The Impact of Budget Reductions for Higher Education in Florida: Is the State University System Functioning Effectively with Declining Resources?

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ABSTRACT

The purpose of this study is to examine the impact of the State of Florida budget reductions for the State University System and the implications for students and faculty members. As the economy continues to decline, there is the increasing concern of how budget reductions will affect higher education not only in Florida but also in educational systems around the country. In order to provide quality education, states require adequate revenue and resources to ensure that secondary and postsecondary institutions are providing the best education possible for students. This research examines the budgets that universities within the State University System received from Fiscal Year 2001 through Fiscal Year 2010 and compares the changes in funding for those universities. The research compares changes in the number of admissions, degrees awarded, course sections offered, faculty changes, and financial assistance awarded during the 10 years reviewed.

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DEDICATION

I would like to dedicate my dissertation to the members of my family who supported me through all the years and encouraged me through the challenging periods even when these became extremely stressful. To Kent, my husband and the love of my life: you were always there providing encouragement when I was discouraged. You provided me a shoulder to cry on, and you were there when I needed a joke to make me laugh when I was anxious and depressed. Thank you for all the loving things that you did that you thought I did not notice. I noticed every one!! Thank you for enduring all of the missed important events during these years. Our sacrifices have made accomplishing this goal less difficult.

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DEFINITIONS AND ACRONYMS

American Association of Community College (AACC).

American College Testing (ACT).

American Council on Education (ACE).

Association for Institutional Research (AIR).

American Recovery and Reinvestment Act of 2009 (ARRA) – Provided stimulus funding.

Board of Control (BOC) – First governing body for Florida universities.

Board of Governors (BOG) – The organization replaced the Board of Regents and is the governing body for state-funded public universities.

Board of Trustees (BOT) – Each of the state universities has an independent board of 13 members who regulate their respective university to ensure high quality programs and to ensure that their universities are accomplishing their missions ("University Board of Trustees" 2011).

Common Data Set (CDS) – Information collected through surveys that are completed for each university. The surveys provide statistical data on student demographics, admission information, financial aid, instructional information and other university-related information.

Competiveness and National Science and Mathematics Access to Retain Talent (SMART) – Provided support for students attending postsecondary institutions.

Contracts and Grants (C&G) – Funding generated through research which faculty members apply.

Department of Education (DOE).

Distant Learning Fee (DLF).

*Educational and Gen*eral (E&G) – Funding allocated from general revenue for Florida public universities.

Elementary and Secondary Education Act of 1965 (ESEA) – Provided funding to poverty-stricken areas.

Fiscal Year (FY) – In Florida the 12- month period which begins July 1st of each year and ends June 30th of the following year.

Florida Agricultural College (FAC) – Established in Lake City.

Florida Agricultural and Mechanical University (FAMU) – Located in Tallahassee.

Florida Atlantic University (FAU) – Located in Boca Raton.

Florida Gulf Coast University (FGCU) – Located in Fort Myers.

Florida International University (FIU) – Located in Miami.

Florida State University (FSU) – Located in Tallahassee.

Free Application for Federal Student Aid (FAFSA) – An application that is available for students to complete to determine their eligibility for financial assistance, such as federal work study, grants, or loans.

Full-time Equivalent (FTE).

Grade Point Average (GPA).

Higher Education Act (HEA) – Provided financial assistance for individuals from lower-income, urban, and rural areas.

Leveraging Educational Assistance Partnerships (LEAP) – Provide funds to states based on student enrollment and matched by federal dollars.

National Aeronautics and Space Administration (NASA).

National Association for College Admission Counseling (NACAC).

National Association of College and Business Officers (NACUBO).

National Association of Independent Colleges and Universities (NAICU).

National Association of Student Financial Aid Administration (NASFAA).

National Defense Education Act (NDEA) – Provided financial assistance to educate individuals in technological areas

New College of Florida (NCF) – Located in Sarasota.

No Child Left Behind Act of 2001 (NCLB) – Legislation designed to improve the education for children.

North American Free Trade Agreement (NAFTA).

Office of Institutional Research (OIR) – The university department or office that collects and maintains the institution data.

Other Personnel Services (OPS).

Reserve Officers Training Corps (ROTC).

Scholastic Assessment Test (SAT).

Southern Association of Colleges and Schools (SACS) – The accreditation body in the southeast that regulates degree-granting institutions of higher education.

State Student Incentive Grant (SSIG).

State University System (SUS) – The 11 state-supported public universities of Florida.

Student Credit Hour (SCH).

The College Board (CB).

University of Central Florida (UCF) – Located in Orlando.

University of Florida (UF) – Located in Gainesville.

University of North Florida (UNF) – Located in Jacksonville.

University of South Florida (USF) – Located in Tampa.

University of West Florida (UWF) – Located in Pensacola.

United States (U.S).

Chapter I

INTRODUCTION

During the past 50 years, public universities received state funding and provided higher education for many students who would not have been able to afford a college education. Education in postsecondary institutions is important to assist individuals in expanding the skills and knowledge that employers seek. As society advances, employers seek individuals who possess a variety of skills, such as technological proficiency, needed for businesses to progress and be successful. As the requirement for technical skills in the workforce advances, the requirement for higher education increases. From 2000 to 2010, nearly 42% of jobs required a degree from a postsecondary institution. (Toutkoushian 2005, 956)

However, it is projected that from 2008 to 2018, nearly 50% of all new jobs and one third of all job openings will require postsecondary education. (Bureau of Labor Statistics 2009) Information technology has become a significant function in the workplace, and without education and knowledge, individuals may find it more problematic to acquire and maintain employment. In today's society, many fields of employment, such as those in telecommunications, engineering, energy conservation, and other highly technical areas, require postsecondary education. (Lovett 2002, 12)

In 1960, the state of Florida population was nearly 5 million. (1960 Census of Population and Housing 1960, 5) More than 50 years later, the state population has increased by nearly four times to approximately 18.8 million. (State & County Quick

Facts 2010) During the last century, several universities were established in areas throughout the state where the population and economic growth continued to expand. As more individuals in and out-of-state seek education, the State University System (SUS) continues to expand, and in 2001, the most recent public university was established: New College of Florida located in Sarasota (see Appendix A).

In 2000, the educational system in Florida began changing. During that year, the legislature enacted the *Florida Education Governance Reorganization Act of 2000*, which established a task force to present proposals regarding creating a new administering body. (Justification Review 2001, 2) The following year, the *Florida Education Governance Reorganization Implementation Act of 2001* was enacted, which merged elementary, secondary, and postsecondary school systems together to create a uniform K-20 organization. (Justification Review 2001, 2) It also replaced the State Board of Education with the Florida Board of Education. (Justification Review 2001, 4)

In 2002, Florida voters passed an initiative to modify Article IX of Florida's Constitution which restructured the Board of Regents and the State Board for Community Colleges; these boards control universities, state, and community colleges. (Florida Board of Governors Regulation Development Procedure 2002, 1) The new board that governs public universities became the Board of Governors (BOG). (Florida Board of Governors Regulation Development Procedure 2002, 1) With the establishment of the BOG, each of the public universities established an independent Board of Trustees (BOT). The reorganization of the BOG and BOT helps to ensure that programs meet standards, operate economically, and implement new curricula. The BOG and BOT work jointly to guarantee that public universities function cost-effectively and successfully to

accomplish their goals. The two boards work in partnership to ensure that institutions within the SUS are fulfilling their missions.

The SUS includes Florida Agricultural and Mechanical University (FAMU), located in Tallahassee; Florida Atlantic University (FAU), located in Boca Raton; Florida Gulf Coast University (FGCU), located in Fort Myers; Florida International University (FIU), located in Miami; Florida State University (FSU), also located in Tallahassee; New College of Florida (NCF), located in Sarasota; University of Central Florida (UCF), located in Orlando; University of Florida (UF), located in Gainesville; University of North Florida (UNF), located in Jacksonville; University of South Florida (USF), located in Tampa; and the University of West Florida (UWF), located in Pensacola. As of fall 2010, the 11 universities had approximately 321,503 students, with the state's largest public universities being UCF with 56,338 students, UF with 50,116 students, and USF with 47,800 students. (Fall Student Enrollment in State University System Institutions 2010)

Purpose of the Study

The purpose of this study was to examine the impact of the State of Florida budget reductions for the SUS and the possible effects not only for students and faculty but also for students in the workforce. As the economy continues to decline, there is the ever-growing concern of how the budget reduction will impact education not only in Florida but also in educational systems around the country. States are reducing their budgets, which ultimately is leading to reductions of resources for educational systems at the secondary and postsecondary levels. In order to provide quality education, states require adequate funding, and resources are needed to ensure that secondary and

postsecondary institutions are providing a quality education. This research examined the budgets that universities within the SUS received from fiscal year (FY) 2001 through FY 2010 and compared the changes in funding for university employees and students. The research was used to examine the impact of limited resources for student admissions and student performance from FY 2001 through FY 2010. The study compared changes in the number of admissions, degrees awarded, courses offered, and financial assistance dispersed.

The objective of this research was to focus on the changes that have been implemented, and the policy changes that have been implemented as result of budget cuts. The intent was to compare the reduction in programs, course offerings, student admissions, and student completion rates. The research was used to compare budgets of the 11 public universities from FY 2001 through FY 2010 and the students' performance and completion rate.

Statement of Problem

For many decades, the educational system in Florida has struggled to resolve various social problems and improve the quality of education that students received. These problems have included segregation, creating equal school districts, and providing adequate classroom materials. During the past 50 years, there have been great advances in secondary and postsecondary institutions, such as the increase in funding to poverty-stricken areas or in areas with a large military population with the Title VIII of the *Elementary and Secondary Education Act of 1965* (ESEA). (Dillion and Rotherham 2007, 1) There has been improvement in the educational system with the ruling in 1954

of *Brown v. Board of Education of Topeka of 1954* that racially segregated schools were unequal.

Another change that was made in secondary education was the *No Child Left Behind Act of 2001* (NCLB), which was legislation designed to improve the education outcome for students. (Dillion and Rotherham 2007, 1) The NCLB allows states to establish quantifiable objectives to determine students' achievement skills and test students on an annual basis to determine their progression. (Dillion and Rotherham 2007, 1) It was estimated that the legislation would provide more than $1.4 billion in grants to improve academic achievement and support intervention programs for those students who were at risk. (Aspey, Colby, and Smith 2006, 1)

Other initiatives that have been implemented include of the Academic Competiveness and National Science and Mathematics Access to Retain Talent (SMART) grants that provide support for students attending postsecondary institutions. Students have access to better resources, technology, and facilities compared to those of 50 years ago. Students entering college have higher grade point averages (GPA) and higher scholastic scores. (Goldrick-Rab and Mazzeo 2005, 6) However, as a result of recent budget cuts some of these advancements are now being erased. Many of the secondary schools are losing teachers as a result of reductions in force, and attrition through resignation or retirement and position eliminations. The remaining teachers are seeing increases in class sizes, which may make it more difficult for younger students to learn. This may be the one explanation for the high number of high school dropouts in Florida.

During FY 2009, the overall dropout rate in Florida was 23.8%, with the highest dropout rate of 50% in Jefferson County. (Florida Public High School Graduation Rate 2008-09 2009, 5) In FY 2008, Florida was one of eight states that had an average dropout rate of 30%, compared to the national average dropout rate of only 4.1%. (Chapman, Laird, and KewaiRamani 2010, 13) The decline in high school completion will have an impact on the number of students enrolling in colleges and universities. This will also affect the level of education of individuals entering the workforce. However, those students who choose to and can afford to attend college will have a choice of several universities in the state that can provide them with opportunities to earn degrees.

During the past decade, the United States (U.S.) economy has been in a recession since the terrorist attacks of September 11, 2001. (Jackson 2008, 3) The country has experienced a housing market collapse and stock market decline. In 2008, the state of Florida's financial crisis continued to deteriorate as a result of changes to *Amendment 1* that decreased the amount of revenue received from property taxes. (Moore 2008, 40-41) This change significant impacted funding that the state received from property taxes.

One critical negative impact on the state revenue was the heavy reliance on sales taxes and tourism. When the economy was stable, businesses in the state were flourishing; the housing market was lucrative and tourism was profitable. As the housing market continued to expand, there was an increase in revenue generated from property taxes and other fees such as impact fees from new home construction. (Jeong and Feiock 2006, 754) Although home property taxes do not provide direct revenue for universities, revenue is directly generated from the fees and taxes collected from construction. (Wright 2010, 62-63)

As the housing market began to slow and tourism began to weaken, the revenue that was once received from these sources declined. Florida was one of the first states in the southeast to experience the housing collapse, and the state experienced the second highest foreclosure rate in the U.S. (Boulard 2011, 16; Fogel, Smith, and Williamson 2008, 107) As the housing market declined and the unemployment rate increased, consumers reduced personal spending and expenses, thereby reducing the amount of revenue generated through sales tax. Revenue allocated to universities and other agencies is, in part, derived from those taxes. When state revenue increases, universities are able to grow and increase the number of students admitted, hire needed personnel, and complete capital improvement projects. Some universities in the state have become the largest in the U.S., and such growth requires buildings and facilities to accommodate the student population.

Florida SUS's budget for FY 2009 was $3.18 billion and for FY 2010 it was $3.4 billion. (FY 2009-10 Florida Budget House Democratic Caucus Perspective 2009, 5). For FY 2012, the state has a projected $4 billion budget shortfall, and one of the areas that was affected was higher education. (McNichols, Oliff, and Johnson 2011, 5; Johnson, Oliff, and Williams 2011, 3) As a consequence of budgetary shortfalls, tuition rates were increased by 8% to generate an additional $65 million. (FY 2009-10 Florida Budget House Democratic Caucus Perspective 2009, 5) Many projects and anticipated expansions were postponed or cancelled as a result of the shortfall. As result of the budget deficit, public universities and colleges turned to stimulus money from the *American Recovery and Reinvestment Act of 2009* (ARRA) to help sustain the SUS through FY 2012. (FY 2009-10 Florida Budget House Democratic Caucus Perspective

2009, 5) The SUS received $219 million, and community colleges received approximately $82 million from the stimulus package. (FY 2009-10 Florida Budget House Democratic Caucus Perspective 2009, 5)

Significance of Study

This research is significant because it explored the effects that budget reductions had, and continue, to have in the SUS of Florida. The study investigated outcomes that occurred and will continue in the near future not only for students seeking to advance their education, but also for employers who may be forced to deal with a workforce of inexperienced, unskilled, and less-educated employees. There is growing concern that there will not be enough trained and educated individuals to enter the workforce or individuals with the level of skills required to be successful in the workplace.

As the cost of university operations increased, administrators sought to implement various methods to ensure that their universities were solvent. In 2010, the Florida Legislature passed legislation that would increase undergraduate tuition by 8%, with an additional 7% for tuition differential. (Tuition Differential Fee Report 2010, A2; Johnson, Oliff, and Williams 2011, 3) In FY 2010, the tuition differential increase for students generated approximately $51.7 million. (Tuition Differential Fee Report 2010, 2)

Although there is a large body of literature addressing budget reductions and information concerning community college budgets, there is limited scholarly literature that focuses on Florida's SUS budget reduction. This study is significant as it provides a new perspective on budget reductions for higher educational institutions in Florida. The

goal is that this research will contribute to the body of literature and encourage political leaders to reconsider the budget reductions borne by public universities.

Based on the changes to federal and state funding that began to affect universities in 2007, this study was based on events and changes that occurred from FY 2001 through FY 2010. The methodology that was used to complete the study was a comparison analysis of secondary and archival data collected from university resources, BOG, and the Florida Department of Education. Data collected from federal agencies of the U.S. Census Bureau, U.S. Department of Education, U.S. Department of Labor, and other public documents were used as well as printed articles, scholarly journal articles, and printed books. The data collected was used to determine the effect of the Florida budget cuts on the educational system, specifically the SUS, and to determine if the system is functioning efficiently and providing quality education to postsecondary students.

The next four chapters consist of a literature review, methodology, data analysis, and discussion of the research findings. Chapter 2: Literature Review discusses studies which have been completed that examine the impact of budget reductions. The review discusses the effects of budget reductions and policy changes at the national level and the impact that they have at the state and university levels. The review consists of two sections that include theoretical concepts and possible reasons for state budget cuts. The theories may assist in explaining why individuals choose to continue their education and describe some barriers that may affect their decisions.

Chapter 3: Methodology discusses the steps that were utilized to collect data and to explain where the information was obtained. The data includes Common Data Set (CDS) obtained from each university, which consists of the number of students admitted,

degrees awarded, number of faculty members, and other institutional information. The chapter investigated the hypotheses that the study assessed regarding the consequences of budget reductions during the past 10 years from FY 2001 through FY 2010.

Hypothesis 1: The state budget reductions will be linked to a reduced number of faculty members during FY 2001 through FY 2010.

Hypothesis 2: The state budget reductions will be linked to increased student-to-faculty ratios during FY 2001 through FY 2010.

Hypothesis 3: The state budget reductions will be linked to reduced course offerings during FY 2001 through FY 2010.

Hypothesis 4: The state budget reductions will be linked to a reduced number of students who received financial assistance during FY 2001 through FY 2010.

Hypothesis 5: The state budget reductions will be linked to a reduced number of new students admitted during FY 2001 through FY 2010.

Hypothesis 6: The state budget reductions will be linked to a reduced number of students who graduated during FY 2001 through FY 2010.

Hypothesis 7: The state budget reductions will be linked to changes in the demographics of students enrolled at state universities during FY 2001 through FY 2010.

Chapter 4: Data Analysis describes the findings of the data collected and evaluated. The chapter includes tables and figures that provide a clear illustration of the research findings. The segment includes the comparisons of funding for each university and the changes in funding. The section describes the CDS from each university used. It compares the funding and expenditures of the 10-year period to determine the changes that occurred as a result of budget cuts for student enrollment and graduation, faculty increase or decrease, and course sections offered.

Chapter 5: Discussion includes research results and recommendations for new policy changes or needed modifications of existing policies. The chapter includes

findings from the data analysis and explains if there were any changes for students and faculty as a result of budget reductions during the last 10 years.

Chapter II

LITERATURE REVIEW

Introduction

This literature review explored the budgets for Florida public universities and the methods by which the budgets were determined. There is a large body of literature that concentrates on the state of the economy, state of education, function of community colleges, and the matriculation of students from two-year colleges to four-year universities. However, there is limited information regarding the effects of the economy in Florida and the outcome for higher education. The SUS in Florida is comprised of 11 universities which are funded from state revenue. With the state relying on declining revenue from taxes as well as lottery sales, there have been discussions regarding higher education's sustainability.

Not only is it important to understand the role that institutions of higher education play allowing individuals to continue their education, but it is also important to understand the role that the institutions play in helping to maintain communities. Postsecondary institutions facilitate partnerships and collaborations with community partners, which help to stimulate and revitalize areas of communities that would otherwise deteriorate. The institutions help to develop connections among social groups or organizations, generate community development, and provide financial resources. (Allen-Meares 2008, 82; Dennison 2010, 79; Lamore, Link, and Blackmond 2006, 435)

This review provides a historical background of university budgets during FY 2001 through FY 2010 including studies completed by other researchers along with their findings and recommendations. The literature review consists of three sections. The first section discusses theoretical concepts that include: 1) Theory of Knowledge, 2) Social Justice, and 3) Rational Choice Theory. The second section discusses the historical funding perspective for education and the state of Florida universities and federal and state funding for universities. The third section discusses: 1) state revenue, 2) budget reductions, 3) university employment, 4) student enrollment, and 5) college costs. This chapter presents a context for budget allocations and reductions for higher educational institutions as a foundation to understanding the outcomes of budget cuts and diminishing resources.

