related to one another; the $p$ values were above .05. Of the correlations conducted, the largest correlation existed between two of the independent variables: SPI and ENP, $r = .96$, $p < .001$. This correlation was extremely high and indicated the presence of multicollinearity; therefore, the correlations on total giving were
compared. The results indicated that the correlation between SPI and total giving was slightly larger, $r = .06$ (rounded from .061), than the correlation between ENP and total giving, $r = .06$ (rounded from .055). Because the relationship between SPI and total giving was larger, ENP was removed from the proposed analyses for research questions one through four and ENP was not further examined in the study. The results of the individual questions are presented below.

**Research Question 1**

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education from 1987 to 2012?

The multiple linear regression produced significant results indicating that SPI and ADU predicted total giving to IHEs and accounted for one percent of the variance in total giving. Due to the statistical significance of the regression model, the predictor variables were examined individually to determine their predictive magnitude. It was discovered that a one unit increase in SPI resulted in a total giving increase of 0.69 units, and a one unit increase in ADU resulted in a total giving decrease of 27.31 units.

**Research Question 2**

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education by institutional type (public and private) from 1987 to 2012?

The results of the multiple linear regressions were statistically significant for both institutional types and accounted for three percent of the variance in total giving to public universities and one percent of the variance in total giving to private universities.
The examination of the individual predictor variables revealed that SPI and ADU offered significant, unique contributions toward predicting total giving. As SPI increased by one unit, total giving showed an increase of 0.65 units to public universities and an increase of 1.05 to private universities. As ADU increased by one unit, total giving to public universities experienced a decrease of 6.93 units, while total giving to private universities experienced a decrease of 30.28 units.

**Research Question 3**

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education by institutional classification (public doctoral, public master’s, public baccalaureate, private doctoral, private master’s, and private baccalaureate) from 1987 to 2012?

The public and private university regression models produced statistically significant results for each classification type, indicating that SPI and ADU predicted total giving to both public and private IHEs and accounted for two percent of the variance in total giving to public and private baccalaureate, private master’s, and private doctoral university classifications. SPI and ADU accounted for five percent of the variance in total giving to public master’s and public doctoral university classifications.

The examination of individual predictor variables revealed that only SPI offered a significant, unique contribution toward predicting total giving to public baccalaureate, public doctoral and private doctoral universities wherein a one unit change in SPI resulted in increases in giving units of 0.54, 1.14, and 1.52, respectively. For private baccalaureate, public master’s and private master’s universities, a one unit change in SPI resulted in increases
of 1.28, 0.28, and 0.74, respectively; however, a one unit increase in ADU resulted in decreases of 33.63, 4.32, and 32.53, respectively.

The six regression models were then compared through 15 Fisher’s $r$ to $z$ transformations to determine which model offered a statistically, significantly stronger contribution toward predicting total giving. Eight of the 15 analyses were found to be statistically significant; the public master’s model, followed closely by the public doctoral model, offered the statistically strongest model for predicting total giving than the public baccalaureate model and all three private classification models. No statistically significant differences were found among the three private classifications types when compared to public baccalaureate or when compared to each other.

Research Question 4

After adjusting for inflation, what is the relationship between Average Duration of Unemployment and S&P 500 Stock Price Index with private giving to higher education by source of giving (alumni, foundation, corporate, other individual, and parent) from 1987 to 2012?

The results of the multiple linear regressions for both public and private universities were statistically significant, indicating that SPI and ADU predict each of the five giving sources. SPI and ADU accounted for one percent of the variance in giving to public IHEs from both corporate and parent sources, as well as giving to private IHEs from alumni, corporate, other individual, and parent sources. SPI and ADU accounted for two percent of the variance in giving by alumni and other individual to public IHEs and foundation giving to private IHEs; these indicators also accounted for three percent of the variance in foundation giving to public IHEs.
The examination of individual predictor variables revealed that a one unit increase in SPI offered increases in giving to public institutions of 0.18 from alumni, 0.19 from foundation, 0.08 from corporate, 0.15 from other individual, and 0.01 from parent, while private institutions saw increases in giving of 0.57 from alumni, 0.38 from foundation, 0.16 from other individual, and 0.05 from parents. The result for private corporate was not noted to be statistically significant.

A one unit increase in ADU resulted in decreases in giving to public universities of 2.30 from alumni, 2.13 from corporate, and 3.45 from other individual, while decreases in giving to private institutions were noted as 8.22 from alumni, 3.65 from corporate, and 16.70 from other individual. The results for foundation giving to public and private IHEs as well as parent giving to public IHEs were not statistically significant.

The results of the 45 Fisher’s $r$ to $z$ transformations indicated that the regression model for alumni giving to public IHEs was determined to be a statistically stronger prediction model than the regression models for parent and corporate giving to public IHEs. Additionally, the regression model for foundation giving to public IHEs was statistically stronger than the regression models not only for corporate giving to public IHEs, but also all regression models for all giving sources to private IHEs. Lastly, the regression model on foundation giving to private IHEs was statistically stronger than the regression models for corporate and parent giving to public IHEs as well as and alumni, other individual, parent giving to private IHEs. The regression model on private foundation giving was also statistically weaker than foundation giving to public IHEs.


**Discussion and Implications**

Recessions are not random; they occur as part of the business cycle in which the conditions created by economic expansions lead to economic recessions, and the conditions created by economic recessions lead to economic expansions. According to Hovey (1999) and Delany and Doyle (2007, 2011), these periodic economic shifts place IHEs in the role of serving as a balance wheel for state finances where allocations flow freely to IHEs during prosperous times but result in drastically reduced funding during times of economic distress. This growing financial uncertainty has resulted in concerted efforts by both public and private IHEs to acquire additional support sources in order to minimize fiscal stress and develop diversified resource streams.

Private fundraising can be an important source of supplementary support for IHEs, amounting to 9.4 percent of university budgets (Council for Aid to Education, 2013). For doctoral and research IHEs, charitable contributions amount to 10.5 percent of total spending and when combined with endowment payouts (which are the direct result of previous fundraising efforts), the amount of supplemental support can rise to 15.7 percent of total spending in these institutions (Brown, Dimmock & Weisbrod, 2012).

The increasing interest in garnering private support for IHEs requires institutional leadership to have a greater understanding of the expected size of contributions and how these gifts are correlated with particular economic conditions. During periods of economic downturn, IHEs must be prepared to adjust to financial strains because many of their resource providers will also suffer economic shocks at the same time that demands from the public arise to keep tuition affordable. Public institutions will need to find ways to absorb the losses in funding that occur as the result of reduced appropriations, while many endowment-
dependent private institutions will have to cope with lesser resources that occur from reductions in payouts from their endowments. According to Brown et al. (2012), it is critical for IHEs to recognize the connection between private gifts and economic shocks in order to understand whether charitable gifts help to moderate the volatility of their institutional budgets.

As the emphasis on fundraising continues to grow at IHEs, academic leadership, scholars, and practitioners can benefit from research that provides additional methods to compare and evaluate fundraising endeavors (Bekkers & Wiepking, 2011; Caboni & Proper, 2007; Lindahl & Conley, 2002). Interpreting the overall net performance or the total amount of gifts received does not provide institutional administration with specific insight into this resource stream, nor does it inform them where their fundraising support efforts and dollars would best be directed in order to produce the greatest return on investment. To determine strategies for fundraising efforts in a way that is useful for planning and budgeting, it is important to analyze both fundraising gains and fundraising losses in comparison to changes in economic conditions.

This study revealed that differences exist between institutional type, institutional classification, and giving source when correlated to economic indicators over the past 25 years. Based on these results, it appears that charitable funding directed to support IHEs based to some extent on resource providers’ ability to expend support at particular times in the economic environment. As observed throughout all four research questions, ADU had a larger effect on charitable support directed to IHEs than did SPI. It is suspected that SPI had a lesser effect due largely to the removal of a considerable number of outliers from the data set. These outliers comprised the many one-time, significantly large contributions (often referred to as
mega-gifts) that periodically come to IHEs to support specific initiatives such as the launch or close of a major fundraising campaign, a naming opportunity, the creation of an endowed chair, or construction of a new facility. Had these unusually large gifts been included in this study, the output for SPI giving units may have resulted in substantially higher numbers when compared to a one unit increase in SPI. However, mega-gifts were purposely excluded from this study in order to gain a greater understanding of gifts that may be considered more regular and reliable in an attempt to evaluate private giving as a potential constant source of funding support.

Noteworthy, is the fact that ADU had considerably larger impact on private institutions than public. For example, in research question two, while public institutions saw a decrease of 6.93 with a one unit increase in ADU, private institutions saw a much larger decrease of 30.28 giving units. The same held true for research question three where public master’s and public doctoral IHEs saw decreases of 4.32 and 8.54, respectively, while private baccalaureate and private master’s IHEs saw much larger decreases of 33.63 and 33.53, respectively, with a one unit increase in ADU. (Results for public baccalaureate and private doctoral were not statistically significant in this question.) The greater impact of a one unit increase in ADU was again noted in research question four where declines in giving to public IHEs were noted from alumni (2.30), corporate (2.13), and other individual (3.45), but larger declines in giving to private IHEs were noted from alumni (8.22), corporate (3.65), and other individual (16.70). The decrease in other individual giving is observed to be twice as large as the decrease in alumni giving. This particular difference may be attributable to the stronger linkages and longer histories that alumni tend to have with certain institutions when compared to other individuals whose connections may not be as stable or long-lived.
Overall, the larger impact of ADU may be ascribed, in part, to the fact that it is a lagging indicator. Unlike a coincident indicator that changes at approximately the same time as the economy, the effects of ADU tend to improve only two to three quarters after an upturn in the general economy has occurred. It is also recognized that even as economic expansion begins to occur, the effects of extended periods of unemployment may continue to linger in donors’ apprehensions toward the economic future. Conventional wisdom suggests regular donors have the tendency to continue to give, but do so more conservatively. Again, we know stock market fluctuations have a greater impact on those with larger incomes. As donors to private institutions tend to be in higher income brackets, they tend to give more when the economy is healthy. This is observed in this study by the larger giving units to private IHEs than public IHEs when compared to SPI. Advancement professionals believe that regular donors to higher education tend to give from their income and not their wealth, therefore, stock market gains and losses tend to have little effect on lower income donors’ decisions to give. The results of this study appear to confirm this belief and also introduce the concept that an alternate economic indicator (ADU) may be a stronger indicator of donor giving.

Parent giving to private IHEs was the only giving source in this study that did not result in a decrease in giving with a one unit increase in ADU; instead an increase of 0.73 giving units was observed. This result might be explained by the fact that the highest number of cases reported came from private baccalaureate institutions. Further investigation revealed that these IHEs were predominantly in the Northeast region of the country where many of the older, more established, elite private institutions are located (Appendix J). As noted in the literature review, there may be particular interest from parents to contribute to prestigious institutions. The most obvious reason being, of course, that their child may be a student at that
institution. (The alumni relationship does not apply to this group as parents are defined specifically as nonalumni, parent, guardian or grandparent of current or former students in the survey data.) Another reason may be that parent giving programs have been in effect much longer at these institutions and considerable effort continues to be put forth by advancement professionals to maintain these relationships (which provide continual solicitation opportunities even after students have graduated from the institution). Additionally, one might also have to consider that parents may also derive a considerable amount of satisfaction in terms of their social or organizational identities in being recognized as a continuing donor to what they (and others) may perceive to be a prestigious affiliation.