Theoretical Concepts

Introduction

Individuals have the right to learn and advance their learning through experiences and perceptions of those experiences. As individuals enter the academic world, they expand their knowledge and ideas as they mature and progress. Individuals enhance their problem-solving and decision-making abilities based on their experience and knowledge. As individuals advance, they learn to balance their needs with those of society and adapt accordingly to be productive citizens. There are various theoretical concepts that may be used to examine why individuals choose to advance their education, why educational institutions function as they do, and how political decisions affect funding of postsecondary education. Three concepts were examined that may help to understand these occurrences.

Theory of Knowledge

As Peter Losin shows, knowledge and education are essential to a civilized society and enlightened citizens. (Losin 1996, 50) This idea is found in Plato's *The Republic*, an influencing source in the history of education. (Losin 1996, 50) Plato's metaphor of the Cave and the shadows that were formed by the illumination on the cave walls represents individual's ability to gain knowledge of and enlighten one's "self," which is a philosophy necessary to gain knowledge. (Bøyum 2010, 545-546; Hodgson 2010, 118; Losin 1996, 50) Those who are policymakers must be educated as well so that they have the knowledge and skills needed to make logical decisions that are in the best interest of society. (Chandler 2006, 25) Plato's philosophy of the ruling group was that they continue to be educated; this is an important element for political leaders and others in leadership roles. (Ramsey 2009, 574)

In Plato's *The Republic*, the phrase a "good man" (individual) refers to being good individuals, but to be good citizens, one must have knowledge, and in order to develop knowledge, an individual must be educated. (Chandler 2006, 25) For citizens to be "good," they must be taught. However, with federal and state governments reducing their financial support for educational institutions, it will become more challenging for individuals to attend colleges and gain additional knowledge. Plato indicates that individuals are to be "good…citizen[s] of a state….," and in today's society to act as "good citizen[s]," not only requires education, but also the ability of people to provide the necessities for themselves. (Chandler 2006, 25)

Possessing only a high school diploma may make obtaining a job and maintaining the basic necessities of life challenging. To avoid lawlessness and authoritarianism, all

citizens should be treated equally and granted the opportunity to acquire education. For society to continue functioning as a healthy and holistic community, its members must have their basic needs met, and if those needs are not met, mayhem may occur. Citizens may devise methods of survival that may include taking from those who possess the items they require to meet their own basic needs. This would likely result in increased crimes.

Social Justice

A point made by the influential American Philosopher John Rawls is that those individuals who are "worse off" should be provided opportunities to improve themselves. (1971, 83) Few would disagree with this basic principle. Education is a catalyst in changing society, and individuals may use it as an empowering mechanism. (Allen-Mears 2008, 83) Those who are first-generation college students, minority groups, or those from low-income households are losing the opportunity to improve themselves as budgets shrink. Changes have been made to the types and the amounts of financial aid that are available that will make it more difficult for some students to attend college. With many universities implementing "enrollment management" systems that limit who will be admitted, they also limit the educational opportunities of those students from impoverished background thus limiting their opportunities to improve themselves. During periods of budget cuts and recessions, political leaders often implement policies to reduce funding for education and social programs that most often impact those individuals from lower-income households or the impoverished. (Neiman and Stambough 1998, 1)

As political leaders continue to make decisions regarding budget reductions, not only at the state level but also at the university level, the policies and funding of programs should be fair and funded equally. When examining these decisions, the leaders should consider the theory of "the social contract" or "social justice" based on such books as John Rawls' *Theory of Justice*. (1971) From "need-based" aid to "merit-based" aid, which is more likely to benefit students from affluent backgrounds, contradicts the theory of "social justice." "Social justice" advocates equality for all citizens. (Bankston 2010, 174; Esquith 2006, 533; Stark 2009, 370) When state-level political leaders base their decisions on what their constituents want or need rather than what is in the best interest of the entire state, the decisions may create inequalities. Students who cannot afford to attend institutions of higher education because they do not have the financial means may be experiencing social inequalities.

Rational Choice Theory

During the past decade, more individuals have found themselves unemployed and have chosen to return to college to obtain higher or advanced degrees, change their career fields, or improve their job skills. The choices that individuals make help to define who they are and what they want to accomplish. Although the decisions that individuals make may not help them achieve all of their objectives, they still retain the desire to reach their goals. Throughout their lives, individuals choose to change their life choices, desires, and goals. Individuals who choose to continue their education do so because they have evaluated the benefit versus the cost of returning to college and have determined that the value of an education is worth the cost.

Historically, political leaders make decisions based on their political affiliations, as is evident in the policies of the Democratic and Republican parties. Democrats have developed a pattern of being more liberal and supporting federal funding for higher education, whereas Republicans are known for their conservative spending for education and other social programs. When examining the choices that political leaders make, it is important to understand how their decisions will affect the public. It is theorized that political leaders consider the costs and benefits of making decisions and attempt to select the best options. (Neiman and Stambough 1998, 449)

Although rational choice theory may be used to explain some of the decisions that individuals make in returning to school or that politicians use in decision-making, there has been criticism regarding the use of that theory to explain certain behaviors. Some researchers use the theory to explain that humans will try to maximize their own self-interests by considering the cost-benefit and making decisions. Brogan (1996, 797) argues that although rational choice theory may be used to explain some behaviors, this does not suggest that all individuals are logical actors. The theory does not account for other conditions that may cause individuals to make certain decisions. The researcher indicates that rational choice theories are not empirical because they cannot be scientifically tested, and the use of the theories has not provided any new empirical knowledge to the field. There are also questions regarding the use of rational choice theory in social science fields.

Brogan (1996, 799) argues that a few researchers believe that rational choice theory is flawed science and that it is an irrational attempt to produce empirical science that explains politics. Some researchers believe that rational choice theory is used in an

attempt to "corrupt" and misinform future leaders. (Brogan 1996, 799) There is also the opinion that the theory may be used to weaken the ethical foundation of social equality. Brogan (1996, 799) One argument is that rational choice theory may explain that an individual's need for material greed is innate and logical, but other human desires are not. It does not encourage or explain the motivation of political, economical, and social behavior of individuals. As individuals seek to further their education, it could be considered a choice to develop their intellect. Brogan (1996, 802)

Landemore (2004, 179) suggests that rational choice theory is used in natural and empirical science to describe and predict human decision-making and to create a representation that illustrates human decision-making in political science. The fundamentals are used to create models that would provide statistical conclusions, and human choices may be considered mathematical and may be used in formulas and equations that provide scientific or empirical substantiation. Another issue to be considered is that some rational choice theorists do not support the view that the theory may explain human behavior, but instead, they regard it as a theory that provides rationalization of economics.

With the changes that have been made in the financial support for Florida's SUS, questions arise regarding the system's ability to continue functioning effectively with limited financial resources and the sustainability of the 11 universities as budgets continue to be reduced as a result of the loss of state revenues.

Historical Perspective

National Framework

The creation of the educational system in the U.S. dates back to the colonial era. The first educational institutions were established in the thirteen colonies, with the first public school being established in the U.S. in 1635. (First Public School Site and Ben Franklin Statue 2011) Cole (1957, 68) suggests that the educational system was modeled after the education system in England. The scholastic system had been adjusted to meet the needs of the colonists in their new homeland. The Massachusetts Bay Colony made education a requirement, and the other colonies implemented the requirement. The *Massachusetts Law of 1642* was the first decree to establish guidelines for education in this country. (Monaghan 1988, 26; Parker 1909, 80) The legislation specified that elementary schools be established for the children of the colonists. Cole (1957, 69) indicates that individuals were selected to ensure that the educational laws established by the colony's General Court were being followed.

By 1647, a township with a population of 100 families or more was required to establish a grammar school that would prepare boys to enter college. The boys and girls attended separate schools, and their level of education was not the same. Matthew (1976, 48) indicates that girls were expected to marry at an early age and to raise the family, specifically to rear sons to become future leaders. Though the schools were publicly supported at the local level, the schools were not free; they were funded by fees that were charged for students to attend.

The colonists not only established the first public system for elementary schools, but they also established the system of higher learning or higher education. The colonists

had several reasons for establishing institutions of higher education. Some of the settlers had attended prestigious British universities, such as Oxford and Cambridge, and their philosophy was the education was a necessity. The settlers' ideology was that their religious and civic leaders should be educated, and this belief led to the establishment of Harvard College in 1636. (Robinson and Jeynes 2010a, 299; Robinson and Jeynes 2010b, 329) Hatfield (2003, 27) indicates that the first scholarship fund was utilized at Harvard in 1643. In Virginia, William and Mary also was established to continue the religious teachings.

Morpugo (1993, 40) indicates that during the eighteenth century, as educational institutions continued to be established, they received financial support from royal and colonial governments. Although the institutions received financial support from these funding sources, institutions of higher education were accessible predominantly to elite, white Christian males. However to continue receiving financial support, the males were required to serve as missionaries and teach Christianity to Native Americans. (Morpugo 1993, 42)

As the colonies expanded and the government developed, they became less dependent on royal support and more autonomous. Institutions of higher education began to rely more on state and local government for support and regulation. From 1800 through 1850, many new colleges were established, but these institutions depended on student tuition to operate. This dependence resulted in some colleges failing. The nineteenth century was a period when young males and their families had to determine if attending college to obtain a degree was worth the possibility of missing employment

opportunities. Although the cost of a college education was not extremely expensive during this period, only a limited number of jobs required a degree.

During the early 1800s, there was an effort to create colleges that would provide education in agriculture. In 1853, Representative Justin Morrill from Vermont introduced a bill to the legislature that would provide land to build and establish colleges that would provide education in the agricultural and mechanical fields. The bill was originally vetoed by President James Buchanan; however, Morrill modified the bill to include the wording "military training," and President Abraham Lincoln signed the bill in 1862.

The *Morrill Land-Grant Act of 1862* authorized the use of land in the states and financial support to establish institutions that would teach engineering, agriculture, and provide military training. (Gunn and Lucaites 2010, 406) If the land was not used to build educational institutions, and instead was sold, the proceeds from the sale were to be used to assist in forming and funding educational institutions. Gunn and Lucaites (2010, 406) suggest that the *Morrill Land-Grant Act of 1862* assisted in establishing the mission of public universities: to provide affordable education, produce experts in specific fields, and educate professionals to provide guidance for the neighboring communities. The function of higher education was to connect and educate the working class.

Nearly 30 years after *Morrill Land-Grant Act of 1862* was passed, the second *Morrill Act of 1890* was ratified. (Harris and Worthen 2004, 447) This legislation stipulated that states that had separate institutions for different races, such as those institutions for African Americans, had to ensure that funding was distributed equitably among all colleges. One of the provisions of legislation was that any state that had

received funds through the *Morrill Land-Grant Act of 1862* and used the funds exclusively for universities that admitted only white students had to choose from two options: 1) the universities had to admit students of other races, such as African Americans; or 2) the states had to establish separate institutions of higher education for African Americans. (Harris and Worthen 2004, 448) The legislation provided the authorization to establish 16 additional colleges in the South using land-grants. (Harris and Worthen 2004, 448)

Harris and Worthen (2004, 450) indicate that in 1914 the *Smith-Lever Act* was passed, and the legislation created the provision for land-grant institutions to work collaboratively in providing education for agricultural extension employment. (Harris and Worthen 2004, 450) Many of the state universities that exist today were established through the land-grant act. In continuing the development of institutions of higher education, the *Smith-Hughes National Vocational Education Act of 1917* was passed. (Harris and Worthen 2004, 450) This legislation promoted vocational training for individuals who would work in the agricultural field, and the training would be supported through federal funds.

During the World War II era, there was a significant change in the federal support of education. Two pieces of legislation were passed: the *Lanham Act of* and the *Impact Aid Law of 1950* (Porter 1951, 2). These laws were primarily designed to provide financial support in areas that were impacted by military presence, including military facilities and military families. The federal government provided aid in areas where military installations had adversely impacted the communities' economy. During World War II, many communities near military facilities experienced overcrowding, insufficient

housing, and inadequate public schools. The original *Lanham Act of 1940* was established to provide housing for military families. (Porter 1951, 1) However, after the surrounding communities began to display the negative effects of increased military housing and the need for more schools, the *Lanham Act of 1941* was passed. (Porter 1951, 2) This legislation provided $125 million to support approximately 1,000 school districts. (Porter 1951, 2)

With the noticeable increase in military facilities, military housing, and military families after World War II, there was also an increased number of veterans returning from the war. As the service men and women sought employment and education, there was a need to provide financial support to assist this segment of the population. The *Servicemen's Readjustment Act of 1944*, or "GI Bill," was enacted, and this legislation provided financial assistance to veterans who wished to pursue higher education. (Hatfield 2003, 27) The program was the first significant financial assistance program sponsored by the federal government. (Hatfield 2003, 27) Kim and Rury (2007, 305) argue that the number of veterans attending college greatly increased as a result of the financial assistance they received through the "GI Bill." According to the researchers, more than one million veterans were enrolled in postsecondary institutions in 1947; however, that number decreased to approximately 600,000 by 1950. (2007, 305)

Following World War II and the increase in the number of veterans attending college, the federal government made surplus buildings available to universities to use as classrooms. In 1950, the *Lanham Act of 1940* and *Lanham Act of 1941* were replaced with the *Impact Aid Act of 1950*, which is currently known as Title VIII of the ESEA. (Porter 1951, 2) This legislation appropriates funding for schools in disadvantaged

communities, and the financial support is used to reduce the inequalities that may exist within certain communities. The legislation also provides funding for schools that are located in Native American territories and in areas containing low-income rental proprieties.

During the Cold War in 1958, when the country's technology was advancing and the race to be the first nation in space became an important factor, Congress passed the *National Defense Education Act* (NDEA). (Bankston 2011, 333; Hatfield 2003, 27) This legislation was in response to the launch of the Soviet Union *Sputnik* satellite. (Bankston 2011, 333; Hatfield 2003, 27) The NDEA provided financial assistance to educate individuals in the fields of science, mathematics, and other highly technological areas. The legislation had two provisions: providing student loans and fellowships. Eligible students could receive loans of up to $1,000 per year with a maximum of $5,000. (Flattau, Bracken, Van Atta, Bandeh-Ahmandi, de la Cruz, and Sullivan 2006, II-2) Students who were eligible received awards over a three-year period for $2,000, $2,200, and $2,400. Bankston (2011, 334) suggests that the legislation also provided funding to states to improve science programs in elementary and secondary schools, and provided funding to better prepare high school students to enter college.

In the 1960s, during President Lyndon Johnson's initiative of the "Great Society," educational programs and equal opportunities were among the numerous objectives. In 1965, the *Higher Education Act* (HEA) was passed, which provided financial assistance for individuals from lower-income, urban, and rural areas. (Hatfield 2003, 27) The legislation was enacted to provide financial support to students through loans and scholarships to assist in obtaining postsecondary education. The legislation has been

amended numerous times with changes that range from increased amounts for Pell Grants to reducing the interest rates for student loans.

The Pell Grant was originally established in 1972 as an amendment to the *Higher Education Act of 1965* to assist individuals from low-income households and was known as the *Basic Education Opportunity Grant*. (Baime and Mullin 2011, 6) However, based on a study completed by Thomas Kane (1999, 28) using data from the National Longitudinal Study of 1988, of 8,313 students, the number of recipients from low-income households using Pell Grants increased only slightly. This was a lower percentage than anticipated. Opponents of the program speculated that the reason for the lack of participation may be that the process of completing the Free Application for Federal Student Aid (FAFSA) is too challenging and not worth the bureaucracy.

In 2010, there was a modification which increased the amount for which a student may be eligible. The *Student Aid and Fiscal Responsibility Act of 2010* increased the grant amount to $5,550. (The Student Aid and Fiscal Responsibility Act 2010, 20) In 1972, the *State Student Incentive Grant* was enacted, which provided matching funds to states to support "need-based" programs. States that participated received allocations from the U.S. Department of Education based on student enrollment, but the states had to provide funds to match the federal appropriated amount. (State Student Incentive Grant (SSIG) Program, 9-3) The grant is now known as the Leveraging Educational Assistance Partnerships (LEAP). Postsecondary institutions often relied on funding from the federal government; however, as the federal government provided more funding, it became more controlling. Doyle (2010, 623) suggests that to ensure that institutions were following

federal requirements, the government became involved with universities' daily operations.

Gilbert and Heller (2010, 6) indicate that three years ago when the *American Recovery and Reinvestment Act of 2009* (ARRA) was passed, it provided billions of dollars for higher education expenses. The funding varied from tuition tax credit to funds for facility improvements. The legislation provided $39.5 billion in funding to stabilize secondary and postsecondary educational systems from FY 2009 through FY 2011. (American Recovery and Reinvestment Act of 2009: State-By-State Estimates of Key Provisions Affecting Low-and Moderate Income Individuals 2009, 4) The funding was allocated in two parts: 1) a percentage of the appropriations were earmarked to assist states in maintaining their educational systems at or above their funding levels for FY 2008 and FY 2009; and 2) the remaining funds were allocated directly to local school districts. The funding was through the Education Block Grant and the Flexible Block Grant. Florida received more than $2.2 billion through the Education Block Grant and more than $491.5 million through Flexible Block Grant. (American Recovery and Reinvestment Act of 2009: State-By-State Estimates of Key Provisions Affecting Low-and Moderate Income Individuals 2009, 5)

Chronister (1980, 233) argues that, at the beginning of the twentieth century, states reduced the amount of funding for private universities and began supporting only public institutions. As the change in financial support shifted to public colleges, there was also an increase in tuition and fees that resulted in changes in student enrollment in both private and public universities. Not only is the change in funding seen in private and public-supported universities, but it is also seen in other areas as well. Chen and St.

John (2011, 629) argue that funding higher education is being "privatized." First, the funding of higher education at public institutions is being transferred from taxpayers to students through increased tuition and fees. Second, there is less financial support for students through grants and more emphasis placed on student loans. Third, states have increased high school graduating standards and implemented standardized testing, which may make it more difficult for some students to graduate. This may also be one explanation for the high dropout rate. Finally, there is an increase in "merit-based" grants and a decrease in "need-based" grants.

Chen and St. John (2011, 630) found that states typically funded postsecondary institutions to keep tuition costs low and promote equal access to diverse populations. However, some states are changing and shifting to a "cost-sharing" model between the state, students, and student families. These changes were recommendations made in the Carnegie Commission of Higher Education in 1973, Committee for Economic Development in 1973, and the Newman Commission 1971 reports. (Chen and St. John 2011, 630) Following the reports, students were able to attend college using Pell Grants that provided more access ability as a result of financial equitable. However, in 1979, the income threshold was raised changing eligibility for some middle-class students and reducing the amount of funding available for students from low-income households.

In the 1980s, there was another change in the amount of funding that students were eligible to receive through Pell Grants. Chen and St. John (2011, 631) found that the federal government reduced the amount of funding that institutions received for Pell Grants and increased the amount for subsidized student loans. As a result of the change

in the amount that institutions receive for financial aid, there is a widening gap between students from affluent households and those from low-income households.