Alumni and other individuals have typically provided the largest portions of private support to IHEs over the years; however, since 2007 foundation support has exceeded alumni giving as a major source of philanthropic support to colleges and universities. Foundation giving is related to the performance of the stock market. Most of their assets are typically invested in securities. Private contributions from foundations are based on their payout percentages and endowment levels. However, gifts are typically based on a three- to five-year asset estimation, indicating that the value of their assets for a particular year are set based on averages that may include previous years of economic prosperity. This may account for the increase in foundation giving when compared to other giving sources during the recent downturn.

According to the Council for Aid to Education (2013), corporate giving to higher education comes in a variety of forms, many of which are not counted on the VSE survey (e.g.; sponsorships, clinical trials, contracted sponsored research, pouring rights, and software partnerships). Had these contributions been included, it is expected that the actual amount of
corporate giving would be sizably larger. However, even without these contributions, it is recognized that corporate foundations continually grow their endowments (especially during boom years in order to amass surplus resources that permit continued giving practices during periods of economic declines). It is also noted in this most recent downturn that productivity gains allowed corporations to return to profitability at a faster pace than was initially projected at the outset of the financial crisis.

It is suggested that education institutions should compare their fundraising results with similar or peer institutions not only to see how they measure up, but also to guide discussions regarding strategic investments in their own institutional advancement programming in order to grow potential external resource streams. To stabilize potential budget volatility, especially in times of economic decline, IHEs can pay greater attention to anticipating challenges by preparing estimates of likely impacts of financial challenges and develop contingency plans based on various scenarios. In regard to resource development, it would be important to create and implement fundraising communications targeted for specific populations at specific times in the economic cycle. Such strategic communiques to outside entities may be much more effective at reaching those better able to respond to solicitation requests in conjunction with their particular support patterns.

As the funding model of higher education continues to evolve, it is of the utmost importance that institutional leaders have a context for understanding how other sources of funding can supplement the declining traditional sources of revenue. It is no longer feasible for IHEs to expect that private sources of supplementary dollars will find their own way into institutional coffers. Academic leadership has become aware that financial stability of their organizations depends on a variety of resource providers. However, without an understanding
of their giving patterns, IHEs may not be fully prepared to serve donors who are increasingly becoming more intentional with their giving at the very same time these institutions are becoming more reliant on this supplementary source of funding.

**Recommendations for Future Research**

Given IHEs’ continuing need for additional sources of revenue, effective financial management requires a greater understanding of the expected size of financial contributions to assist IHEs with strategic planning and managing expenditure demands. The growing interest in charitable support for higher education offers numerous possibilities for additional analysis. The following recommendations for potential future research studies are therefore suggested:

1. While this study specifically examined five giving sources to public and private institutions of higher education, the VSE survey also captures similar data on giving by religious organizations, fundraising consortia and other entities. This study could be replicated for each of the VSE’s giving categories across the six institutional classifications to ascertain if the findings from this study are consistent across other donor constituent groups. Differences between donor types and institutional classifications may prove insightful and further clarify this resource stream.

2. Similarly, the methodology used in this study could be replicated to examine other types of educational institutions that report data to the VSE survey. They include tribal, special focus, precollege and for-profit institutions. Studies of these organizations could lead to greater generalizability of the findings.

3. Associate degree granting institutions have become more engaged in fundraising efforts in recent years. While many of these programs are still relatively young,
research into the economic effects on donor giving, comparisons between giving sources, giving by enrollment size, or any number of giving study topics would greatly contribute to the knowledge base for understanding fundraising from a community college perspective. Research in these and other areas would greatly assist community colleges in the creation or continued development of their institutional advancement programs.

4. Another area that could prove rich for analysis is deferred giving to higher education. Many IHEs are devoting considerable effort and resources to building deferred giving programs at their institutions. These deferred gift vehicles (e.g.; wills, charitable remainder trusts, charitable annuity trusts, and charitable gift annuities) are tracked in the VSE survey. New testamentary commitments are reported at face value and realized bequests are counted in giving totals. This data could be mined from those IHEs with well-developed deferred giving programs to see if this particular type of giving has the potential to become a consistent source of supplementary funding.

5. An area of study that IHEs may find very informative is the relationship between institutional investment in advancement activities and fundraising outcomes. While the provision of information regarding internal financial support for advancement is optional for VSE participants, studies that explore benefits, compensation, and expenditures across the areas of development/fundraising, alumni relations, public relations and media relations would provide additional insight into the investment and success of IHE advancement programs on a national scale.
Significance of this Study

Examining the trends and drawing connections between institutional type; institutional classification; and patterns of support from alumni, foundations, corporations, other individuals, and parents provides a much needed lens through which private charitable support for higher education can be viewed. By critically examining private giving to IHEs through the Voluntary Support of Higher Education survey from 1987 to 2012, this study provided a national description of these patterns and provided insight into the need for academic research in higher education philanthropy to look beyond a single campus or a particular source of philanthropic support. This line of inquiry suggests a construct that could help even out fundraising performance across both strong and weak years of the economy and offer new insights into the long-term successes and evolution of the field of institutional advancement in higher education. Without an understanding of the patterns of private support directed to IHEs, academic leadership may not be fully able to forecast and plan for changing financial conditions and successfully manage future expenditures. Additionally, they will be unable to focus their efforts on those donors who are most affected by particular economic factors.

Summary Statement

While fundraising continues to be only one source of additional funding, it cannot be ignored that the generosity of private donors since the earliest days of this country has helped to create, support and sustain the vital functions of colleges and universities. While the pursuit of private support may have been left primarily to the private institutions over the years, more recent developments in state and government funding patterns to IHEs make the constant search for additional support sources a necessity for today’s public higher education.
institutions as well. Academic leadership has become aware that fiscal flexibility in times of both economic prosperity and economic decline can be supplemented by the philanthropic intent of those interested not only in an IHE’s presence or prestige, but also by its impact on students, families, communities, customers, and the economy. Institutions of higher education and their institutional advancement programs can greatly benefit from research studies that provide additional substantive and objective research on private support to higher education.
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Stanford estate worth seven millions: Stanford University will have total of thirty million dollars. (1905, April 5). *The Evening News*, (p. 1).