Bankston (2011, 326) argues that federal subsidies provided for financial assistance, such as Pell Grants, have resulted in an unforeseen impact for higher education. With the availability of the Pell Grant, more individuals were provided the opportunity to earn a college degree resulting in an increase in the number of degrees awarded. The author indicates that from 1940 through 2008 that the percentage of individuals who possessed degrees increased from 5% to 30% (Bankston 2011, 326). Prior to World War II, less than 10% of managers had a college degree, but more than 70 years later, approximately 40% of managers now have degrees. Bankston (2011, 333) suggests that not only was there an increase in funding for higher education following World War II, but there also was an increase as a result of the Cold War and the "War on Poverty." With the "War on Poverty" revealing the inequalities that existed, the HEA assisted in providing equal opportunities through financial support for the underprivileged to earn a college degree. The legislation provided funding for "need-based" scholarships, interest-free student loans, and part-time employment.

Okunade (2004, 124) argues that the federal government is reducing its financial support of postsecondary institutions because the universities are moving from publicly funded universities to privately financed institutions. The researcher found that state funding of public universities has declined as states are appropriating more funding to other areas, such as the welfare systems, Medicaid, prisons, and secondary education. Previously, states appropriated a higher percentage to postsecondary education, which helped to keep the tuition cost low. However, with less federal and state support, higher

educational institutions are increasing tuition fees in an attempt to balance their revenue and expenditures.

Florida Framework

Florida's first institution of higher education was established nearly 10 years prior to the *Morrill Land-Grant Act of 1862*. In 1853, Governor Thomas Brown enacted a law that would allow government funding of higher education. East Florida Seminary in Ocala was one of the first schools to receive public funding, but as a result of the Civil War, the school closed. In 1884, Florida's first land-grant institution, Florida Agricultural College (FAC) was established in Lake City. Originally, the college was to be located in Gainesville; however, the town could not meet the financial requirements, and the school was established in Lake City for a short period. In 1903, FAC was relocated to Gainesville and changed its name to the University of the State of Florida.

In 1905, the Florida legislature passed the *Buckman Act* which amended the State's Constitution of 1885 and eliminated state-supported schools in order to combine institutions; prior to this legislation there were seven schools within the state. (Tigert 1933, 139) After the legislation was implemented, several schools merged, creating the University of the State of Florida for white males located in Gainesville and now known as the University of Florida (UF); Florida Female College for white females located in Tallahassee and now known as Florida State University (FSU); and the State Normal School for Colored Students for African Americans also located in Tallahassee and now known as Florida A & M University (FAMU). With the passing of the *Buckman Act* the Board of Control (BOC) was created to oversee the three institutions, but the Legislature retained control of funding for the universities.

Tigert (1933, 139) argues that the *Buckman Act of 1905* was passed because there was not enough support for the seven schools that existed. The author indicates that the students' performance was below college standards, and with the merging of schools and with a board to oversee the three new universities, it would improve the institutions, thereby improving student's performance. Tigert (1933, 139) suggests that abolishing the seven schools with low educational standards and restructuring them into three universities would assist in modernizing the state's higher education system.

Finney (1997) found that a study conducted in 1956 by A. J. Brumbaugh and Myron R. Blee to determine the status of higher education in Florida resulted in the state legislature approving the expansion of the postsecondary system. Approximately 20 years later, six additional universities were established within the state. The University of South Florida (USF) was established in 1956; the University of Central Florida (UCF) was founded in 1963; Florida Atlantic University (FAU) was established in 1964; the University of West Florida (UWF) was established in 1967; the University of North Florida (UNF) was established in 1969; and Florida International University (FIU) was established in 1972.

In 1965, the Legislature eliminated the BOC and created the Board of Regents (BOR), a 9-member panel that regulated and oversaw higher education in the state. In 1968, the BOR became a unit of the Department of Education (DOE) and reported to the Commissioner of Education. The BOR expanded from a 9-member to a 13-member board in 1981. In 1997, Florida's tenth public university FGCU opened, and in 2001, Florida's latest university NCF opened.

The SUS receives support from several sources. The state appropriates a percentage of tax revenue to the system, and the universities within the system also receive funding from grants, contracts, and contributions. The tuition and fees are distributed to the universities within the SUS. The public institutions receive revenue from other sources that include royalties and licensing fees. The SUS also receives revenue from hospitals located at UF and USF. Other sources of revenue include proceeds from intercollegiate athletics and concessions.

The major contributions that universities in the SUS receive are state funds appropriated by the legislature from sales tax. These sources of support are allocated for Educational and General (E&G) purposes that include funding for general instruction, maintenance, student services, libraries, and university operations. Another source of revenue that SUS receives is for Public Education Capital Outlay, which are the proceeds from utility fees. An additional source of revenue for the SUS is funding from the Lottery Trust Fund for Education Enhancement. This funding is a portion of the proceeds from lottery sales. The SUS also receives financial support from other types of trust funds. During FY 2011, the SUS budget was derived from the following sources: 53% from general revenue; 36% from tuition and fees; 6% from the Educational Enhancement Trust Fund; 4% from ARRA; and 1% from other types of trust funds. (Education Funding 2011, 4)

The universities within the SUS also receive support from external revenue sources. A large percent of SUS resources are generated through sponsored research. These Contract and Grant (C&G) funds may be generated through federal, state, local, or private sponsors, and the funding may be used to support public services, training, and

faculty research. Universities also receive funding from auxiliary businesses, such as student housing, bookstores, computer support, and food services. Additionally, SUS receives funds from activity and service fees, intercollegiate athletics, and campus vending machines. Another source of revenue includes Faculty Practice Plans which generate external revenue through the fees that are charged for patient services at UF and USF hospitals.

College costs in the state of Florida have remained low for many decades, and the state recently ranked 15th in state and local financial support of higher education. (The Florida Council of 100 Higher Education Funding Task Force Position Paper 2003, 3) However, during the 1990s, a task force was appointed to assess the operations of universities by examining their revenue and expenditures. The task force found that postsecondary institutions could no longer operate effectively with the amount of financial support they were generating from the low tuition fees. This continued to be problematic, even with the increases in tuition fees during the 1990s. During FY 2003, Florida ranked 49th in undergraduate tuition fees, with only one state (Nevada) charging lower tuition fees. (The Florida Council of 100 Higher Education Funding Task Force Position Paper 2003, 3)

Budget Changes

To understand the budget crisis in higher education, we must review the national financial system and the dynamics that has led to the current financial conditions. The monetary economy of the U.S. dates back to the 1600s with the exploration of the new world by voyagers exchanging their goods (i.e. furs or vegetable produce). (Samuels 1990, 234) As the colonists came to North America and settled, they began to exchange

their products and goods which helped to establish a mercantile system and financial foundation. As time progressed, and the financial system continued to develop, more institutions began depending on the revenue that was generated.

Harlow (1929, 47) argues that during the American Revolution, the colonies relied heavily on revenue from taxation to fund the war, which created a financial crisis during that period. With the manufacture of inventions such as the cotton gin, machinery led to the expansion of cotton fields, mills, and transportation of the product by means of roads, railways, and waterways. As the production of cotton increased and the establishment of factories to process the cotton and other goods expanded, the Industrial Revolutions continued to evolve. As the economy continued to advance, the establishment of a financial system depended on funds generated from trade fueled by industrialization. However, the country also encountered numerous financial crises, including the Great Depression that began in 1929, which resulted in a loss of much of the country's wealth (Bernanke 1995, 1).

The recession that occurred following the terrorists' attacks on September 11, 2001, was characterized by a high unemployment rate, stock market decline, and housing market collapse. These factors led to decreased revenue and tightening budgets. To stabilize the U.S. economy, the ARRA was enacted, which provided $789 billion to support the infrastructure of governments, institutions, and agencies. (Landers 2009, 10)

Tandberg (2010a, 417) found that during the past two decades, the amount of funds allocated to higher educational institutions has declined, with a significant decrease beginning during the late 1980s. Although most states' overall spending increased, the increase did not include money for postsecondary institutions. The researcher indicates

that frequently, when there is increased funding for social programs, higher education receives less funding, which is often supplemented with tuition and fee increases. Although public institutions receive funds from sponsored research and donations, it has not been enough to offset the deficits experienced by universities.

Researchers in the U.S. have studied the financial crisis and its effects, but studies that explain the impact of fiscal policies for higher education are limited. During the past 10 years, significant interest has focused on states' budget cuts and funding for secondary education. Although the financial crisis affected many states, and resulted in reducing their budgets for higher education, one important influence on this crisis is the role that politics plays in determining how the available funds will be allocated. Even though politics plays a role in fund allocations, special interest groups may play a larger role than previously thought.

Special interest groups and lobbyists often influence policymakers in ways that may impact their budget decisions and the policies that they implement regarding funding higher education. To prevent such influences, some states may allocate funds through fiscal models. (Tandberg 2010a, 419; Tandberg 2010b, 736) To avoid politics and interest groups' influence, several states have implemented funding formulas to provide a standard. Frequently, the formulas are based on inflation, student enrollment, number of faculty, research funding, and other areas. (Tandberg 2010a, 425) A cross-sectional time-series analysis was completed for a 19-year period. The findings indicated that politics and interest groups' influence play a key role in determining the funding of higher educational institutions. The results also challenge the theory that funding is based completely on the population and economics. Tandberg (2010a, 419) explains that

several factors that influence policymakers include politics, economics, and demographics. These factors may determine the type and level of funding that is received by institutions.

According to Tandberg (2010a, 419; 2010b, 742), one hypothesis is that political ideology may be a factor determining the manner in which politicians respond to interest groups and voter pressure. The level of fiscal authority that state governors have is also a determining factor. Governors who have more fiscal authority may be more inclined to regulate and reduce funding for postsecondary institutions, to control legislative spending, and to fund other areas. (Tandberg 2010a, 422; Tandberg 2010b, 742)

The researcher indicates that another factor, term limits, may influence the level of spending for higher education. Decision makers with limited terms may have a higher probability of funding higher education because voters prefer it. (Tandberg 2010a, 422; Tandberg 2010b, 742-742) Political affiliation also may be an influence; Republicans are associated with less educational spending and Democrats associated with more support.

State-level government and governing power varies with each state. Those individuals who are the policymakers make decisions based on specific dynamics. Although elected officials most often concentrate on the individuals and interests within their districts, state governors and the governing body must consider the interests of the general population. As decision makers, governors focus on reallocating benefits to those whom they serve, and in some cases, they have the authority to allocate funding of expenditures that they believe are needed while limiting other types of funding. (Barrilleanux and Berkman 2003, 409) The concern occurs with the sharing of power between branches and with what each considers priorities for budgetary funding.

Barrilleanux and Berkman (2003, 409) suggest that when examining state spending, there are two types of spending: 1) developmental spending, which allocates funds to certain geographic locations to specific groups or support certain projects; and 2) redistributive spending that is allocated throughout a state and benefits the entire population. Barrilleanux and Berkman (2003, 409) completed a study during 1990, 1992, 1994, and 1996 of 188 governing bodies to determine the budget decisions that the governing bodies made as a deciding factor for budgetary decisions. The researchers investigated the effect of expanding government and its impact on state budgeting. They anticipated that decision makers who are interested in expanding government would be more supportive of larger budgets. Democrats favor supporting programs while Republicans were more conservative and less likely to want large budgets.

As a result of the *Deficit Reduction Act of 2005*, the federal government was expected to reduce the national budget by $22 billion by 2010 and, as that occurred, the amount of funding that the states received would be reduced. (S.1932 Deficit Reduction Act of 2005 2006, 7) This provision made changes in the amount of funding institutions would receive for educational programs, and modifications were made to the process of receiving student loans. These changes were projected to save the federal government approximately $12 billion by 2010. (S.1932 Deficit Reduction Act of 2005 2006, 7)

As a result of the budget reductions during FY 2010, some institutions made extensive reductions. Hulsey (2010, 24) suggests that budget cuts may be seen in four areas. First, there may be fewer class offerings that result in students attending college additional terms before graduating. Second, there may be a decrease in full-time equivalent (FTE) faculty members and an increase in hiring of part-time adjunct

instructors. Third, there may be an increase in class size that may change the student-faculty ratio. Lastly, there may be a reduction in the availability of assistantships and on-campus employment for students.

For many decades, states were able to rely on additional funding from the federal government to close the gap in revenue shortfalls. However, with decentralization and devolution, more of the financial responsibilities were assigned to states and local government agencies. State governments were left to develop innovative methods of generating revenue to fill the gaps that increased after losing federal funding. States that had resources from personal income tax or other revenue endured the financial crisis better than those that did not have other sources from which to generate revenue. States, such as Florida, which depends on sales tax, property tax, tourism, and lottery dollars found themselves in serious financial distress.

Stanley and French (2005, 22) argue that lottery revenue provides a percentage of revenue for many states. The researchers found that when states initially established lotteries they experienced an increase in educational spending, but over a period of time the level of revenue generated for educational purposes declined. One problem with lottery revenue is that funding cannot be reallocated for other expenditures. Lottery revenue allocated to educational systems may intensify the financial problems over time when sales decline.

Stanley and French (2005, 25) studied several factors to determine the effects of state lotteries on higher education systems; these included federal funding, lottery revenue, state population, employment rate, poverty level, and other factors. The study was a cross-sectional, time-series analysis to evaluate the correlation between university

enrollment and lottery funding. States with large populations and high unemployment rates had higher numbers of students enrolled in postsecondary institutions. The sample included two-year colleges and four-year universities as a group, but the researchers did not examine state lotteries independently. The results were categorized together into one study, which did not allow an analysis of the allocation of lottery revenue state-by-state. The researchers found that states disburse their lottery revenue differently for scholarships, student financial assistance, capital improvements, and other educational expenditures.

Florida Lottery has contributed to the state education system since its establishment in 1988, and nearly $231 million was contributed to the SUS through the Educational Enhancement Trust Fund during FY 2011. (Florida Lottery and Slot Machine Revenues for Education 2011, 21) In FY 2010, as the amount of overall spending for SUS decreased, the amount of lottery sales increased reflecting a period when lottery sales peaked and higher education was a major beneficiary. (Dollars to Education 2011; Florida Lottery and Slot Machine Revenues for Education 2011, 21)

As of FY 2010, Florida Lottery provided more than $1.2 billion to Florida's Educational Enhancement Trust Fund that included community colleges and the public school system. In FY 2011, $1.3 billion was provided. (Dollars to Education 2011; Florida Lottery and Slot Machine Revenues for Education 2011, 21) As of FY 2011, Florida Lottery provided more than $201 million to state universities; $426 million for Bright Future Scholarships; $326 million to the public school system; $311 million for school construction bonds; nearly $117 million for community colleges; and $35 million in student financial aid. (Dollars to Education 2011)

As citizens reduced their spending during the decade to cope with the financial crisis, sales taxes declined, tourism decreased, and the revenue that was generated from these resources diminished. Floyd, Gibson, Pennington-Gray, and Thapa (2003, 21) found that there were other factors that affected Florida's economy including the terrorist attacks of September 11, 2001 that resulted in a decrease in tourism of nearly 45% in September of 2001, from which the economy had not fully recovered. Another setback to the state's tourism revenue was the *Deepwater Horizon* (BP) oil spill of April 20, 2010, which was projected to cost Florida a minimum of $2 billion in tourism. (Ellis 2010 ; Brogan 2010, 10)

Hammond and Tosun (2011, 48) suggest that not only has the loss of tourism revenue had a negative impact for the state, but the wars in Afghanistan and Iraq have also impacted the economy. As the wars continue, the financial impact is felt at the national level, affecting state and local governments. Badde, Baumann, and Matheson (2007, 2072) suggest that as the state was slowly recovering from the economic problems, it experienced natural disasters of Hurricanes Charley, Jeanne, Frances, and Ivan that had an adverse impact on the economy. During 2004 through 2006, the housing market was prosperous with new home construction providing revenue through impact fees, permits, and other taxations. (Jeong and Feiock 2006, 754) However, with the collapse of the housing market, mortgage defaults, and home foreclosures, the flourishing construction business subsided and many homes under construction were not completed. (Burney 2010; Fogel, Smith, Williamson 2008a, 192)

Although Florida voters passed the change to *Amendment 1*, they may not have been aware of the future financial impact that the amendment would create. Moore

(2008, 37) argues that the passing of the amendment resulted in reduced property taxes and, though property tax is not directly associated with revenue for higher educational institutions, reduction in overall state revenue limited the availability of funds for many state agencies. Hence, the decrease in revenue caused by passage *Amendment 1* caused shortfalls across the state budget which needed to be covered and additional funds were not available to support higher education. The revenue generated would have provided the state with additional funds that would have been reallocated to other institutions.

The financial problems of public universities are not limited to Florida but extend to many higher education institutions throughout the U.S. The budget reductions have impacted colleges and universities causing institutions to reduce spending, postpone capital improvement projects, and increase tuition and fees. Administrators and university leaders are forced to be creative and innovative with funding to continue providing critical services and quality education for students. Toutkoushian (2005, 956) suggests that there is a continuing concern regarding the level of funding that public universities receive and, as a result of the negative impacts of budget reductions, there is a growing concern regarding the quality of students who are graduating and entering the workforce. Although the Florida budget crisis was lessened with the funding that universities received for FY 2009 through FY 2012 through stimulus funds (Brogan 2010, 10), Florida nevertheless experienced a budget shortfall. In response to the budget shortfall, the SUS was forced to increase tuition by total of 15%. (Tuition Differential Fee Report 2010, 3)

University Employment

Wellman (2008, 20) suggests that the resources for institutional purposes, such as hiring full-time faculty to reduce the student-faculty ratio, are fewer and have been declining over the past five years. As the number of full-time faculty decrease and the number of part-time adjunct instructors increase, the quality of education that students are receiving is being scrutinized. Since adjunct instructors' salaries are much lower than those of full-time professors, the universities are experiencing salary savings. However, Green (2007, 29) indicates that as the number of full-time faculty decrease and the number of part-time instructors increase, this trend may adversely impact departments and universities. The question of quality arises in this situation when part-time adjunct instructors outnumber full-time faculty. Adjunct instructors are part-time faculty who typically work in the field and therefore may have less time to give to students. The researcher indicates that the positive aspect is that they may possess knowledge, associations, and experiences that are applied in the classroom.

One issue that has arisen during the current recession and the discussion of university funding is the salaries of university presidents. The increasing amounts that some universities presidents receive are being questioned as those salaries appear to be substantial during times when that many universities' budgets are being reduced. The compensation package given to university presidents varies based on the school, location, and enrollment size. During FY 2010, the president of the Ohio State University earned a salary of $1.3 million as part of a total compensation package of $1.8 million. (Stripling and Fuller 2011, A1-A2) Presidents may compare their compensation packages to those of corporate executives who are paid based on the company, productivity, and profit.

The salaries of university presidents in the SUS are aligned to be equivalent to other public university presidents. The university system in Maryland implemented a policy to ensure that senior executives' salaries are in the 75th percentile of other university executives. (Stripling and Fuller 2011, A1-A2) Some universities have adopted other measures to determine presidents' salaries that may be incentive-based. (Stripling and Fuller 2011, A1-A2) Presidents' bonuses may be associated with meeting specific goals, and if those objectives are not met, there is the potential of no bonus or salary increase. (Stripling and Fuller 2011, A1-A2)

Student Enrollment

Bankston (2011, 342) argues that the increased number of individuals admitted to colleges and universities has had adverse consequences. He believes that the increase has led to the following: 1) a decrease in the aptitude of students entering college; 2) an emphasis on getting a degree seen as more important than learning; and 3) the growth in the number of people having obtained credentials has increased competition for degrees that are occupation-oriented, resulting in a reduced value of traditional degrees.

Florida BOG instituted an admission freeze for university freshmen that did not allow an increase in the number of freshmen being admitted. The freeze was effective Spring 2008, but did not impact the enrollment of upper-division students. (State University System of Florida Enrollment Plans 2008, 2) In higher educational institutions long supported by state revenue and student tuition, the model of funding is being questioned. During the past four decades, government-supported universities have worked to ensure that all students are treated equally and fairly, and this allowed individuals to gain education, training, and skills to enter the workforce. Individuals

from lower-income households were granted the same educational opportunities as those from affluent households. (Fenton, Gardner, and Singh 2001, 54) However, the impartiality appears to be declining along with budgets, as individuals who were once able to obtain funding to attend universities may find that those opportunities are becoming fewer.

Ewing, Berkert, and Ewing (2010, 423) completed a time-series analysis using information from the U.S. Department of Education, the National Center for Education Statistics, Digest of Education Statistics 2007 of data from 1963 through 2004 to examine college enrollment. The study utilized the consumer price index, economic growth, and inflation in relation to their study of student enrollment. The researchers found that the enrollment data for male and female students were similar; however, economic growth and inflation had an impact on enrollment. In 1976, following the economic downturn in 1975, male students' enrollment decreased by more than 8% and female enrollment increased approximately 2%. (Ewing, Berkert, and Ewing 2010, 426) However, from 1990 through 2004, there appeared to be an opposite reaction.

Ewing, Berkert, and Ewing (2010, 426) found that as the economy grew the number of students, both male and female, increased slightly at approximately 3%. In 1975, when inflation decreased slightly, male students' enrollment decreased approximately 12% and female enrollment decreased approximately 4%. (Ewing, Berkert, and Ewing 2010, 426) One explanation for the decrease in enrollment during 1976 was that there were more employment opportunities available, and during the period when inflation occurred, the cost of attending postsecondary institutions also increased. (Ewing, Berkert, and Ewing 2010, 423)

College Cost

Doyle and Delaney (2009, 60) implies that when the economy is healthy, higher education often gains from that success. However, when there is a recession, universities may be among the first institutions to experience budget reductions. They explain that the amount appropriated for higher education decreased sharply during the 1990s and rebounded during mid-2000. During the past decade, the largest budget reduction and largest per-capita change was in California, while Florida, Massachusetts, and Illinois remained nearly unchanged. (Doyle and Delaney 2009, 60) The amount of change in the budgets was steady until the 1990s, when there were drastic changes in budgets and spending. Institutions of higher education received funding from state revenue and tuition and fees. During periods of economic downturns, students provide the additional resources through increased tuition and fees. (Doyle and Delaney 2009, 60; Lovett 2002, 12)

Another concern is that, as a result of policy changes, financial aid is being modified to a "merit-based" aid model that is more beneficial for students who have less financial need than those from low-income households. (Long 2008, 1; Long 2010, 27) "Merit-based" aid may be awarded to affluent students through scholarships. Because funding is limited and "need-based" aid is reduced, the amount of funding for students who require financial aid is being reduced. This leaves fewer options for those students who wish to continue their education. One of the only remaining choices for students to pursue their education is through student loans.

Student loans are options some students do not choose. From 1989 through 2004, the number of full-time students who received loans increased from 36% to 50%. (Long

2008, 35; Long 2010, 27) This may result in students graduating from college with a degree and an accumulated debt, or they may quit attending college because the debt becomes excessive. Not earning a degree may lessen the opportunity of gaining employment to repay loans. As a result of the economic downturn, high unemployment, and inflation, many students may have no other options but to seek student loans if they wish to pursue higher education. Even if they receive grants or scholarships, it may not be enough to cover all of their educational expenses and their families are expected to meet the remaining financial needs which may be considerable. (Long 2010, 27)

Technology Fee

Directly charging students for technology fees at universities within the SUS was a measure implemented during the past five years. During FY 2004, the legislature discussed the technology fees which were only permitted at the community college level. However, as funding for universities in the SUS began to decline, the BOG considered implementing a technology at public four-year institutions fee to help support the growing need for state-of-the-art technological resources. With limited financial support, postsecondary institutions lagged in technological resources which may have adversely affected the students' education.

During FY 2007, $5.9 million was included in the Legislative Budget Request to assist in updating universities' technological resources. The request also included the proposal to create a fee that would help off-set the costs of updating and maintaining technological resources. (2006 Legislative Issue Form 2006, 2) With the implementation of the technology fee, each university would establish a technology fee committee to oversee the use of the fee. The technology fee committee grants universities control to

determine what the university's technological needs and to use the proceeds from the fees to support those requirements.

Universities were authorized to charge a technology fee of $1 for each student credit hour (SCH). With approximately 7 million SCH, approximately $7 million was generated from technology fees. (2006 Legislative Issue Form BOG/SUS Issue: Technology Funding 2006, 2) The provision had one exception. Students who were attending the 11 universities with the financial support of Florida Bright Future Scholarships were exempted from paying the technology fee. Florida Statue 1009.24, subsection 12 was amended to include the technology fee for public universities. The technology fee went into effect on July 1, 2006.

In August 2008, the BOG granted each university's Board of Trustees the approval to increase their respective school technology fee up to 5% per credit hour. (Florida Board of Governors Notice of Proposed Regulations Amendment 2008) The amount charged for technology fees varies by university, student status, student residency, and the program. In FY 2010, the average cost of the technology fee for undergraduate students who attended a university within the SUS was $4.33. (Public College and Universities of Florida, Tuition and Required Fees, Fall 2009-10 for New Students in Main Campus 2010) The average cost for the technology fee for graduate students who were Florida residents was $8.55, and for non-Florida resident graduate students, the cost was $8.77. (Public College and Universities of Florida, Tuition and Required Fees, Fall 2009-10 for New Students in Main Campus 2010).

Universities with professional programs, such as law and physical therapy, also charge technology fees to cover the required resources. UF and FSU have technology

fees for law students; however, the technology fee for law students at FAMU of $16.50 is approximately three times that of the undergraduate students. (Public College and Universities of Florida, Tuition and Required Fees, Fall 2009-10 for New Students in Main Campus 2011-12, 2011) At FIU, the undergraduate technology fee is $23.13, but law students pay more than four times that amount. (Public College and Universities of Florida, Tuition and Required Fees, Fall 2011-12 for New Students in Main Campus 2011) Students who major in physical therapy at UCF pay $23.77 for technology fees. (Public College and Universities of Florida, Tuition and Required Fees, Fall 2011-12 for New Students in Main Campus 2010) Each year as tuition increases so do the local fees, including the technology fee.

Online Programs

The programs offered online vary at each university with many of them being offered through Continuing Education. The cost of the programs also varies. Some Continuing Education departments offer online degree programs for bachelor of arts, bachelor of science, and master's degrees. Some of the universities participate in distance learning programs that allow students to enroll in courses in nursing, accounting, health promotion, nonprofit management, health sciences, education, criminal justice, legal studies, and many other programs. With the cohort groups, there may be an additional fee based on the number of credit hours, the programs, and the university.

Research Question

What changes have been implemented as a result of budget reductions for Florida's higher education university system? This question was assessed during this study to determine what was the impact of budget reductions, what were the effects, what

changes may have been implemented to reduce their impact if any, and what possible alternatives may be used to reduce the effect.

The type of policies implemented should be examined to determine if they are fair and equitable and if they do not oppress a specific group or individuals. Based on the type of policies that are being implemented, budget reductions may have had negative or positive effects on student enrollment. The policies may change the financial aid availability, course accessibility, or programs practicality. Decision makers may implement policies that they believe are cost-effective, but the policies may be producing negative outcomes for students, full-time faculty, and employers.

Changes, elimination, and consolidation of degree programs may be influenced by rational choice theory as university leaders attempt to make decisions regarding what is in the best interest of their universities and student population. In order to maintain the universities ability to operate, some modifications are necessary. However, those changes may not be in the best interest of students over a long period of time.

The changes in funding may have had a negative, positive, or no impact on the number of students who were enrolled during the past ten years. Increases in tuition significantly impact the ability of students to afford education causing some students to drop out of college or to decide not to pursue postsecondary education at all because of the cost. The decision to increase tuition and fees may be the choice that state and university leaders must make to ensure universities have adequate funding to provide quality education, but there are unforeseen consequences to such actions. Budget reductions may have an impact on the number and type of students being admitted to SUS universities. If students from low-income households are being "forced out" of

universities as a result of tuition increases, it may result in social inequality or injustice. If they are not granted the opportunity to improve themselves, they may remain in the category of “worse off.”

If the number of students who graduate has decreased, fewer students will have the opportunity to improve their lives. If funding for student support such as financial aid is limited to certain students or not available, this may impact the number of students who graduate from degree programs. Students who may have been eligible for financial aid prior to the budget reductions may be ineligible since the reduction were implemented during the 10 years reviewed.

Chapter III

METHODOLOGY

Introduction

Chapters 1 and 2 discussed the difficulties of budget reductions and changes in funding for postsecondary institutions in Florida. The chapters also explained the decrease in state revenue and the impact which has resulted in increased tuition and fees. The chapters provided a historical perspective of the institutions currently in Florida's SUS. Chapter 1 discussed the problem statement and research questions that this study investigated. This chapter describes the methodology, hypotheses, procedures, data collection, and resources used for the study. Although there is a large body of literature that addresses reduced funding in education, the decision-making process, and the effects on community colleges, there is limited literature that focuses on the funding of Florida's public universities. This researcher did not locate any scholarly literature regarding the impact that budget reductions have had on students who attend the universities in Florida's SUS.

Prior to the terrorist attacks of September 11, 2001, and the *Deepwater Horizon* oil spill on April 20, 2010, Florida depended heavily on tourism dollars for a significant percentage of its revenue. As these two events had catastrophic consequences for the tourism industry, millions of dollars of state revenue was not realized. These and other natural disasters, such as hurricanes, floods, and fires, cost Floridians millions of dollars

to rebuild and renovate their damaged homes. This money could have been spent for other types of purchases that would have generated more tax revenue. During the past decade, there have been changes in the state's budget allocations, most noticeably, the budget reductions during the last 10 years. One obvious change is in funding higher education. Budget reductions may have resulted in changes in programs, hiring of employees, available financial aid, admission of students, university operations, and other areas. The universities' expenditures have continued to increase, and with the increase in operations and the decrease in budgets, resources for postsecondary institutions have reached a crucial point.

Procedure

Although the study did not involve human participants, the exemption approval was requested. An Institutional Review Board Oversight Screening Form for Graduate Student Research was completed and submitted for exemption approval (see Appendix B). This study evaluated the E&G funding that was allocated from state revenue; Florida universities also received C&G funding. E&G funds are monies redistributed from the revenue that is generated by taxes, tourism, and other resources. The legislature appropriates the funds by allocating monies based on the approved state budget. C&G funds are monies generated through research, primarily derived from faculty-initiated projects sponsored by federal, state, and local governments and private sponsors. In most cases, the monies may be spent only for the project or related expenses and cannot be used for expenses that are not stipulated in the grant proposal without the grantor's approval.

The methodology used to complete this study was an analysis of secondary or archival data collected from university's Web sites, BOG, and the Florida Department of Education. Data collected from federal agencies, such as the U.S. Department of Education, U.S. Department of Labor, and other public documents as well as printed articles, scholarly journal articles, and printed books, were also used.

This study examined the budgets allocated to the 11 public universities in Florida's SUS. The objective of this study was to collect data from FY 2001 through FY 2010 to evaluate the change in funding levels and the effects. The purpose was to determine how budget reductions impacted four important areas. The first important area was the number of freshmen admitted to each university. The second important area was the number of courses offered at each university. The third important area was the number of university faculty members employed at each university. The final area was the number of degrees awarded at each university per year. The study included data from FY 2001 through FY 2010 to evaluate the changes in funding levels and the effect on higher education in Florida during the 10-year period.

Data Collection

The data used was considered part of the public record and accessed. However, each Office of Institutional Research (OIR) was contacted to obtain written permission to access and utilize its Common Data Set (CDS). A letter explaining the purpose of the study along with a permission form was sent to the head of each OIR, and a response was received from each recipient. The completed permission form was returned or a telephone call was received granting permission to use the CDS.

The data sources for this study were secondary or archival information from CDS found at each university's OIR. The title of OIR departments varied for some universities, but each university had a department or office that maintained statistical information. The information found in the CDS was collected annually and consisted of standardized data for the respective university. The CDS included the number of students admitted, degrees awarded, faculty members employed, and other institutional information. Each university, Florida Department of Education, and BOG Web sites provided a variety of information along with the OIR and the CDS. After the CDS was collected, the data was separated into two categories of students and faculty. The two categories were divided into subsections based on the research question in Chapter 2 and the hypotheses discussed later in this chapter.

While there were other sources that provided statistical information regarding state funding, the information used in this study came directly from government agencies and universities to ensure accuracy and authenticity. Some data, such as student admission and the university annual budget, was gathered from the institutions, BOG, and Florida Department of Education. At the completion of the study, it was anticipated that the research data would indicate that constant budget cuts to postsecondary institutions would produce negative outcomes, and if these cuts continued, they would increase financial difficulties for public universities and for their students in the near future.

Information from each university's CDS and the BOG was analyzed in a series of steps. Five steps were used to collect data before the evaluation began. *Step 1*: The budget information collected from the CDS was evaluated for each of the 11 universities

for FY 2001 through FY 2010 to compare the annual E&G budget. *Step 2*: The number of new students admitted and the number of degrees awarded each year were assessed. *Step 3*: The study examined the amount of funding each university provided for "need-based" and "merit-based" aid. There was a comparison of the number of students who received financial assistance and the type of aid they received. *Step 4*: The amount that students paid for tuition from FY 2001 through FY 2010 was compared for each university. The cost of other college expenses such as for dormitory rooms and meals was examined to analyze the rate of increase of other college expenses during the 10-year period. *Step 5*: There was a comparison of the number of full-time faculty members in relation to the part-time instructors, if available.

Research Design

This research project was a mixed-methods approach that included two types of analyses. This method was used to examine the SUS as a complete entity, but detailed examination for each of the 11 universities within SUS was also used to evaluate and to determine the effects of budget cuts for each university. A case study was used to assess the impact of budget reductions for postsecondary institutions in Florida. Case studies are frequently used in the public administration field to evaluate events or phenomena that have occurred or are occurring and the outcomes of those events. (Rudestam and Newton 2007, 50)

A mixed-methods approach was used to ensure that quantitative information was analyzed and outlined pertaining to the budget cuts during the 10 years. The rationale for using both methods was to ensure that the research question and hypotheses were appropriately addressed. The use of both methods permitted the link of data, enhanced

analysis, provided more details, and provided a different viewpoint. Precise comparisons were utilized to analyze budgets of the 11 universities. Also, qualitative information was collected so that policymakers and political leaders may understand the implications and choices that were made.

Comparing and documenting the changes in funding levels that have affected university budgets in Florida during the 10 years required researching several data sources and gathering and combing the information. Data collection and analyses were performed using Microsoft Excel (Microsoft Office 2010; Microsoft Corps Redmond, WA). The data was used to answer the research question in Chapter 2 and to prove or disprove the hypotheses discussed in this chapter. The results focused on areas of budgets, faculty numbers, student admission, and student financial assistance. These areas along with other financial factors may address the need for increased budget funding.

Hypotheses

This study evaluated the SUS operating budgets and the universities' expenditures. Although the nation and the state of Florida are still experiencing a recession, this study focused on FY 2001 through FY 2010. The reason that this period was selected is that the state economy deteriorated more during this period, as was evident from the budget reductions for many agencies, including the SUS. The budget for FY 2006 was approximately $3.4 billion, whereas in FY 2010 the budget was $2.8 billion. (2006-2007 University Budget Summary 2006, 1; Brogan 2010, 16) This was a decrease of approximately $600 million (17.65%) during a 5-year period.

As the amount that universities were allocated for E&G budgets decreased, the amount for tuition and fees were increased in an attempt to sustain university operations. During the 10-year period, as the E&G budgets were reduced and tuition increased, there was also a devastating affect from inflation. These factors had an impact on the number students enrolled and faculty members employed. This study investigated the following hypotheses regarding the consequences of budget reductions from FY 2001 through FY 2010:

Hypothesis 1: The state budget reductions will be linked to a reduced number of faculty members during FY 2001 through FY 2010.

Hypothesis 2: The state budget reductions will be linked to increasing student-to-faculty ratios during FY 2001 through FY 2010.

Hypothesis 3: The state budget reductions will be linked to reduced course offerings during FY 2001 through FY 2010.

Hypothesis 4: The state budget reductions will be linked to a reduced number of students who received financial assistance during FY 2001 through FY 2010.

Hypothesis 5: The state budget reductions will be linked to a reduced number of new students admitted during FY 2001 through FY 2010.

Hypothesis 6: The state budget reductions will be linked to a reduced number of students who graduated during FY 2001 through FY 2010.

Hypothesis 7: The state budget reductions will be linked to changes in the demographics of students enrolled at state universities during FY 2001 through FY 2010.

Limitations

The study limitation was that the research may not be generalizable. The study was based on information pertaining to Florida's four-year public universities which may not be similar to institutions in other states or to private universities. The study included only four-year universities within Florida that were accredited by SACS. However, the

conclusions may have implications for all higher education funding and resources. Although the state provided funding for two-year colleges as well as four-year universities, this study focused only on four-year universities. The justification for studying only four-year public universities and excluding private universities and two-year colleges was to maintain a manageable data size.

Delimitations

The sample size was based on postsecondary institutions in the Florida's SUS that included the 11 universities. Community colleges and private universities were not included in the study due to the large number of such institutions in the state and the time limitation of the study. The research did not include public universities that were not a part of the SUS, such as the universities that offered programs online and were not accredited by SACS.

Assumptions

There were two major assumptions in the study. First, during the study it was assumed that the information collected from university sources was accurate and current. Second, it was also assumed that the universities' information was complete.

Resources

Online data resources from the Valdosta State University and UCF libraries were used. No additional funding was used to complete this study other than the time that was needed to complete the permission forms and return telephone calls regarding permission to use CDS. Both study materials and supplies were funded by this researcher.

Chapter IV

DATA ANALYSIS

Introduction

This chapter will discuss data that was collected to address the following research question: *What changes have been implemented as a result of budget reductions in Florida's higher education university system*? The chapter is divided into two sections. The first section provides a summary of the data used and the evaluation procedure utilized. The second section reviews the data that was collected and discusses the information.

To determine if state budget reductions had an impact on university operations, specific factors had to be reviewed. It was important to compare the budgets that were received from FY 2001 through FY 2010 for each university to obtain an accurate description of the universities' financial situation. The amount of funding may have affected the universities' ability to provide students with quality education and meet the needs of students attending a university.