APPENDIX A – UNIVERSITY OF SOUTH FLORIDA IRB LETTER

May 9, 2014

Karen Frank
Adult, Career and Higher Education
USF College of The Arts
4202 E. Fowler Ave, FAH110
Tampa, FL 33620

RE:  NOT Human Research Activities Determination
IRB#: Pro00016955
Title: Twenty-five Years of Giving: Using a National Data Set to Examine Private Support for Higher Education

Dear Ms. Frank:

The Institutional Review Board (IRB) has reviewed, your study on May 9, 2014, the information you provided regarding the above referenced project and has determined the activities do not meet the definition of human subjects research. Therefore, IRB approval is not required. If, in the future, you change this activity such that it becomes human subjects research, IRB approval will be required. If you wish to obtain a determination about whether the activity, with the proposed changes, will be human subjects research, please contact the IRB for further guidance.

All research activities, regardless of the level of IRB oversight, must be conducted in a manner that is consistent with the ethical principles of your profession and the ethical guidelines for the protection of human subjects. As principal investigator, it is your responsibility to ensure subjects’ rights and welfare are protected during the execution of this project.

Also, please note that there may be requirements under the HIPAA Privacy Rule that apply to the information/data you will use in your activities. For further information about any existing HIPAA requirements for this project, please contact a HIPAA Program administrator at 813-974-5638.
APPENDIX A – UNIVERSITY OF SOUTH FLORIDA IRB LETTER (CONT.)

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

[Signature]

John Schinka, Ph.D., Chairperson
USF Institutional Review Board
APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY

Sample Survey
FY2011 Higher Education Survey

Section 1. Pledges & Testamentary Commitments (Optional)

A. Outstanding Pledges
   Report the number and dollar amount of new contributions pledged (unconditionally) during the fiscal year but still outstanding at the end of the fiscal year, regardless of the promised payment date. Do not include pledges made in a previous year. Do not include pledge amounts paid during the reporting year. Pledges (unconditional promises) should not be counted anywhere else in the VSE survey.

<table>
<thead>
<tr>
<th>No. of Pledges</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. For current operations</td>
<td></td>
</tr>
<tr>
<td>2. For capital purposes</td>
<td></td>
</tr>
</tbody>
</table>

B. New Testamentary Commitments
   Report provisions made in wills (or through revocable trusts) during the fiscal year for which the institution has documentation. Documentation might include a photocopy of the pertinent portion of the will or trust document or a letter describing the commitment and its ultimate financial value to the institution. Do not include provisions that name the institution as a contingent beneficiary. Testamentary commitments (bequest intentions) should not be counted anywhere else in the VSE Survey.

<table>
<thead>
<tr>
<th>Number of provisions</th>
<th>Face value of provisions $</th>
<th>Present value of provisions $</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Testamentary Commitments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This entire section must be filled out in order to be listed in the VSE Report and be eligible for the CASE Award Program.

**ENROLLMENT**
Count enrollment at the beginning of the academic year being reported (i.e., fall of 2004 for the report covering the 2004-05 fiscal year). All students (except continuing education) are counted: full-time, part-time, resident, extension, non-degree. DO NOT convert part-time students to full-time equivalents. **FULL-TIME EQUIVALENT ENROLLMENT** Count the FTE enrollment figure as of the beginning of the reporting period, i.e., opening fall FTE enrollment. If the FTE figure is not available, use the formula: the sum of all full-time students plus one-third of the number of part-time students (e.g., three part-time students equal one full-time student).

**ENDOWMENT/LONG-TERM INVESTMENTS**
Include all the following:
- True endowment: funds provided the institution, the principal of which is not expendable by the institution under the terms of the agreement that created the fund.
- Term endowment: similar to true endowment except that all or part of the funds may be expended after a stated period or upon the occurrence of a certain event as stated in the terms governing the funds.
- Quasi-endowment: funds functioning as endowment funds given to the institution "with no strings attached" or surplus funds that have been added to the endowment fund, the principal of which may be spent at the discretion of the governing board.

Public institutions should include the combined endowment of the Foundation and the institution. As a guideline, institutions should enter the amount reported on the NACUBO endowment survey.

**EXPENDITURES**
Include all expenditures for Instruction, Research, Public service, Academic support, Student services, Institutional support, Scholarships and fellowships, and Operation and maintenance of physical plant. Exclude Auxiliary Enterprises, Hospital Services, and Independent operations. Public institutions should enter the combined expenditures for the Foundation and the institution.

<table>
<thead>
<tr>
<th></th>
<th>FY2010</th>
<th>FY2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Enrollment - Total headcount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Enrollment - full-time equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Endowment market value $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Expenditures $</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes on Endowment and Expenditures**
**APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY (CONT.)**

**Sample Survey**  
**FY2011 Higher Education Survey**  
**Section 2b. Advancement Investment (Optional)**

**QUESTION I:** In the section below, report expenditures by function. Regardless of how the advancement function is administered (centrally or in a decentralized manner), report the distribution of expenditures by function below. Salaries and benefits should be included in rows 1. and 2. by function, even if they are paid for centrally.

<table>
<thead>
<tr>
<th>Function</th>
<th>A. Development/ Fundraising</th>
<th>B. Alumni Relations/ Affairs</th>
<th>C. Communications/ Marketing</th>
<th>D. Advancement Services</th>
<th>E. Advancement Management</th>
<th>F. Total Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Salaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Current Operations Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Capital Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Total Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**QUESTION II:** In the section below, report the FTEs of paid staff by function. A single employee's time may be spread over several functional areas. This question is for number of staff, not for dollar amounts. Staffing costs go in Question I, rows 1. and 2.

<table>
<thead>
<tr>
<th>Function</th>
<th>A. Development/ Fundraising</th>
<th>B. Alumni Relations/ Affairs</th>
<th>C. Communications/ Marketing</th>
<th>D. Advancement Services</th>
<th>E. Advancement Management</th>
<th>F. Total Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Staff (FTE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**QUESTION III:** Use the space below to tell us if your institution is in an active capital campaign this fiscal year, and, if so, the dates of the campaign. If your institution is in a capital campaign, check here. Then enter the dates of the campaign below.

The silent phase of the campaign started on:  
The campaign officially started on:  
The campaign ends:  

**QUESTION IV:** Comments and Notes (Please use this space to enter comments or explanatory notes)
APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY (CONT.)

Sample Survey
FY2011 Higher Education Survey
Section 3a. Outright Giving: Current Operations (Full option)

DO NOT INCLUDE DEFERRED GIFTS IN THIS SECTION. There are three options for completing Section 3: Full, Partial, and Minimal. All forms of the survey count as full participation in the program. So, complete the version where the level of detail corresponds to the level of detail in your records. You might also want to do a shorter version because of time constraints. Please enter 0 where no gift income was received for a particular cell. Every cell below should have a number in it when you are finished.

<table>
<thead>
<tr>
<th>A. Alumni</th>
<th>B. Parents</th>
<th>C. Other Individuals</th>
<th>D. Foundations</th>
<th>E. Corporations</th>
<th>F. Religious Orgs</th>
<th>G. Fundraising Consortia</th>
<th>H. Other Orgs</th>
<th>I. TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unrestricted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Restricted Academic Divs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Faculty &amp; Staff Compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Public Service &amp; Extension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Op &amp; Maint. of Plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Student Fin. Aid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Athletics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Other Restricted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. TI Restricted (2-10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Total Outright for Curr. Ops. (1&amp;11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY (CONT.)

Sample Survey

FY2011 Higher Education Survey
Section 3b. Outright Giving: Capital Purposes

Do not include deferred gifts in this section. Please enter 0 where no gift income was received for a particular cell. Every cell below should have a number in it when you are finished! DO NOT INCLUDE CORPORATE PARTNERSHIPS ANYWHERE ON THE VSE SURVEY. THESE INCLUDE THE PLM SOFTWARE AGREEMENTS AND OTHER SUCH ARRANGEMENTS THROUGH THE PACE PARTNERSHIPS.

<table>
<thead>
<tr>
<th>A. Alumni</th>
<th>B. Parents</th>
<th>C. Other Individuals</th>
<th>D. Foundations</th>
<th>E. Corporations</th>
<th>F. Religious Orgs</th>
<th>G. Fundraising Consortium</th>
<th>H. Other Orgs</th>
<th>I. TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prop., Build &amp; Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Endowment - Unrestricted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Endowment - Restricted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Loan Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Total Outright for Capital Purposes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please report both Face Value (FV) and Present Value (PV). The Present Value for VSE purposes is defined as the tax deduction to the donor as allowed by the IRS. You must report both. If you find your records do not contain both figures, please contact VSE Support and request help. The survey cannot be accepted without face and present value figures. There is a deferred gift calculator at www.cae.org/vse. This section is only for NEWLY established deferred gifts or gifts that had funds added to them this year. You do not report REALIZED deferred gifts anywhere on this survey. They are reported only when established. Also, do not put pledges or bequest intentions in this section. You can record them in section 1 if you want to keep a record. Please enter 0 where no gift income was received for a particular cell. Every cell below should have a number in it when you are finished.

<table>
<thead>
<tr>
<th>A. Alumni - FV</th>
<th>B. Alumni - PV</th>
<th>C. Parents - FV</th>
<th>D. Parents - PV</th>
<th>E. Others - FV</th>
<th>F. Others - PV</th>
<th>G. Total Face Value</th>
<th>H. Total Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Endowment - Unrestricted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Endowment - Restricted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Other Purposes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Total Deferred Giving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY (CONT.)

Sample Survey
FY2011 Higher Education Survey
Section 3d. Gift Income Summary

This summary pulls together Total rows from Section 3.a, 3.b, and 3.c. When you enter the data online, this section is filled in automatically. There is no data entry required.

<table>
<thead>
<tr>
<th>A. Alumni</th>
<th>B. Parents</th>
<th>C. Other Individuals</th>
<th>D. Foundations</th>
<th>E. Corporations</th>
<th>F. Religious Orgs</th>
<th>G. Fundraising Consortia</th>
<th>H. Other Orgs</th>
<th>I. GRAND TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Outright for Current Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Total Outright for Capital Purposes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total Deferred at Present Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official Total Using Present Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Deferred at Face Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Using Face Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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## APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY (CONT.)

### Section 4a. Additional Details on Section 3 - Individuals

1. Contributions from Individuals

<table>
<thead>
<tr>
<th>A. Contributions from Individuals for All Purposes</th>
<th>Alumni Total - REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of Record</strong></td>
<td><strong>No. Solicited</strong></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>1. Contributions from Individuals</td>
<td></td>
</tr>
<tr>
<td>1a. Alumni undergraduate degree or diploma holders</td>
<td></td>
</tr>
<tr>
<td>1b. Alumni graduate only degree or diploma holders</td>
<td></td>
</tr>
<tr>
<td>1c. Alumni without a degree or diploma</td>
<td></td>
</tr>
<tr>
<td>1d. Enter Totals here ONLY if you have left 1a-1c above blank</td>
<td></td>
</tr>
<tr>
<td>1e. Alumni Total</td>
<td></td>
</tr>
<tr>
<td><strong>No. of Record</strong></td>
<td><strong>No. Solicited</strong></td>
</tr>
<tr>
<td>2. Parents</td>
<td></td>
</tr>
<tr>
<td><strong>No. of Record</strong></td>
<td><strong>No. Solicited</strong></td>
</tr>
<tr>
<td>3. Faculty and Staff</td>
<td></td>
</tr>
<tr>
<td>4. Students</td>
<td></td>
</tr>
<tr>
<td>5. All Others not counted in 1-4</td>
<td></td>
</tr>
<tr>
<td>Dollar Total of rows 3-5 above</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY (CONT.)