Financial Statement

Statistical data regarding SUS budgets were collected from the BOG University Financial Statements for FY 2001 through FY 2010 for each university. The statements provided the amounts for operating revenue that included funding generated by student tuition, sales, royalties, licensing, gifts, donations, and other revenues. The statements also provided the amount that each university used for expenses and compared the

amount of revenue to the expenses incurred. The financial statements provided information regarding state appropriations, federal and state contracts/grants, ARRA funding, and endowments. Statistical data was also gathered from the SUS summary of E&G funding for each university during the 10-year period.

The amount received by universities in state appropriations is based on the Legislature's allocations and approval by the Governor. During the 10 years reviewed, the amount of funding which universities within the SUS received from state appropriations varied. From FY 2001 through FY 2008, the amount of state appropriations reported was rounded to the nearest $1,000. In FY 2009 and FY 2010, state appropriations were reported to the exact dollar amount.

Common Data Set

The CDS is a combined initiative to gather statistical information used by postsecondary institutions and publishers, which include the College Board, *Peterson Comprehensive College Guide*, and *U.S. News & World Report*. (Common Data Set Initiative 2011) The purpose of the collective data is to improve the quality and accuracy of statistical information that is available to the public and for prospective students who may be in the process of determining where to apply. The survey is also a more standardized tool to collect statistical data on universities.

The objective of the survey is to obtain more concise, uniform information from each university. The information and definitions utilized in the survey are those used by the U.S. Department of Education. The items used in the CDS surveys are reviewed by the CDS Advisory Board members, which consist of individuals from eight college boards. They are the American Association of Community College (AACC), American

Council on Education (ACE), Association for Institutional Research (AIR), The College Board (CB), National Association for College Admission Counseling (NACAC), National Association of College and Business Officers (NACUBO), National Association of Independent Colleges and Universities (NAICU), and the National Association of Student Financial Aid Administration (NASFAA).

The CDS is an instrument that is used to establish standardized questions that institutions use to collect needed information. Some of the questions used in the CDS surveys are also used in the *U.S. News & World* statistical surveys that are sent to colleges each year. Some of the questions are used to assist in categorizing universities for the *Best Colleges* ranking report. The data is also used for the *Peterson Comprehensive College Guide* which provides information pertaining to colleges and graduate programs.

Survey Questions

The CDS survey is divided into 10 sections. *Section A*: General College Information provides the basic data of Respondent Information, the institution's address, type of institution (public or private), classification (co-education, women's, or men's college), academic year calendar (semester, quarter, trimester, other, 4-1-4), degrees offered (associate, bachelor's, master's, certificates, doctoral). *Section B*: Enrollment and Persistence provides information on enrollment of students (undergraduate, graduate, professional), gender, racial/ethnic classification, number of degrees awarded, and retention rates. *Section C*: First-Time, First-Year (Freshman), Admission includes information regarding first-time, first-year (applicants, admitted, enrolled), admission requirements (high school completion requirements, general college preparatory program,

high school units required), admission criteria, Scholastic Assessment Test (SAT) and American College Testing (ACT) Policies, Freshman Profiles, Percentile scores, class rank, Grade Point Average (GPA), average GPA, Admission Policies (application fee, closing date, notification date to applicants), Early Decision and Action. *Section D*: Transfer Admission provides information regarding Fall Applicants, Application for Admission, and Transfer Credit Policies. *Section E*: Academic Offering and Policies includes information for special study options and graduation requirements. *Section F*: Student Life provides information regarding fraternities, sororities, housing (on-campus and off-campus), student activities, and Reserve Officers Training Corps (ROTC). *Section G*: Annual Expenses provides information pertaining to undergraduate cost (tuition, required fees, room and board), per credit hour cost for in-state and out-of-state. *Section H*: Financial Aid provides information for the aid awarded to undergraduates (need-based, scholarship, grants, and loans), types of assistance, and the number of students awarded aid. *Section I*: Instructional Faculty and Class Size provides information regarding faculty demographics (full-time, part-time, men, women, degrees, student-to-faculty ratio, undergraduate class size, and number of class sections). *Section J*: Degrees Conferred indicates the number of degrees awarded and the discipline areas.

Data Collection

Information regarding state appropriations was compiled from the BOG for the Legislature's appropriations for each year and each university during the 10 years that were reviewed. The amount of state appropriations was organized according to the university and the year. To collect CDS surveys, each university's OIR Web site was accessed to gather the respective college information, or the university's OIR was

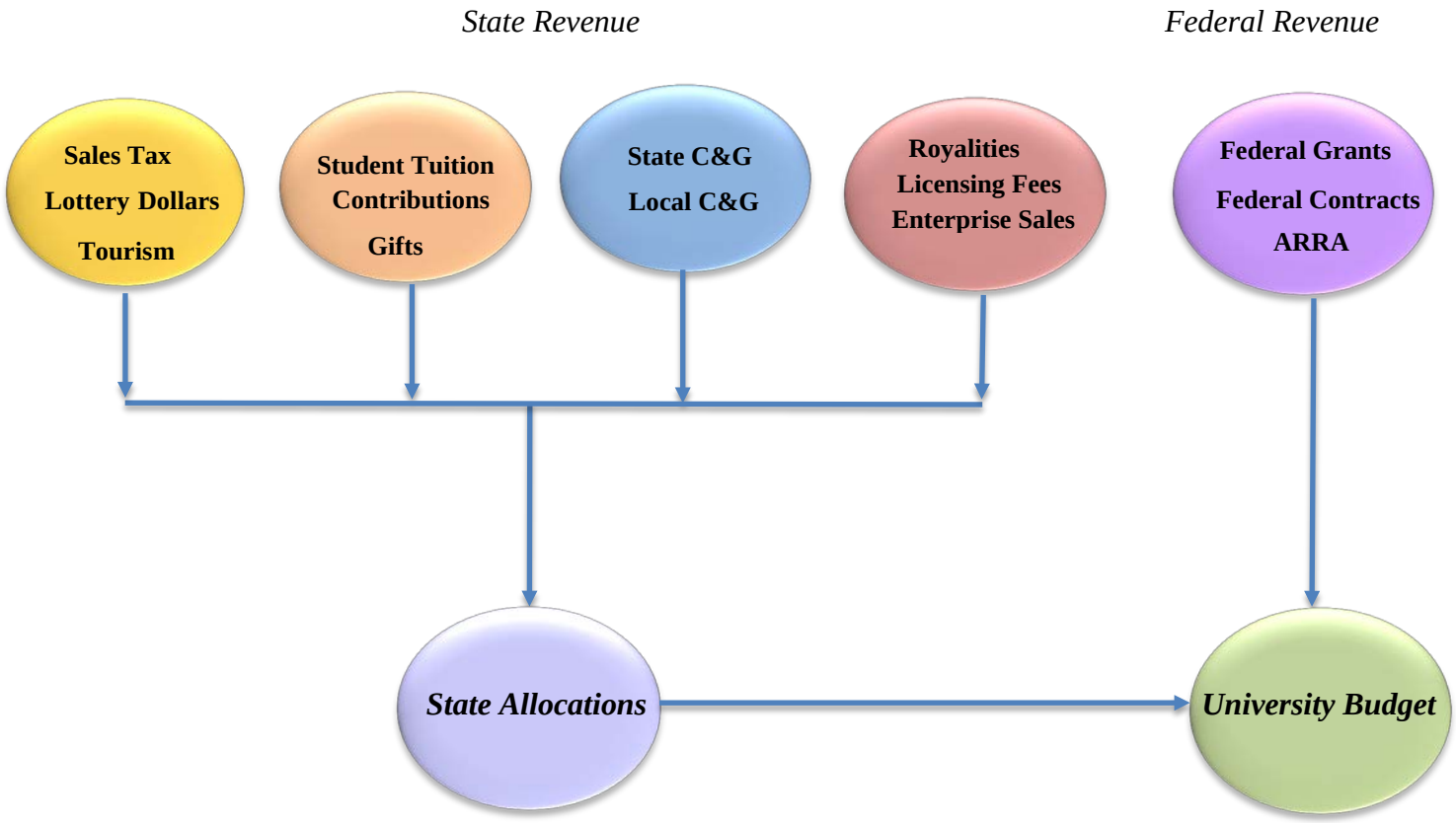
contacted by telephone. The surveys that were not available and had been archived required additional research to access the information. The data used during this study was based on statistical information from FY 2001 through FY 2010 to determine if there were changes in the education provided at the universities. The information for each of the 11 universities was then compiled according to the category.

Statistical information pertaining to the 11 universities was compiled using the CDS surveys and the number of students enrolled at each university from FY 2001 through FY 2010. After comparing the total number of students enrolled, the number of degrees awarded was then tabulated for each university for the 10 years reviewed. The number of course sections was compared from FY 2001 through FY 2010 for each university. The amount of in-state and out-of-state tuition costs for undergraduate students was compared during the 10 years. The amount of financial assistance (need-based, merit-based, and loans) received by students was assessed. The number of full-time graduate students enrolled during the 10 years was reviewed and calculated. The number of instructional faculty will be compared. The number of full-time instructional faculty members was compared to the number of part-time instructional instructors for each university during the 10 years.

State University System Revenue

The revenue that SUS universities received was generated by numerous sources. The funds were allocated from state and federal sources. At the state level, funds were generated through state appropriations from sale taxes, lottery dollars, tourism, contributions, gifts, royalties, licensing fees, sales, and student tuition as shown in Figure 1.

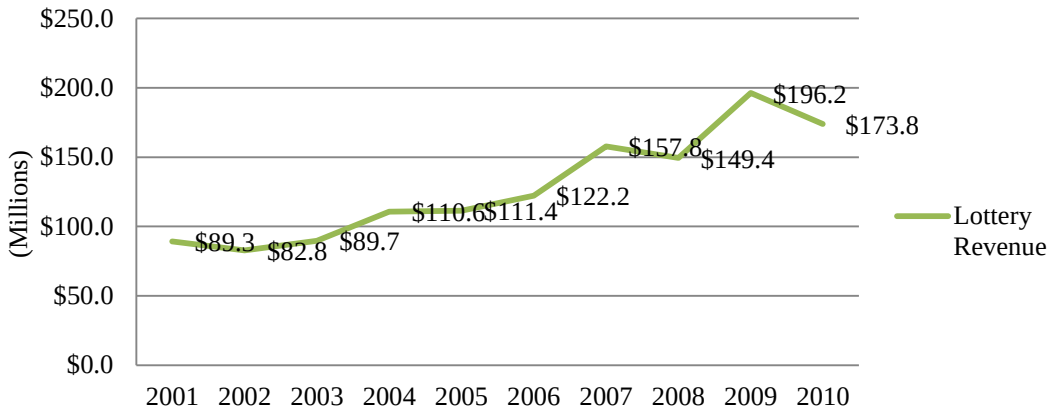
Figure 1. State University System Revenue



Lottery Funding

The amount of funding received by SUS universities form the Florida lottery increased from FY 2001 through FY 2010. Lottery revenue increased from $89.3 million in FY 2001 to a high of $196.2 million in FY 2009 with a slight decrease of $22.3 million in FY 2010 (see Figure 2). This is noteworthy because it resulted in the SUS receiving less funding through the Lottery Trust Fund for Education Enhancement. This is particularly important as the loss of lottery revenue reduced funding for Bright Future Scholarships, capital improvements, and other university functions. If declining lottery revenue continues, it will significantly impact the Lottery Trust Fund for Education Enhancement and the financial assistance that students and the 11 universities receive.

Figure 2. Lottery Revenue



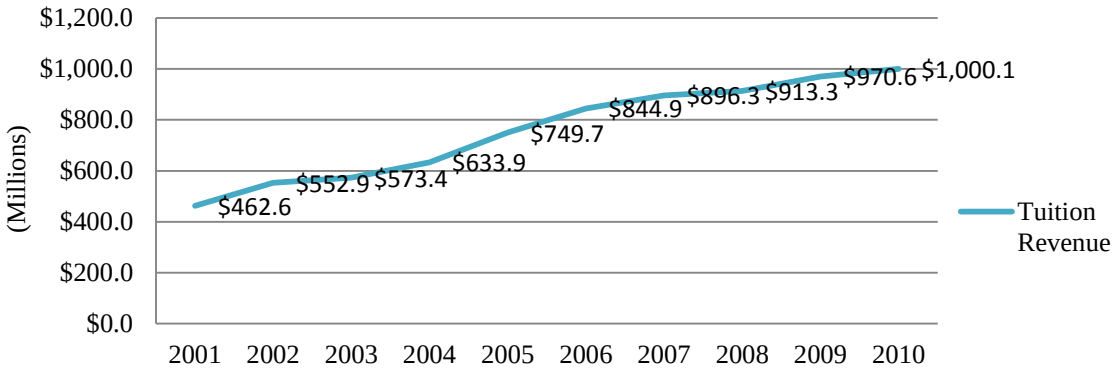
Source: Board of Governors, Budget & Fiscal Policy Office, University Financial Statement, 2001-2010

Student Tuition

The amount of revenue that universities within the SUS received from student tuition continued to increase from FY 2001 to FY 2010. This may have been the result of the increased tuition for each student, increased number of students or a combination of

both. During FY 2001, the SUS received more than $462.6 million in student tuition revenue, and in FY 2010, the SUS received more than $1.1 billion that was generated by student tuition (see Figure 3). This was an increase of more than $537.5 million during the 10-year period.

Figure 3. State University System Tuition Revenue



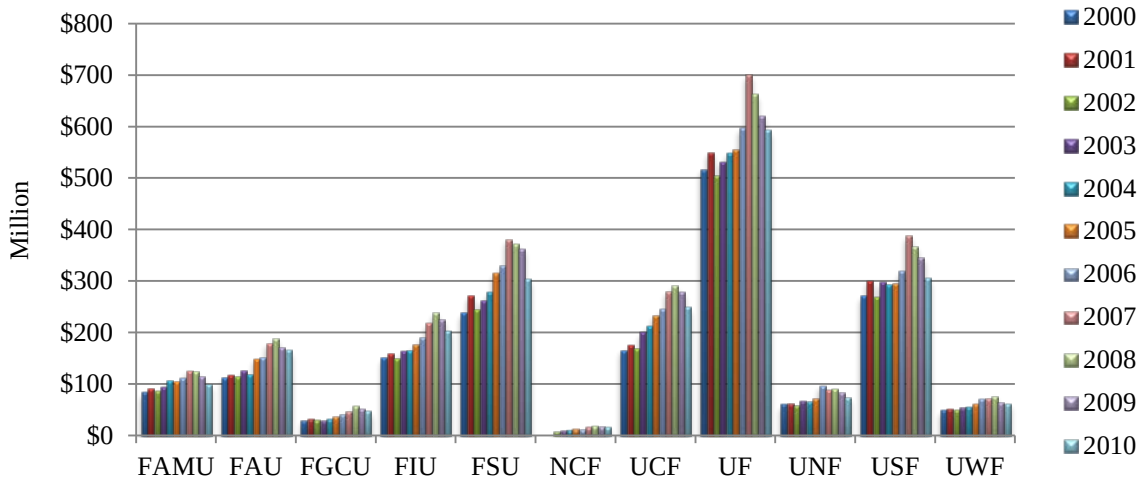
Source: Board of Governors, Budget & Fiscal Policy Office, University Financial Statement, 2001-2010

State Appropriations

During FY 2001, all the universities within the SUS received an increase in the amount of funding provided from state appropriations, and the larger universities received a higher percentage than smaller universities. There were no state appropriations reported by NCF since it was changing over to a separate university. Although the universities continued to receive state appropriations over the 10-year period, the amount varied. The overall amount of funding that universities received increased from FY 2001 through FY 2007, but there were some universities that experienced a decrease in state-appropriated funding during those years. However, those universities that experienced an increase in funding prior to FY 2008 had a decrease in

FY 2009 and FY 2010. All 11 universities experienced a reduction in state appropriations during FY 2009 and FY 2010 (see Figure 4).

Figure 4. State Appropriations



Source: Board of Governors, Budget & Fiscal Policy Office, University Financial Statement, 2001-2010

Although the 11 universities received an increase in state appropriations during FY 2001, this did not occur during FY 2002. When comparing the state appropriations of FY 2001 and FY 2002, it appears that only NCF received an increase during FY 2002, but that was due to the university receiving state appropriations after its separation in FY 2001. The state appropriations decreased for 10 universities, and this decrease in funding varied from approximately 3% - 25%. Some universities experience greater decreases than other universities. This may have been based on the student enrollment and budget amounts. During FY 2010, several of the universities experienced budget reductions that were greater than 10% of the previous year's budget (see Table 1).

Table 1. State Appropriation Budget Percentage Changes

(Budget in million)

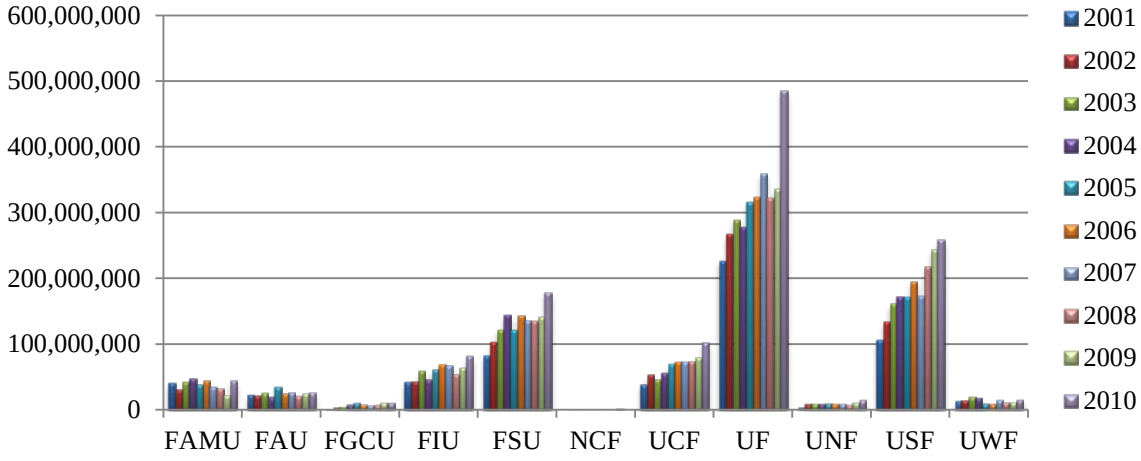
Univ.	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	Budget	%	Budget	%	Budget	%	Budget	%	Budget	%	Budget	%	Budget	%	Budget	%	Budget	%	Budget	%
FAMU	$92.8	10.31	$86.1	(25.00)	$93.7	8.15	$106.6	12.06	$104.8	(1.65)	$111.1	5.65	$125.7	11.55	$124.3	(1.12)	$114.5	(8.51)	$99.9	(14.64)
FAU	$117.9	4.71	$114.2	(3.24)	$127.4	10.39	$119.4	(6.69)	$148.8	19.71	$151.4	1.75	$179.7	15.73	$189.2	4.99	$172.0	(10.00)	$165.4	(5.61)
FGCU	$31.2	1.63	$29.1	(7.02)	$29.8	2.18	$31.2	4.55	$37.2	15.98	$42.4	12.36	$48.0	10.92	$56.4	14.88	$51.8	(8.91)	$46.3	(11.94)
FIU	$158.8	4.23	$149.9	(5.97)	$163.6	8.38	$166.5	1.78	$176.4	5.59	$191.4	7.83	$217.5	11.96	$239.1	9.06	$227.0	(5.32)	$203.1	(11.78)
FSU	$271.5	11.95	$246.2	(10.30)	$263.7	6.66	$278.2	5.18	$315.0	11.68	$331.1	4.87	$380.2	12.91	$371.8	(2.26)	$362.6	(2.53)	$302.9	(19.70)
NCF	$0.0	0.00	$7.9	22.65	$9.8	18.46	$10.9	10.22	$11.9	8.84	$13.0	8.15	$19.8	34.08	$18.8	(5.22)	$17.1	(3.13)	$16.6	(3.23)
UCF	$175.0	4.90	$169.9	(3.00)	$200.0	15.04	$212.8	6.02	$234.0	9.06	$244.9	4.45	$281.0	12.12	$291.3	3.52	$277.9	(4.81)	$249.9	(11.21)
UF	$549.3	5.52	$505.3	(8.70)	$531.8	4.97	$549.0	3.13	$557.0	1.44	$596.3	6.57	$702.2	14.99	$662.5	(5.99)	$620.9	(6.70)	$593.1	(4.69)
UNF	$62.6	3.25	$59.7	(4.91)	$65.6	9.00	$66.8	1.87	$71.8	6.91	$96.6	25.63	$88.9	(8.65)	$90.8	2.10	$84.4	(7.56)	$74.5	(13.26)
USF	$300.3	9.46	$267.9	(12.08)	$297.9	10.04	$293.4	(1.50)	$296.5	1.03	$319.3	7.13	$388.3	17.77	$368.5	(5.38)	$346.1	(6.48)	$304.9	(13.49)
UWF	$51.7	4.63	$49.1	(5.40)	$54.4	9.68	$56.2	3.23	$60.8	7.55	$71.2	14.66	$72.3	1.54	$76.8	5.79	$65.0	(18.19)	$61.4	(5.80)

Source: Board of Governors, State University System of Florida Facts and Figures, Institutional Finance, 2001-2010

Federal Contracts & Grants

From FY 2001 through FY 2010, the amount received from federal C&G funding increased during most years for several universities. During FY 2009 and FY 2010, there was an increase in the amount of federal C&G funding received by several universities including UF, FSU, USF, and UCF (see Figure 5).