Sample Survey


B. Contributions from Individuals for Current Operations Only

<table>
<thead>
<tr>
<th>No. Solicited</th>
<th>No. Donors</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Alumni undergraduate degree or diploma holders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b. Alumni graduate degree or diploma holders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c. Alumni without a degree or diploma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1d. Enter Totals here ONLY if you have left 1a-1c above blank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1e. Alumni Curr. Ops. Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. Solicited</td>
<td>No. Donors</td>
<td>Amount $</td>
</tr>
<tr>
<td>2. Parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Faculty and Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. All others not counted in 1-4 above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dollar Total of rows 3-5 above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Bequests - REQUIRED Include realized bequests, not bequest intentions, which are reported in section 1. Make sure the bequests listed below are also reported in section 3A, 3B, and/or 3C. Bear in mind that most bequests would not appear in 3C. Generally, they are not deferred gifts. In some cases, though, a deferred gift may be established via a will. If any of the reported bequests were reported in 3C, report them below at their present value, not face value.

<table>
<thead>
<tr>
<th>No. of Donors</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bequests for Current Operations</td>
<td></td>
</tr>
<tr>
<td>2. Bequests for Capital Purposes</td>
<td></td>
</tr>
<tr>
<td>3. Enter Totals here ONLY if you have left lines 1 &amp; 2 above blank</td>
<td></td>
</tr>
<tr>
<td>4. Total Bequests</td>
<td></td>
</tr>
</tbody>
</table>
D. Three Largest Donor Totals from Individuals - REQUIRED. If any of these gifts are deferred gifts, use PRESENT value, not face value.

<table>
<thead>
<tr>
<th>Largest $</th>
<th>2nd Largest $</th>
<th>3rd Largest $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. From living individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Through estate settlements (bequests)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E. Direct Governing Board Giving for All Purposes. Include current, emeritus and honorary board members. On row 1 include only gifts that receive legal/hard credit. NEW! Gifts that receive soft credit may be reported on row 2. Remember to report under the dollar amount, the sum of outright gifts plus deferred gifts at PRESENT (discounted) value.

You should count trustees in this section even though you previously counted them as Alumni, Parents, or Other Individuals. And soft-credit gifts would still be counted even though they are also counted under the type of organization that provided the direct gift. Do not enter zero to indicate you are skipping the question! Just leave the question blank if you're not answering. It is very unlikely that zero is a valid answer to this question.

<table>
<thead>
<tr>
<th>No. of Donors</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Governing Board Giving</td>
<td></td>
</tr>
<tr>
<td>2. Additional Soft-Credit Gifts</td>
<td></td>
</tr>
</tbody>
</table>

F. Deferred Giving - REQUIRED. Number of gifts (Charitable Remainder Trusts, Pooled Income Funds, Gift Annuities, and the like) whose dollar amount is reflected in Section 3.C.

Deferred Giving

<table>
<thead>
<tr>
<th>Number established or added to during reporting period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Giving</td>
</tr>
</tbody>
</table>

G. Appreciated Property Giving

<table>
<thead>
<tr>
<th>No. of Gifts</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Securities</td>
<td></td>
</tr>
<tr>
<td>2. Real estate</td>
<td></td>
</tr>
<tr>
<td>3. Other real property</td>
<td></td>
</tr>
<tr>
<td>4. Enter Totals here ONLY if you have left lines 1-3 above blank</td>
<td></td>
</tr>
<tr>
<td>5. Total Apprec. Prop.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: VOLUNTARY SUPPORT OF EDUCATION FY2011 HIGHER EDUCATION SURVEY (CONT.)

H. Personal Giving Additional Details  Some personal gifts are dispensed through organizations and therefore are not reflected as personal Giving data on this survey. Please report below personal gifts that are officially counted as coming from organizations elsewhere on this survey. The amount from family Foundations will appear in section 4b and should not be entered here.

<table>
<thead>
<tr>
<th>Donor-Advised Funds</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Businesses</td>
<td></td>
</tr>
<tr>
<td>Other Organizations (Including Federated Funds)</td>
<td></td>
</tr>
</tbody>
</table>
### 2. Contributions from Organizations

#### A. Foundations

<table>
<thead>
<tr>
<th>No. of Donors</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Personal and Family</td>
<td></td>
</tr>
<tr>
<td>2. Other Foundations and trusts, excluding Corporate</td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td></td>
</tr>
</tbody>
</table>

#### B. Three Largest Donor Totals from Foundations - REQUIRED

The sum of the three largest donor Totals from Foundations below must not exceed the Total dollar amount reported from Foundations above because these largest donor Totals must be included in the amounts reported above and in Section 3.

<table>
<thead>
<tr>
<th>Largest $</th>
<th>2nd Largest $</th>
<th>3rd Largest $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### C. Corporations

1. Forms of Giving

DO NOT INCLUDE CORPORATE PARTNERSHIPS ANYWHERE ON THE VSE SURVEY. THESE INCLUDE, BUT ARE NOT LIMITED TO, THE PLM SOFTWARE AGREEMENTS AND SIMILAR ARRANGEMENTS AS PART OF THE PACE PARTNERSHIP. IF THESE WERE INCLUDED IN SECTION 3, PLEASE RETURN TO THAT SECTION, REMOVE THEM, AND SAVE 3D AGAIN.

<table>
<thead>
<tr>
<th>No. of Gifts</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cash and securities (exclusive of matching gifts)</td>
<td></td>
</tr>
<tr>
<td>2. Company products</td>
<td></td>
</tr>
<tr>
<td>3. Other company property</td>
<td></td>
</tr>
<tr>
<td>4. Matching gifts</td>
<td></td>
</tr>
<tr>
<td>5. Total</td>
<td></td>
</tr>
</tbody>
</table>

#### 2. Additional Matching Gifts Details

In addition to the amounts listed directly above in line 4, please report below matching Corporate gifts that were dispensed through a third party, such as a community Foundation, charitable gift fund, or other entity. These would not be counted as Corporate Giving elsewhere in the survey, but are under the control of companies.

<table>
<thead>
<tr>
<th>No. of Gifts</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matching Gifts Not Directly From a Corporation</td>
<td></td>
</tr>
</tbody>
</table>
D. Three Largest Donor Totals from Corporations - REQUIRED

The sum of the three largest donor Totals from Corporations below must not exceed the Total dollar amount reported from Corporations you reported in Section 3. DO NOT INCLUDE CORPORATE PARTNERSHIPS ANYWHERE ON THE VSE SURVEY. THESE INCLUDE, BUT ARE NOT LIMITED TO, THE PLM SOFTWARE AGREEMENTS AND SIMILAR ARRANGEMENTS AS PART OF THE PACE PARTNERSHIP. IF THESE WERE INCLUDED IN SECTION 3, PLEASE RETURN TO THAT SECTION, REMOVE THEM, AND SAVE 3D AGAIN.

<table>
<thead>
<tr>
<th>Corporations</th>
<th>Largest $</th>
<th>2nd Largest $</th>
<th>3rd Largest $</th>
</tr>
</thead>
</table>

3. Other Fundraising Activity

A. Purposes of Gifts to Endowment: Income Restricted (Include both outright and deferred gifts, and use the PRESENT value of deferred gifts.)

<table>
<thead>
<tr>
<th></th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Academic Divisions</td>
<td></td>
</tr>
<tr>
<td>2. Faculty and Staff Compensation</td>
<td></td>
</tr>
<tr>
<td>3. Research</td>
<td></td>
</tr>
<tr>
<td>4. Public Service and Extension</td>
<td></td>
</tr>
<tr>
<td>5. Library</td>
<td></td>
</tr>
<tr>
<td>6. Operation and Maintenance of Plant</td>
<td></td>
</tr>
<tr>
<td>7. Student Financial Aid</td>
<td></td>
</tr>
<tr>
<td>8. Athletics</td>
<td></td>
</tr>
<tr>
<td>9. Other</td>
<td></td>
</tr>
<tr>
<td>10. Total</td>
<td></td>
</tr>
</tbody>
</table>
Prior to FY2003, Gifts to Endowment, Income Restricted was calculated as the sum of Outright Gifts to Endowment, Income Restricted plus the FACE Value of Deferred Gifts (which are, by definition, gifts to endowment), with income restricted. The section below displays values that were entered before 2003. If you are viewing a survey from 1998-2002, you will see values in this section if the institution replied to the question. Otherwise, it will appear empty.

### Amount $

<table>
<thead>
<tr>
<th>1. Academic Divisions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Faculty and Staff Compensation</td>
<td></td>
</tr>
<tr>
<td>3. Research</td>
<td></td>
</tr>
<tr>
<td>4. Public Service and Extension</td>
<td></td>
</tr>
<tr>
<td>5. Library</td>
<td></td>
</tr>
<tr>
<td>6. Operation and Maintenance of Plant</td>
<td></td>
</tr>
<tr>
<td>7. Student Financial Aid</td>
<td></td>
</tr>
<tr>
<td>8. Athletics</td>
<td></td>
</tr>
<tr>
<td>9. Other</td>
<td></td>
</tr>
<tr>
<td>10. Total</td>
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</table>

**B. Support of Intercollegiate (Extramural) Athletics ONLY**

Note that the Total you report here is not comparable to other Athletics Giving Totals in the VSE Survey. In Section 3A, you report Current Operations Restricted Giving to Athletics for both Intramural and Extramural combined. Here you report only Extramural. Here should also include Extramural Gifts to Endowment, Income Restricted to Athletics that you include in Section 3.B (outright) and 3.C (deferred). For the year 2003 and forward, report the deferred Giving restricted to Extramural Athletics at the present value, not the face value.

### No. of Donors | Amount $

| 1. Restricted to current operations |          |
| 2. Restricted to capital purposes  |          |
| 3. Total                          |          |
Prior to 2003, the capital purpose gifts to endowment restricted to extramural athletics included deferred Giving at face value, instead of the current standard, which is present value. If you answered this question in the past, you can see the capital purpose dollars with deferred Giving at face value below.

<table>
<thead>
<tr>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted to capital purposes (using deferred at FV)</td>
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</tbody>
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APPENDIX C: SCATTERPLOT FOR RESEARCH QUESTION 1

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized
APPENDIX D:  P-P PLOT FOR RESEARCH QUESTION 2

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TotalGiving.adjusted.and.standardized
APPENDIX D: P-P PLOT FOR RESEARCH QUESTION 2 (CONT.)

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: TotalGiving.adjusted.and.standardized
APPENDIX E: SCATTERPLOT FOR RESEARCH QUESTION 2

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Public

Regression Standardized Residual vs. Regression Standardized Predicted Value
APPENDIX E: SCATTERPLOT FOR RESEARCH QUESTION 2 (CONT.)

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Private

Regression Standardized Residual

Regression Standardized Predicted Value
APPENDIX F: P-P PLOT FOR RESEARCH QUESTION 3

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Public, Classification_Category: Baccalaureate
APPENDIX F: P-P PLOT FOR RESEARCH QUESTION 3 (CONT.)