Figure 5. Federal Funding of Contracts and Grants



Source: Board of Governors, Sponsored Research and Contracts and Grants, 2001-2010

These universities had medical or research facilities that received support from sponsored programs from the Department of Health and Human Services, Department of Agriculture, Department of Defense, and National Aeronautics and Space Administration (NASA).

Another type of federal support that the SUS received was from ARRA funds. The stimulus money was provided so that universities could maintain their level of funding at or above that of FY 2008 and FY 2009 budgets. During FY 2010, the SUS received more than $144.6 million in stimulus money. There were additional funds reserved for FY 2011 and FY 2012. During the 10 years reviewed, state appropriations

varied during the first seven years for the 11 universities, but there was a continuous decline during the last three years from FY 2008 through FY 2010.

Faculty

Faculty Employment

The first section compared the number of full-time and part-time instructional faculty members. Full-time faculty members are employed 40 hours per week and primarily contribute to the teaching mission but some may also engage in research. Part-time instructional faculty members are not employed for 40 hours and typically are hired only to teach. Some of the universities may have included adjuncts in the total of part-time faculty when completing the CDS, while other universities may not have. This is why there is a difference in the number shown between the two sections. In this section, full-time instructional faculty is referred to as full-time faculty members and part-time instructional faculty members are referred to as part-time instructors.

Hypothesis 1: The state budget reductions will be linked to a reduced number of faculty members during FY 2001 through FY 2010.

From FY 2001 through FY 2010, the number of full-time instructional faculty members and instructional part-time instructors varied. During FY 2001, there were several universities that had nearly equal numbers of full-time and part-time faculty members, as shown in Table 2.1 and Table 2.2. However, during the 10 years that were reviewed, the numbers of full-time faculty and part-time instructors' changed. As the number of full-time faculty decreased at some universities, while the number of part-time faculty instructors increased. UWF had nearly an equal number of part-time instructors as full-time faculty for almost three years. In FY 2009 and FY 2010, the universities had

an overall increase in the number of faculty members, which offset the decrease during FY 2008 (see Table 2.1 and Table 2.2).

Table 2.1 Full-Time Instructional Faculty Members

Full-Time Instructional Faculty Members										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
FAMU	*	*	*	*	*	*	610	617	617	590
FAU	678	681	689	733	740	767	783	799	796	785
FGCU	*	*	177	192	225	253	272	311	324	348
FIU	866	792	714	731	769	757	759	852	854	871
FSU	*	1,028	1,084	1,124	1,104	1,265	1,309	1,349	1,298	1,293
NCF	*	*	*	*	*	65	67	69	73	71
UCF	877	946	976	1,093	1,152	1,192	1,202	1,193	1,195	1,240
UF	1,536	1,601	1,686	1,679	1,622	2,229	2,007	1,932	3,372	3,416
UNF	376	378	383	411	421	448	470	512	492	495
USF	1,577	1,510	1,535	1,663	1,641	1,692	1,660	1,255	1,262	1,292
UWF	*	248	245	247	257	308	343	332	324	312

Table 2.2 Part-Time Instructional Faculty

Part-Time Instructional Faculty										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
FAMU	*	*	*	*	*	*	176	140	140	140
FAU	532	588	578	571	551	619	477	557	530	498
FGCU	*	*	154	210	186	188	212	214	206	208
FIU	201	655	606	645	690	672	736	689	698	683
FSU	*	314	184	334	382	327	345	341	368	329
NCF	*	*	*	*	*	10	17	16	15	23
UCF	828	671	478	464	476	445	462	495	464	467
UF	39	45	37	41	32	82	70	52	224	227
UNF	290	234	215	235	231	252	226	253	232	246
USF	433	463	459	632	608	241	277	126	133	127
UWF	*	283	301	232	290	219	232	248	100	197

(Note: * Not Reported)
Source: Common Data Sets 2001-2010

Findings

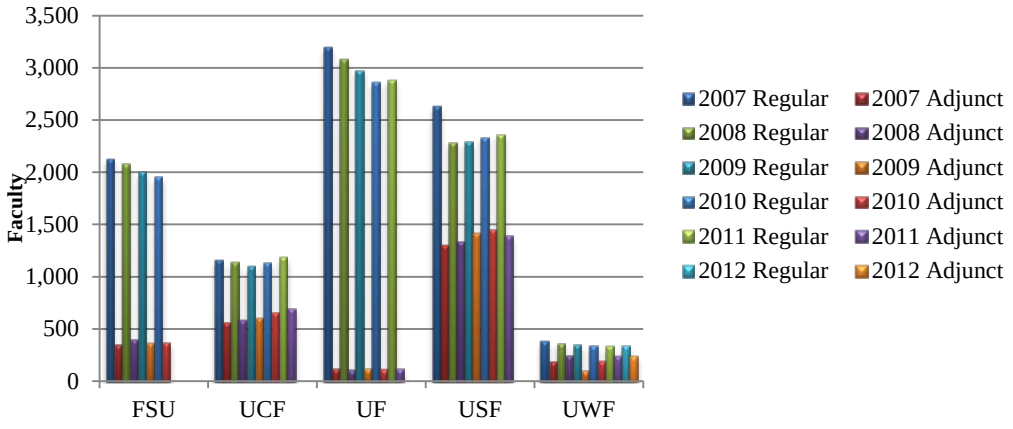
The number of full-time instructional faculty members and part-time instructional instructors varied from each university during each year. Some changes were seen during FY 2008, when several of the universities reduced the number of full-time faculty members and part-time instructors. Although this occurred, other universities increased

the number of faculty members both full-time and part-time. Because there was no apparent trend in the number of faculty members employed at universities during the 10-year period, it cannot be implied that there was a link between the state budget reduction and the reduction in the number of faculty members during FY 2001 through FY 2010. The number of faculty members changed at some universities prior to budget cuts.

Faculty Hiring Trends

All of the 11 universities had part-time faculty members as well as regular faculty members during the 10 years that were reviewed. However, to obtain a more comprehensive perspective of faculty hiring trends during the recent financial crisis, data was collected from five universities to determine if the number of regular faculty and Other Personnel Services (OPS) adjunct numbers changed. The five universities reviewed included FSU, UCF, UF, USF, and UWF. The years that were reviewed were 2007 through 2012 as shown in Figure 6.

Figure 6. Faculty Hiring Trends



Sources: Office of Institutional Research for FSU, UCF, UF and UWF

Data was reviewed to determine if the institutions relied on OPS adjuncts more as the number of regular faculty members decreased during the recent economic crisis. At

some universities, there was no distinction between part-time faculty and adjuncts, or the most current information was not found. Those universities were not included in this section as this segment compared the number of individuals in regular faculty positions, which included Professors, Associate Professors, Assistant Professors, Physicists, Instructors, Lecturers, Scholars, Librarians, Curators, and Coordinators who were hired in tenure-track and non-tenure track positions.

In this section, individuals hired as regular, full-time faculty members are referred to as regular faculty positions. The number of regular faculty positions was compared to the number of positions that were identified as OPS adjuncts. OPS adjuncts are individuals who are temporary faculty members that perform teaching or other assignments who are typically paid less than regular faculty members. They also do not receive benefits from their employers for health insurance, retirement, or accrue any type of leave, such as sick or annual/vacation, as do regular faculty members.

After reviewing the data, the number of regular faculty positions compared to that of OPS adjuncts appeared to vary by university. The number of regular faculty positions declined, but the number of OPS adjuncts increased from slightly. This was an indication that the universities relied on OPS adjuncts more as the number of regular faculty positions declined.

Findings

Although the number of regular faculty positions fluctuated at the five universities, there were distinct decreases at three of the universities (FSU, UF, and UWF). Three of the five universities (FSU, UF, and UWF) had constant decreases in the number of regular faculty positions during the 10-year period. This is important because

it indicated that there might be a link between the economic crisis and the decrease in the number of regular faculty positions. It appeared that the number of regular faculty positions increased at UCF, UF, and USF during 2011 which was likely the result of stimulus funding.

It appears that UCF and USF had similar trends and it may be an indication that the universities were also depending on OPS adjuncts more extensively as the number of regular faculty positions declined. This is important because it suggest that during the recent financial crisis, when regular faculty members were terminated, laid-off, or furloughed, universities may have relied on OPS adjuncts to fill the vacant positions. This is problematic as OPS adjuncts may have other full-time employment, which allows them limited time for student-related issues.

Student-Faculty Ratio

Hypothesis 2: The state budget reductions will be linked to increasing student-to-faculty ratio during FY 2001 through FY 2010.

Several of the universities' student-to-faculty ratios increased from FY 2001 to FY 2010. For several years, the student-to-faculty ratios remained the same, but there were changes in the ratios during some years that were reviewed. From FY 2001 through FY 2005, ratios changes were small ranging from 1 to 1.9 students. However, the student-to-faculty ratio from FY 2001 through FY 2005 increased for some universities. The greatest student-to-faculty ratio increased occurred at FIU and USF. The remaining universities experienced an increase in the student-to-faculty ratio the following years (see Table 3).

Table 3. Student-to-Faculty Ratios

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
FAMU	*	*	*	*	*	18.6 to 1	18.6 to 1	19.2 to 1	18.3 to 1	20.2 to 1
FAU	N/A	18 to 1	18 to 1	17 to 1	18 to 1	19 to 1	18.4 to 1	18.7 to 1	20 to 1	21.3 to 1
FGCU	N/A	15 to 1	18 to 1	18.2 to 1	17.8 to 1	16.7 to 1	17.8 to 1	18.1 to 1	22.1 to 1	21.3 to 1
FIU	19 to 1	21 to 1	21 to 1	21 to 1	23 to 1	24 to 1	26.2 to 1	26.5 to 1	26.5 to 1	27.7 to 1
FSU	22 to 1	23 to	22 to 1	22.6 to 1	21.8 to 1	21.3 to 1	21.3 to 1	20.5 to 1	22 to 1	22 to 1
NCF	*	*	*	*	*	10.2 to 1	10.3 to 1	10 to 1	10.4 to 1	9.9 to 1
UCF	24.7 to 1	24.3 to 1	24.9 to 1	25.5 to 1	26.9 to 1	27.8 to 1	28.8 to 1	29.9 to 1	30.9 to 1	31 to 1
UF	21.9 to 1	21.3 to 1	21.8 to 1	22.7 to 1	21.4 to 1	21.4 to 1	21.7 to 1	20.3 to 1	20.4 to 1	20.5 to 1
UNF	21 to	22 to 1	22 to 1	22.7 to 1	22.3 to 1	22.8 to 1	21.7 to 1	21.1 to 1	22.5 to 1	20.9 to 1
USF	16 to 1	16.6 to 1	16 to 1	26 to 1	24.7 to 1	25.7 to 1	26.8 to 1	27.1 to 1	27.3 to 1	24.3 to 1
UWF	19 to 1	16.9 to 1	19.8 to 1	17.6 to 1	19.2 to 1	17.6 to 1	18.8 to 1	22.5 to 1	22.1 to 1	22.9 to 1

(Note: * Not Reported)
Source: Common Data Sets 2001-2010

Findings

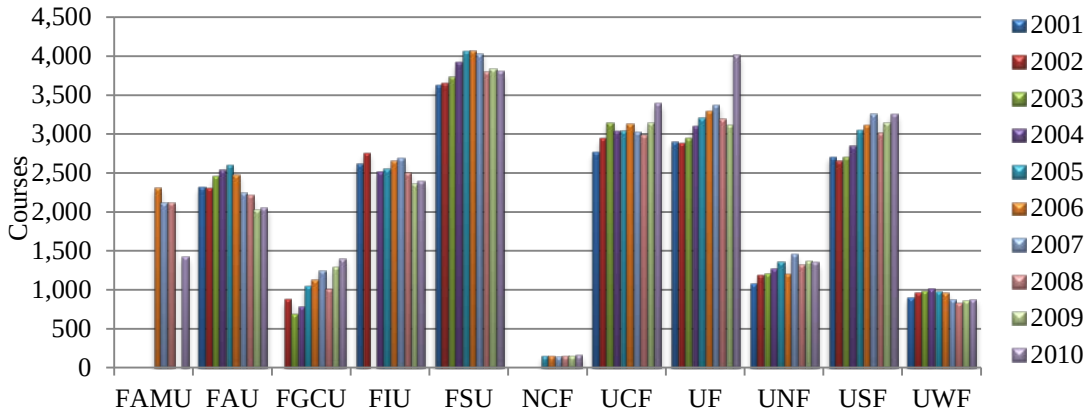
The student-to-faculty ratios varied during the 10 years reviewed for each university with some universities having an increase in student-to-faculty ratio while others had a decrease. These changes were the result of increased or decreased faculty numbers while student enrollment numbers continued to increase. According to the data, the state budget reductions may be linked with an increased student-to-faculty ratio during the 10-year period.

Course Sections Offered

Hypothesis 3: The state budget reductions will be linked to reduced course offerings during FY 2001 through FY 2010.

While universities were experiencing a reduction in funding during the 10 years evaluated, there were changes in the number of course sections offered. From FY 2001 to FY 2005, most universities' course offerings increased with a few exceptions, but there were some changes in the number of course sections from FY 2006 through FY 2010. During the 10-year period, the number of course sections offered varied for the 11 universities. Several universities had a decrease in the number of course sections offered beginning in FY 2006, but the number of course sections increased at several universities during FY 2009 and FY 2010 (see Figure 7). Course sections offered was not reported by FAMU during some years.

Figure 7. Course Sections Offered



Source: Common Data Sets 2001-2010

Findings

During 10 years that were reviewed, one or two universities reduced the number of courses offered. However, during FY 2006 that began to change, and in FY 2008, there was a substantial change with 9 of 11 the universities reducing the number of course sections offered. This improved during FY 2009 and FY 2010, with three universities reducing the number of sections that they offered. There does appear to be a relationship between the state budget reduction and the reduction in course sections offered at universities during FY 2001 through FY 2010.

College Costs

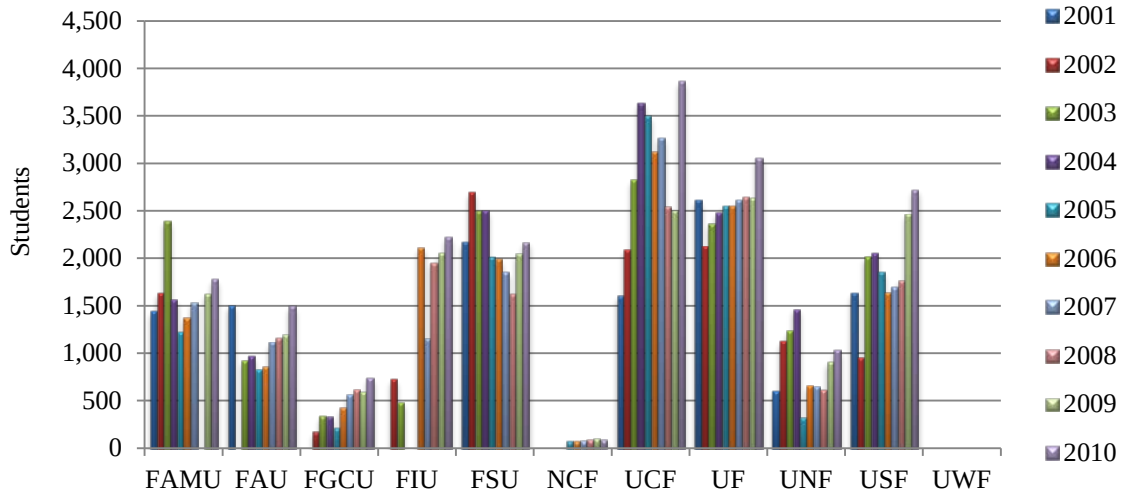
Hypothesis 4: The state budget reductions will be linked to a reduced number of students who received financial assistance during FY 2001 through FY 2010.

Need-Based Financial Aid

From FY 2001 through FY 2004, the number of full-time undergraduate students who received need-based financial aid varied from year-to-year, but the most noticeable change was in FY 2005. Seven universities had fewer students receiving financial aid

compared to the number who received financial assistance during FY 2004. In FY 2010, several universities had an increase in the number of students with need-based financial aid compared to the previous three years (see Figure 8). The number of students who received need-based financial aid was not reported for FAMU, FIU, or UWF during some years.