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Public, Classification_Category: Master's
APPENDIX F: P-P PLOT FOR RESEARCH QUESTION 3 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Public, Classification_Category: Doctoral
APPENDIX F: P-P PLOT FOR RESEARCH QUESTION 3 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Private, Classification_Category: Baccalaureate
APPENDIX F: P-P PLOT FOR RESEARCH QUESTION 3 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Private, Classification_Category: Master's
APPENDIX F: P-P PLOT FOR RESEARCH QUESTION 3 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Private, Classification_Category: Doctoral
APPENDIX G: SCATTERPLOT FOR RESEARCH QUESTION 3

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Public, Classification_Category: Baccalaureate

Regression Standardized Residual

Regression Standardized Predicted Value
APPENDIX G: SCATTERPLOT FOR RESEARCH QUESTION 3 (CONT.)

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Public, Classification_Category: Master's
APPENDIX G: SCATTERPLOT FOR RESEARCH QUESTION 3 (CONT.)

Scatterplot
Dependent Variable: TotalGiving.adjusted.and.standardized
Control: Public, Classification_Category: Doctoral

Regression Standardized Residual vs. Regression Standardized Predicted Value
APPENDIX G: SCATTERPLOT FOR RESEARCH QUESTION 3 (CONT.)

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Private, Classification_Category: Baccalaureate
APPENDIX G: SCATTERPLOT FOR RESEARCH QUESTION 3 (CONT.)

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Private, Classification_Category: Master's

Regression Standardized Predicted Value

Regression Standardized Residual
APPENDIX G: SCATTERPLOT FOR RESEARCH QUESTION 3 (CONT.)

Scatterplot

Dependent Variable: TotalGiving.adjusted.and.standardized

Control: Private, Classification_Category: Doctoral
APPENDIX H:  P-P PLOT FOR RESEARCH QUESTION 4

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: AlumniGiving.adjusted.and.standardized

Control: Public
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: AlumniGiving.adjusted.and.standardized

Control: Private

Expected Cum Prob

0.0 0.2 0.4 0.6 0.8 1.0

Observed Cum Prob
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: FoundationGiving.adjusted.and.standardized

Control: Public
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: FoundationGiving.adjusted.and.standardized
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: CorporateGiving.adjusted.and.standardized

Control: Public
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: CorporateGiving.adjusted.and.standardized

Control: Private
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: OtherGiving.adjusted.and.standardized

Control: Public
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: OtherGiving.adjusted.and.standardized

Control: Private
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ParentGiving.adjusted.and.standardized
APPENDIX H: P-P PLOT FOR RESEARCH QUESTION 4 (CONT.)

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ParentGiving.adjusted.and.standardized

Control: Private
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4

Scatterplot

Dependent Variable: AlumniGiving.adjusted.and.standardized

Control: Public

Regression Standardized Residual vs. Regression Standardized Predicted Value
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: AlumniGiving.adjusted.and.standardized

Control: Private
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: FoundationGiving.adjusted.and.standardized

Control: Public
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: FoundationGiving.adjusted.and.standardized

Control: Private
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: CorporateGiving.adjusted.and.standardized

Control: Public
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: CorporateGiving.adjusted.and.standardized

Control: Private
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: OtherGiving.adjusted.and.standardized

Control: Public
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: OtherGiving.adjusted.and.standardized

Control: Private

Regression Standardized Residual vs. Regression Standardized Predicted Value
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: ParentGiving.adjusted.and.standardized

Control: Public

Regression Standardized Residual

Regression Standardized Predicted Value
APPENDIX I: SCATTERPLOT FOR RESEARCH QUESTION 4 (CONT.)

Scatterplot

Dependent Variable: ParentGiving.adjusted.and.standardized

Control: Private

Regression Standardized Residual

Regression Standardized Predicted Value
## APPENDIX J: FREQUENCIES AND PERCENTAGES OF CASES BY STATE

<table>
<thead>
<tr>
<th>State</th>
<th>Frequency</th>
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**APPENDIX J: FREQUENCIES AND PERCENTAGES OF CASES BY STATE (CONT.)**

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<th>Frequency</th>
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<th>Percentage</th>
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APPENDIX K: IMAGE USE PERMISSION – THE COLLEGE BOARD

About the College Board
The College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, the College Board was created to expand access to higher education. Today, the membership association is made up of over 6,000 of the world’s leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, the College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success — including the SAT® and the Advanced Placement Program®. The organization also serves the education community through research and advocacy on behalf of students, educators, and schools. For further information, visit www.collegeboard.org.

Trends in Higher Education
The Trends in Higher Education publications include the Trends in College Pricing, Trends in Student Aid, and Education Pays series in addition to How College Shapes Lives: Understanding the Issues and other research reports and topical analysis briefs published periodically. These reports are designed to provide a foundation of evidence to strengthen policy discussions and decisions.

The tables supporting all of the graphs in this report, a PDF version of the report, and a PowerPoint file containing individual slides for all of the graphs are available on our website trends.collegeboard.org.

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APPENDIX L: IMAGE USE PERMISSION FROM THE VOLUNTARY SUPPORT OF EDUCATION

Voluntary Support of Education

Since 1957, CAE has conducted the Voluntary Support of Education (VSE) survey, an annual survey of fundraising by colleges and universities. The VSE collects data on fundraising at the nation’s higher education institutions and at a small number of private precollege institutions.

VSE Annual Publication
Our annual publication, Voluntary Support of Education (VSE), offers comprehensive data on contributions, by source and purpose, for over 1,000 higher education institutions and a sample of 200 private elementary and secondary schools.

VSE Executive Summary
The VSE Executive Summary comes free with your purchase of the Voluntary Support of Education. After you purchase the publication, you will receive an email with access information, including the required password. Contact us if you need assistance.

VSE PowerPoint Presentation
Includes all the tables and graphs from the VSE book, plus speaking points, in an editable PowerPoint presentation. The presentation does not include individual institution data from the data pages of the publication. The high-quality format tables and graphs can also be copied into other presentations and reports. File sent by email.

Data Miner
Web-based benchmarking service that provides access to over 350 variables about charitable giving to educational institutions.