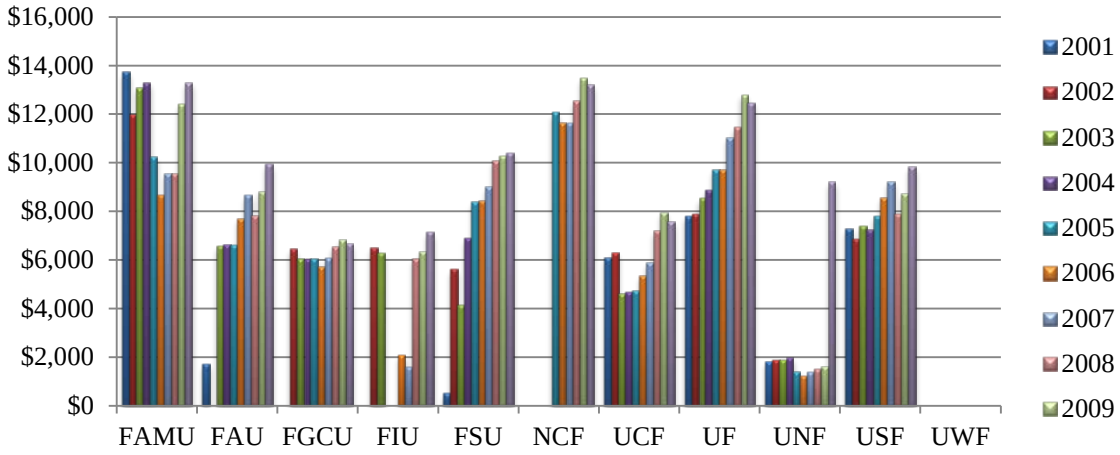
Figure 8. Need-Based Financial Aid Recipients



Source: Common Data Sets 2001-2010

The average amount of financial aid that students received for need-based aid varied according to the university. During FY 2001, the financial aid amounts varied from $519 at FSU to $13,767 at FAMU, and this variation continued. There was a constant increase in the amount of financial aid awarded at the 11 universities. The three universities that awarded the highest financial awards were FAMU, NCF, and UNF with the amounts ranging from $13,136 to $13,471. The universities that awarded the lowest amount of financial aid were UNF and FGCU with the amount ranging from $1,235 to $1,635 (see Figure 9). Need-based financial aid was not reported for FAU and FIU during some years.

Figure 9. Need-Based Financial Aid Award Amount

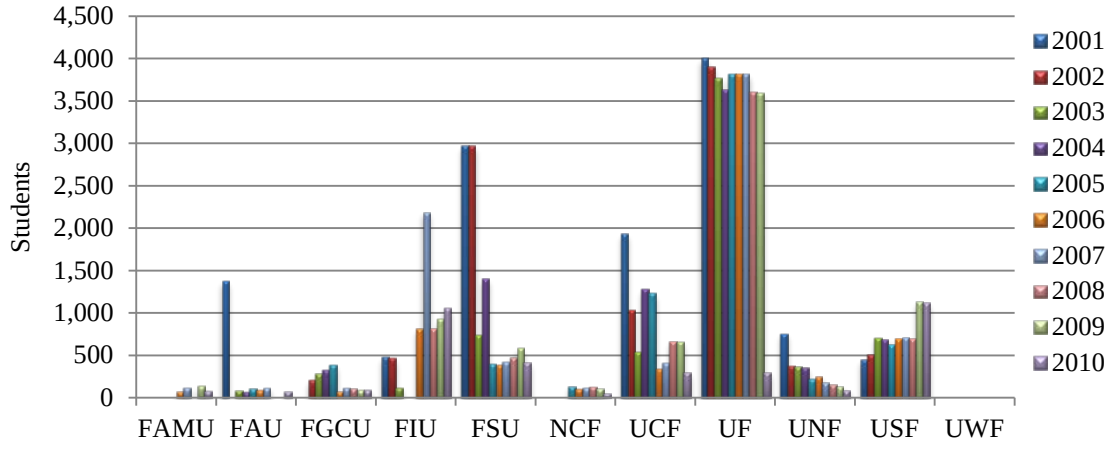


Source: Common Data Sets 2001-2010

Merit-Based Financial Assistance

As universities in SUS experienced budget reductions during the 10 years reviewed, there was a change in the number of students who received merit-based assistance. Several of the universities had a reduction in the number of students who received merit-based financial aid from FY 2001 through FY 2010 (see Figure 10).

Figure 10. Undergraduate Merit-based Assistance



Source: Common Data Sets 2001-2010

From FY 2001 through FY 2010, the amount of merit-based assistance varied, and during most years, the award received increased. During FY 2001, the merit-based financial aid awards ranged from $1,846 at FAU to $4,929 at UCF. However, there was a decrease in the amount of awards during the 10 years reviewed with the financial aid amount ranging from $708 at FIU to $7,935 at FAMU in FY 2010.

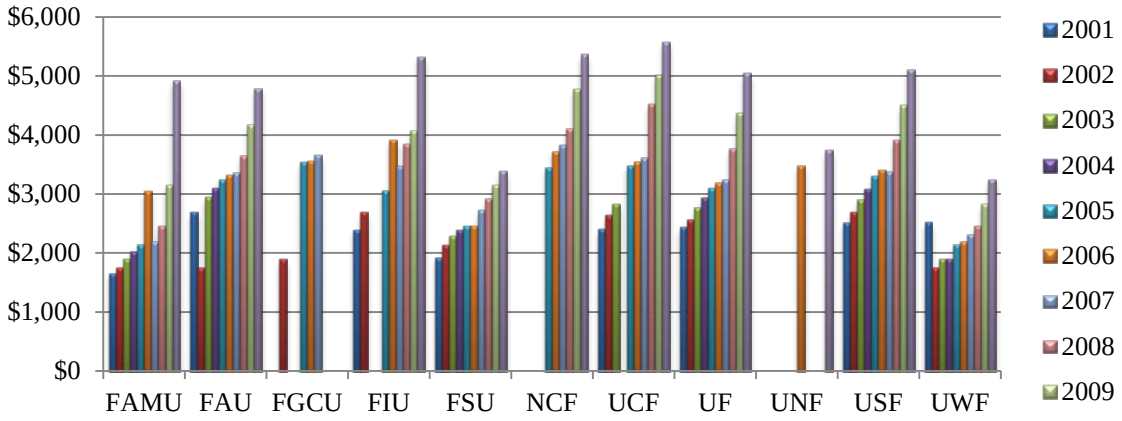
Student Loans

As there were changes in the amounts of need-based and merit-based financial aid provided to students, some students used other types of financial assistance such as loans. With the increase in tuition, fees, and other college costs, students who chose to use loans accumulated debts. The cumulative loan amount for undergraduate students during FY 2001 varied from $2,649 at FIU to $20,993 at FSU during FY 2010. Other universities also had increases in cumulative loan amounts for undergraduate students, but the amounts were not as large of an increase as the above mentioned schools.

Tuition Cost

The average cost of tuition fees for in-state and out-of-state students gradually increased from FY 2001 through FY 2010. During FY 2001, the tuition amounts varied from $1,670 at FAMU to $2,699 at FAU, and the amounts gradually increased during the next nine years. During FY 2009 and FY 2010, there were significant increases in the in-state tuition fees (see Figure 11). In-state tuition fees were not report at FGCU, FIU, UCF, or UNF for some years.

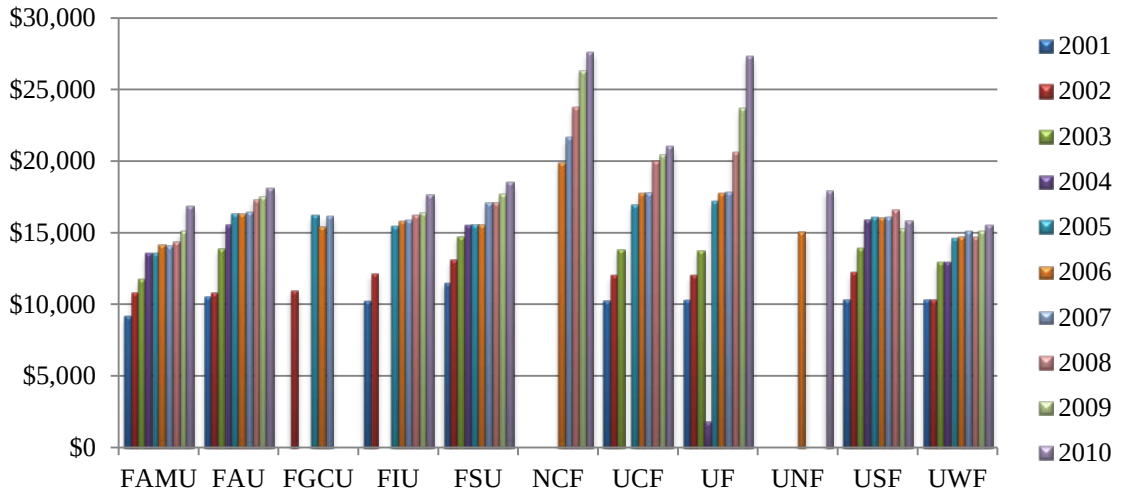
Figure 11. In-State Tuition Fees



Source: Common Data Sets 2001-2010

The cost for out-of-state residents increased as did the in-state tuition. In FY 2001, the most expensive out-of-state tuition cost was $11,527 at FSU and the least expensive was $9,182 at FAMU. Although the cost for out-of-state fees increased at most universities, the fee increases were significantly greater at NCF and UF (see Figure 12). Out-of-state tuition fees were not reported during some years for FGCU, FIU, UCF, and UNF.

Figure 12. Out-of-State Tuition Fees



Source: Common Data Sets 2001-2010

Many universities had additional student fees that included athletic fees, activity and service fees, health fees, technology fees, and transportation fees. Some of the universities included the fees in the tuition costs that were reported while other universities reported the fees separately. USF's additional fees were $34 in FY 2002 and for FY 2003 through FY 2010, the additional fees were, $74. FAMU fees were $1,007 in FY 2001, but in 2010, the reported fees were $258 in FY 2010. No clarification was provided as to why there was a decrease the fees reported. There were two universities whose fees appeared to increase each year. During FY 2001, FSU's additional fees increased from $700 in FY 2001 to $2,428 in FY 2010. During FY 2001, UWF fees increased from $10 in FY 2001 to$1,540 in FY 2010. Fees at FAU, NCF, and UF were included in the tuition amount reported.

Living Cost

Living costs, which included dormitory rooms and meals for fall and spring semesters, also increased during the 10 years reviewed. It appeared that during these years some of the universities' living costs increased or decreased. Students attending FAU and FIU living costs remained higher than those of students attending other universities (see Table 4). FAU and FIU are located in areas with a higher cost of living. Although there were variations in the amount of living costs, there were some universities that did not report these costs. FAMU, FGCU, FIU, FSU, NCF, and UNF did not report the costs during some years.

Table 4. Student Living Cost

FY	Most Expensive University		Least Expensive University	
2001	$6,134	FAU	$4,541	FAMU
2002	$7,112	FAU	$2,110	FGCU
2003	$7,266	FSU	$5,600	FAU
2004	$7,100	FAU	$5,387	FAMU
2005	$8,000	UCF	$4,715	FAMU
2006	$11,530	FIU	$6,564	NCF
2007	$11,120	FIU	$6,660	UWF
2008	$11,946	FIU	$6,900	UWF
2009	$11,440	FIU	$2,400	FAMU
2010	$11,330	FIU	$7,856	UWF

Source: Common Data Sets 2001-2010

Findings

During the first four years that were reviewed, the number of full-time undergraduate students who received need-based financial aid increased at most universities. Although several universities increased the number of full-time undergraduate students who received financial assistance the following year (2006), the number of students who received financial aid in FY 2007 through FY 2009 decreased at several universities. There was some increase during FY 2010, but not all universities increased the number of students who received need-based aid. The number of students who were given such aid varied during the 10 years, and the amount that was awarded increased over the 10-year period.

The type of aid seemed to be associated with the economy. As the economy began to decline in 2002, there was a decrease in the number of students who received merit-based financial aid. Not only did the number of students who received merit-based

financial aid changed, but also the amount they received was reduced. The amount for merit-based financial aid at several universities during FY 2010 was approximately one-half the amount that was awarded during FY 2001. The amount of loans that students accumulated is important because the amount steadily increased during the 10 years reviewed. This was notable because students graduated or left college with student loan debts that they had to repay. The amount for living costs, which included dorm rooms and meals, also increased during the 10 years which was most likely due to inflation. This information is valuable because it indicates a tie between the state budget reductions, the type of financial aid, and the amount students received. It was also noteworthy as it indicates a link between the state budget reductions and tuition increases.

Student Enrollment

Online Courses

With the changes in the number of faculty members in full-time, part-time, and OPS positions, and the changes in the number of course sections offered, it was essential to determine if students were able to enroll in the required courses. This would make a difference in completing their programs and graduating in the customary time. One method that emerged was the increasing use of online courses, distance learning, or e-Learning programs. With the advancement of technology, online courses may be the method that students are using for courses that are not offered in a face-to-face environment. The number of online courses has increased as more students enrolled in these courses to complete their programs or to give themselves more accessibility. Online courses and programs allow students to access the courses whenever possible with no defined schedules.

Several of Florida's public universities offered online courses and degrees, and the cost of the courses varied according to the universities. Several of the programs were offered through distance learning while some universities offered regular courses online or through Web-based video courses. The fees also varied based on the courses, programs, and universities. Although the cost of enrollment for certain online programs may be higher or include additional fees, it seems that more students are enrolling in online courses and programs. This is a substitute for some universities that are reducing faculty numbers in all categories as a result of budget reductions.

However, this will have an adverse impact in three principal areas for those individuals who are teaching online courses because there will be an increase in student numbers. First, faculty members will have extremely large course sections, which may reduce their ability to communicate with students in a reasonable timeframe. Second, it will increase the workload, such as grading exams and research papers. Finally, it will increase the time spent reviewing or managing other student-related problems. These issues, almost certainly, will not be received positively by students. This will also have negative consequences for regular faculty members in track positions. If faculty members do not have time to complete, present, or submit research for publications, their opportunities for advancement and earning tenure may be slowed or postponed.

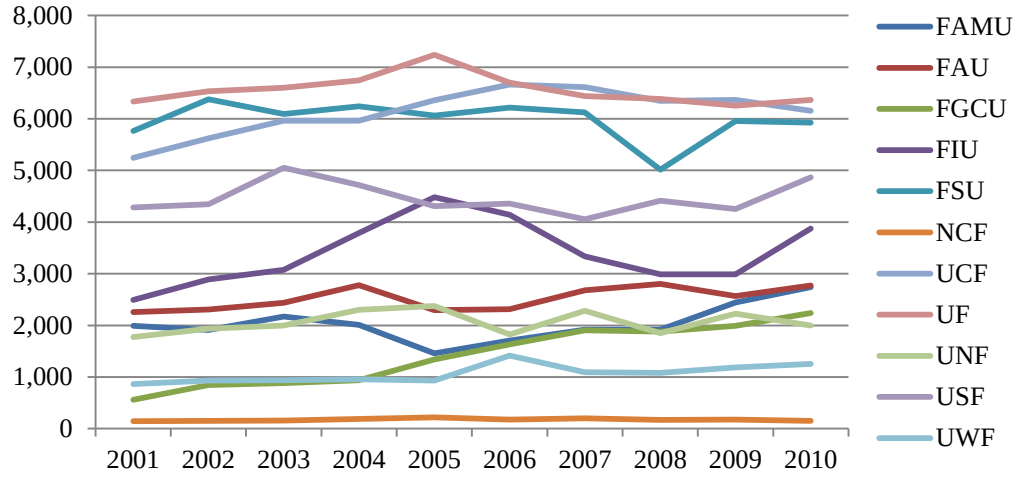
University Enrollment

Hypothesis 5: The state budget reductions will be linked to a reduced number of new students admitted during FY 2001 through FY 2010.

First-Time Freshmen Enrollment

The overall undergraduate enrollment at the 11 universities had similar trends with varying decreases from FY 2001 through FY 2010, and that trend was also seen in the enrollment of first-time, degree-seeking freshmen. The number of first-time freshmen at several of the larger universities increased from FY 2001 through FY 2004. However, during FY 2005 several universities experienced a decrease in the number of first-time freshmen enrolled. During FY 2008, the enrollment of first-time freshmen began to increase and continued increasing through FY 2010 (see Figure 13).

Figure 13. First-Time, Degree Seeking Freshmen Enrollment



Source: Common Data Sets 2001-2010

Universities with smaller enrollment experienced fewer years of decline in first-time freshmen enrollment than those universities with larger student enrollment. NCF, Florida's newest state university, is a liberal arts institution with a small student population. However, NCF also experienced a decline in the number of enrolled first-time freshmen. Several of the universities experienced a decrease in first-time freshmen enrollment for more than one or two years. Similar to other universities with large

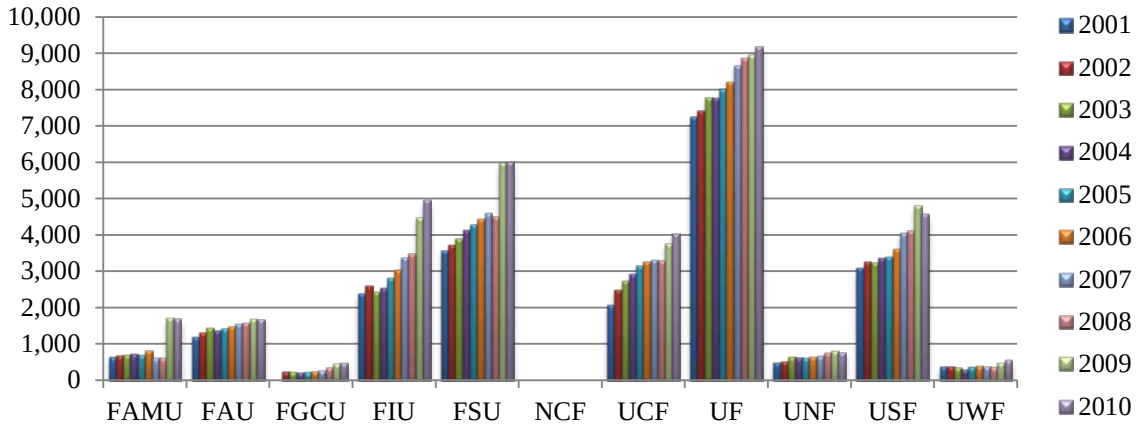
student enrollments, some experienced consecutive years in which the number of first-time freshmen enrollment declined. Although there was a noticeable decline in first-time freshmen enrollment, full-time graduate student enrollment remained constant overall with an increase in graduate students during the 10 years.

Full-Time Graduate Student Enrollment

The enrollment of full-time graduate students increased for universities within the SUS from FY 2001 through FY 2010. The number of full-time graduate students had nearly doubled for most of the universities with large student enrollment. Several universities had increases in the number of full-time graduate students, but they also experienced declines during one or two years. FIU and USF experienced a drop in the number of full-time graduate students in FY 2003.

During the 10 years reviewed, several of the universities experienced a significant increase in the number of full-time graduate students. For example, the number of full-time graduate students increased approximately 50% at FAMU, FIU, FSU, and UCF. The increase during FY 2009 and FY 2010 was significant at these universities (see Figure 14). Although there was a large increase in the number of full-time graduate students, the number of full-time faculty members did not increase significantly.

Figure 14. Full-Time Graduate Student Enrollment



Source: Common Data Sets 2001-2010

Findings

The number of students increased during the 10 years reviewed; however, the number of first-time, degree seeking freshmen began to decline in FY 2005. This trend continued through the next five years and did not change for most universities until FY 2010. There were a limited number of freshmen admitted at Florida public universities, but this limited enrollment was not effective until Fall 2008. The data indicated that there was a link between the state budget reductions and the number of new students admitted to universities during FY 2001 through FY 2010.

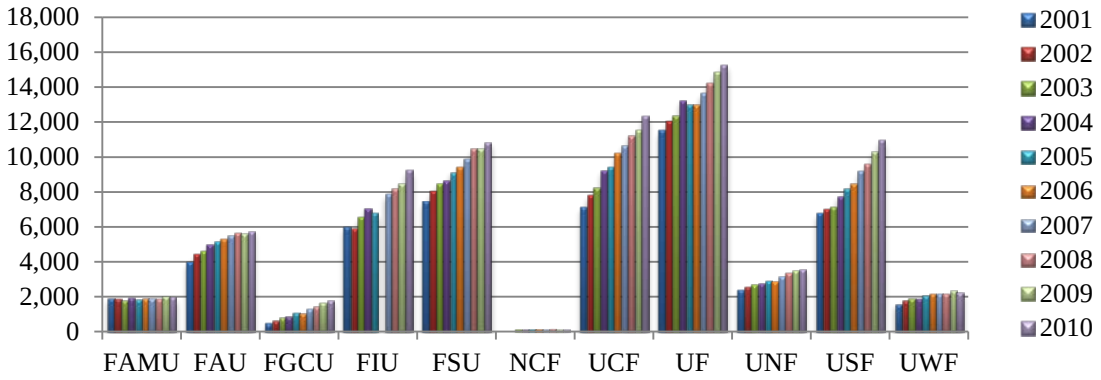
The decreased number of first-time, degree-seeking freshmen seemed also to correspond with the decrease in financial aid, which appeared to relate to state budget reductions. Although the number of first-time degree-seeking freshmen increased during FY 2010 at several universities, it is uncertain if the trend will continue in the near future. The number of full-time graduate students continued to increase during the 10 years that were reviewed. There did not appear to be a link between the state budget reductions and the number of full-time graduate students during FY 2001 through FY 2010.

Degrees Awarded

Hypothesis 6: The state budget reductions will be linked to a reduced number of students who graduated during FY 2001 through FY 2010.

Several of the universities offered associate degrees and certificate programs, but the study only reviewed the number of bachelors, masters, and professional degrees awarded by the 11 universities during the FY 2001 through FY 2010. Whereas several of the universities experienced changes in the number of students enrolled and the number of freshmen admitted, the number of degrees awarded steadily increased during the 10 years reviewed (see Figure 15).

Figure 15. Degrees Awarded at Florida Public Universities



Source: Common Data Sets 2001-2010

Though state appropriations decreased, student enrollment continued to increase and the number of degrees awarded increased. The number of degrees awarded during FY 2006 at FIU, and FGCU degrees awarded was not reported for FY 2010. NCF did not report the number of degrees awarded during FY 2001 and FY 2002.

Findings

The number of degrees awarded at each university continued to increase during the 10 years reviewed. It may be projected from this trend that the number of degrees awarded will continue to increase at universities in the SUS in the future.

Demographics

Hypothesis 7: The state budget reductions will be linked to changes in the demographics of students enrolled at state universities during FY 2001 through FY 2010.

There were 321,503 students attending the 11 universities in the state of Florida during FY 2010. There were increases in both full-time and part-time students during the 10-year period. From FY 2001 through FY 2010 the number of full-time students increased from 170,218 students to 232,514 which represented an increase of 36.6%. This trend was also seen among those students who attended on a part-time basis. Enrollment of part-time students increased from 81,766 in FY 2001 to 88,989 in FY 2010 representing an overall increase of 8.7% over the 10-year period (see Table 5).

Table 5. Student Enrollment at Florida Public Universities

Enrollment	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Full Time	170,218	180,380	189,311	195,690	204,152	210,015	214,518	215,442	223,663	232,514
Part Time	81,766	81,973	82,026	81,872	83,183	84,001	86,617	87,071	88,596	88,989
Total	251,984	262,353	271,337	277,562	287,335	294,016	301,135	302,513	312,259	321,503

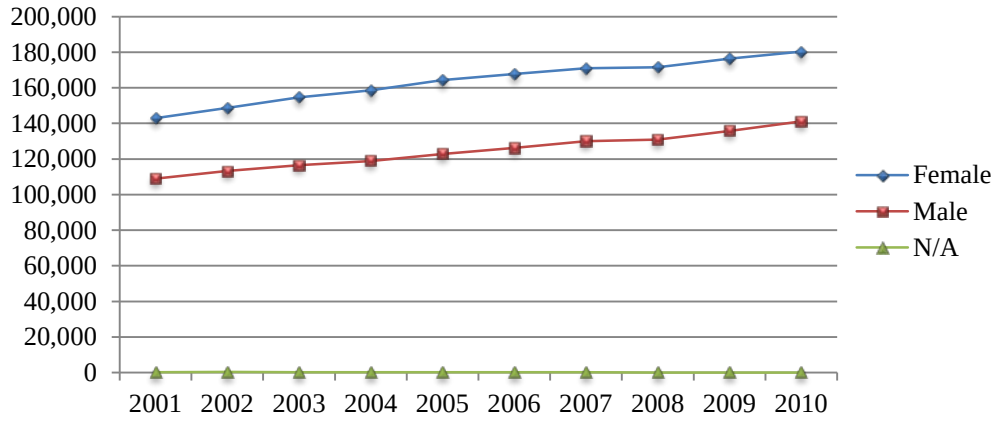
Source: Florida Board of Governors, Fall Student Enrollment in State University System Institutions, 2010

Gender

During FY 2001 there were 251,984 students enrolled in state universities and by FY 2010 the number of students enrolled at the 11 universities increased to 321,503 students representing an increase of 27.5%. The number of female students continued to outnumber male students.

During the 10-year period there were increases in the number of females and males attending the 11 universities. In FY 2001, there were 142,952 female students enrolled at the 11 universities, and 108,898 male students enrolled. By FY 2010, there were 180,307 females and 141,106 males attending Florida's public universities. Therefore, during the 10-year period, female and male student enrollment increased by 26.1% and 29.5%, respectively. During FY 2001 and FY 2010 he number of students who attended state universities without gender classification were 134 and 90 students respectively (see Figure 16).

Figure 16. Student Gender Classification at Florida Public Universities



Source: Florida Board of Governors, Fall Student Enrollment in State University System Institutions

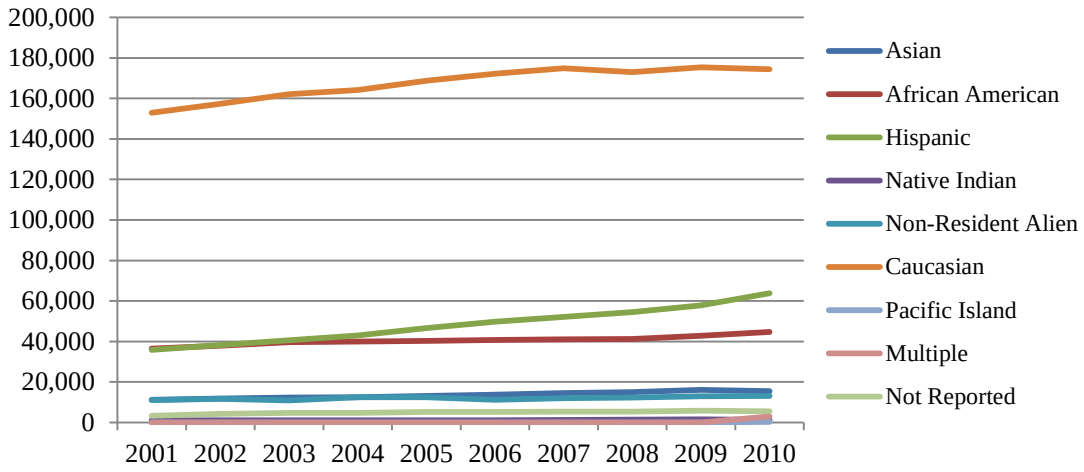
Race

The student racial classification at Florida public universities from FY 2001 through FY 2010 is illustrated in Figure 17. From FY 2001 to FY 2010, the number of African-American students enrolled at Florida's state universities increased from 36,510 students to 44,717 students representing an increase of 22.4%. From FY 2001 to FY 2010, the number of Hispanic students enrolled increased from 35,886 to 63,821

representing more than a 50% increase in Hispanic student enrollment. The number of Asian students increased from 11,153 to 16,043 representing an increase of 43.8% until FY 2009 with a slight drop. The number of Native American students ranged between 1,135 and 1,017 over the 10-year period.

The numbers of students with Non-Resident Alien status showed a slight increase overall from 11,062 in FY 2001 to 13,089 in FY 2010. The number of Caucasian students increased from 152,966 in FY 2001 to 174,876 in FY 2007, but remained relatively constant thereafter reaching only174,454 students FY 2010. FY 2010 was the only year that Pacific Islanders and students of multiple races were reported during the 10 years reviewed. There were 291 Pacific Islanders and 2,959 students of multiple races reported. The number of students whose race was not reported increased from 3,334 students in FY 2001 to 5,468 in FY 2010 as shown in Figure 17.

Figure 17. Student Racial Classification at Florida Public Universities



Source: Florida Board of Governors, Fall Student Enrollment in State University System Institutions

Findings

The number of students enrolled at Florida public universities continued to increase during the 10 years reviewed, and gender and race continued to be diverse. The SUS had more female than male students enrolled at the 11 universities during the 10-year period. There appeared to be no relationship between the state budget reductions and the gender of students admitted to state universities during FY 2001 through FY 2010.

Florida public universities had a diverse student population with students from different racial backgrounds. The number of students from these racial backgrounds steadily increased from FY 2001 through FY 2010 with a few exceptions. Many of the groups had a steady increase from FY 2001 with the largest increase in enrollment observed with Hispanic is students. During the 10 years reviewed, the number of students from all racial groups increased with the exception of Native American students. There does not appear to be a relationship between the state budget reductions and the enrollment of students from diverse racial backgrounds into Florida's public universities during FY 2001 through FY 2010.

Conclusion

In Chapter 4, Data Analysis, seven hypotheses were investigated to determine if Florida's budget reductions resulted in changes that affected the number of faculty members and students at four-year public universities. This chapter discussed the data collected from the CDS from each of the 11 public universities from FY 2001 through FY 2010. Florida SUS received revenue from state and federal sources; however the amounts had noticeable changed during FY 2008 and, during the last two fiscal years that

were reviewed, there were decreases in state appropriations. Although there were other changes that may have been related to the budget reductions, the number of students enrolled and the number of degrees awarded continued to increase. The study reviewed data regarding Florida's public university system to determine if the budget reductions that occurred from FY 2001 through FY 2010 had an effect on the state university system functions.

Budget reductions were experienced by the 11 universities during FY 2009 and FY 2010, but the reductions did not have a substantial impact on the number of students enrolled or the number of degrees awarded. Although most universities experienced an increase in enrollment during the 10-year period, a few universities saw a decrease in first-time freshmen enrollment. During the 10 years that were reviewed, the number of both female and male students continued to increase. The number of full-time and part-time students also continued to increase from FY 2001 through FY 2010.

During periods when there are economic crises, it is expected that individuals would not have additional resources to pursue education or return to college for advanced degrees. However, this trend did not hold true at Florida universities as enrollment continued to increase during the 10-year period. The data indicated that more individuals returned to college during FY 2009 and FY 2010 as many individuals became unemployed. Although the economy was unstable following the terrorist attacks of September 11, 2001, and the housing market collapse adversely affected the economy, these events may have had the opposite effect for some individuals. The data indicated that more individuals attended college during the 10-year period.

Chapter V

DISCUSSION

Theory of Knowledge helps to explain the increase in the number of graduate students. Individuals in leadership roles or decision-making positions need to be educated so that they may make the most informed decisions for those whom they serve. Plato's idea of a good citizen may explain why there was an increase in the number of individuals attending college, particularly those who were graduate students. These individuals found themselves in roles that required education beyond the undergraduate level, or they reached a point in their lives where they thought that additional education was necessary.

Prior to 1980, the number of males who attended both public and private colleges and universities outnumbered that of females who attended postsecondary institutions. However, during 1980 the number of females surpassed the number of males attending public colleges and universities. The increase in female enrollment did not occur at private institutions until 1995. The trend in the number of females attending postsecondary institutions in Florida followed a similar trend at the national level. During the past two decades, the number of females admitted into undergraduate programs has continued to increase, and during the last decade, the percentage of females enrolled in universities nearly doubled at the national level.

There are four reasons for the recent trend showing that more females than males are attending college. First, one possible explanation for this change is the prevailing economy condition. The change in the economy brought about by inflation and a recession, brought about the need for females to obtain undergraduate degrees to enter the workforce. With the increase in living costs, single-income families were unable to provide adequate income to support a family. On the other hand, two-income families better provided for the required income to meet the needs of the household.

During the 1980s, females sought employment due to the recession and the increase in male unemployment as a result of factories closings and jobs being outsourced as an effect of Reaganomics and the *North American Free Trade Agreement* (NAFTA). (Kletzer 2005, 38) Female students outnumbered male students as a result of the economic changes. Those males who were employed did not attended college because they were working more hours or working at more than one job to provide income during the economic downturn. This did not allow them the available time or the financial resources to attend college.

Second, a possible explanation is the feminist movement. With the demand for more women's rights and liberties, females felt more confident leaving the home to continue their education. They chose to postpone marriage and starting a family for professional careers. For those who were already employed, some possibly encountered the "glass ceiling," which reduced the likelihood of females advancing in the workplace. Women without degrees found it necessary to obtain an undergraduate degree for advancement in their place of employment.

This may also explain why there was an increase in the number of women who returned to college as graduate students. With an increased number of individuals earning undergraduate degrees, it became necessary for females to earn advanced degrees to set themselves apart from those who held bachelor's degrees. Research has shown that having an advanced degree results in better pay. Individuals who earned college degrees earned more than those who have only high school diplomas, and individuals with advanced degrees earned more than employees with only bachelor's degrees. Of the total U.S. female population, 59.2% were in the workforce during 2009. (Women in the Labor Force, 1970-2009, 2011) Although more females are in the workforce, they continue to earn less than male colleagues in many of the same professions.

Third, prior to the technology era, females were more likely to be employed in what would have been considered female-dominated occupations, such as clerical workers, teachers, nurses, or social workers. As society advanced and with the birth of the technology era, more females were employed in other highly skilled fields. With more businesses utilizing technology, it was essential for women to become more educated and better skilled to gain entry into those positions and to be successful in the highly technical fields. Today, females are employed in other occupations, such as physicians, engineers, chief executives, managers, and computer specialists, which require advanced degrees.

Finally, another possible explanation underlying why more females are attending four-year institutions is directly related to population growth. As the population in Florida and the U.S. continued to increase, the number of females also increased compared to that of males (The 2012 Statistical Abstract 2012). A greater proportion of

females compared to males in the general population may be reflected in the number of women attending college.

As society has progressed during the past few decades, more females are continuing their education and joining the workforce, often in leadership roles. To obtain leadership positions, they require advanced education, and the steady increase in the number of females who are attending college may be a pattern. Females were expected to continue their education in order to become better leaders. The number of female college students continues to increase which was an indication that women believe that higher education is required for good leadership or to function as good citizens in society.

Although some graduate students returned to college because they lost their employment, others returned with the assistance of their employers. Many employers offer benefits which include tuition assistance or tuition reimbursement to their employees. This added benefit is mutually rewarding for the employees and employers. As the employees have the opportunities to further their education and gain additional skills, the employers gain skilled and dedicated employees. Another reason that there has been an increase in full-time graduate students is that they had the opportunity to continue working full-time and be enrolled full-time through evening, online, or weekend courses.

Rational Choice Theory helped to explain why those students not eligible for need-based or merit-based financial assistance were left with the option of student loans to pay for their education. As the theory indicates, the decision maker (student) must consider the costs versus the benefits. Those who depended on student loans to pay for their

education had to consider whether the benefit of an education outweighed the cost or debt incurred with student loans.

Student tuition increased during the 10 years reviewed, but the continual increases in tuition will have an adverse impact. The most important concern is that students will not have the financial support to enroll or continue at the four-year public universities. They will choose to attend two-year colleges and transfer to four-year universities, or they will choose other state colleges that will be less expensive than attending Florida's public universities for four years. If this should occur, the 11 universities will lose the tuition revenue that would be generated if the students were to attend the entire four years.

A second attractive option for prospective students is to attend less expensive colleges out of the state. This option would result in the SUS losing tuition revenue for each student not enrolled in one of its universities. This will also result in Florida losing revenue from taxes that is re-appropriated to universities. A final choice is that students may choose not to attend college. This not only would have an adverse effect for universities since the state would lose tuition revenue, but it also will have negative outcomes for high school graduates. Having only a high school diploma will most likely limit individuals' ability to find employment that will pay a reasonable wage to support themselves or their families. Being unskilled in all probability will result in employment with low wages, high job turnover rates, or high unemployment rates. Although Florida public universities are attempting to maintain their resources with increased tuition rates, the annual increase will be more detrimental than beneficial for current and prospective students.

While some students will consider their options when deciding to attend college, other individuals will believe that they do not have options. When weighing the cost versus the benefit of attending college, doing so will not be feasible for individuals from disadvantaged or low-income households. If these individuals do not receive financial assistance, the option of student loans will be the only alternative, and without a college education, these individuals will end up having no skills or education.

Such individuals will consider the long-term cost of repaying student loans to be too expensive or uncertain given the limited possibility of finding employment during a recession. They would have to weigh the prospect of becoming employed after graduating against the amount of debt that they would incur as a result of student loans. They will also consider the length of time it will take to repay a student loan. These factors will help individuals decide whether the benefits of a college education will be worth the cost, and for some, it may not.

Social Justice Theory helps to explain why those who were "worse-off" found it difficult to obtain financial aid. As to why the number of students who were eligible for financial assistance decreased, it may be that they wanted to improve their circumstances and found that they had no financial support to help them, thus limiting their educational opportunities. Assisting those who were "worse off" would not have been possible and the "social contract" may not have been implemented. According to the data in this studying, individuals who were from underrepresented groups or minority groups might have been in need of financial assistance, but the amount of assistance that the recipients were awarded was not increased. This will have had an adverse effect for some of those students.

The proportion of students from diverse racial backgrounds enrolled at Florida's 11 public universities was similar to that of the national average. Students from all racial categories increased at the 11 universities which is important because they continued to provide revenue from student tuition. If students were not admitted to the 11 universities, they would have chosen to attend private institutions leading to a loss of tuition revenue by the SUS. Students with different racial backgrounds or with diverse religious beliefs will choose to attend private institutions which they believed would provide an environment based on their backgrounds or beliefs.

There are two reasons why it is important to determine if race was used as a deciding factor when students were admitted into Florida's public universities. First, some students from low-income households, such as African Americans or Hispanics, will be admitted to the universities. However, without financial assistance from grants or scholarships, they will not be able to attend. It is important that universities have the available funding to provide the financial resources to assist those students who will be in need of financial aid so that they do not have to depend on student loans to pay for their education. Being forced to rely on student loans to pay for education will result in students from low-income households remaining impoverished. They left low-income households to obtain a college education only to begin their lives after graduation in debt as a result of outstanding college loans.

Second, it is important to ensure that students who are from diverse racial backgrounds have equal opportunities to be admitted to universities and are granted the same opportunities to earn a college education as those students who are not from diverse backgrounds or from affluent families. All students should have equal access to

education, but for those who do not have equal opportunities as result of no or low-income, systems should be in place to ensure that they are granted those opportunities and are treated equally and fairly when being considered for admission and financial assistance.

Although racial classifications did not appear to be a deciding factor for students' admissions into the 11 universities, it will be an indirect factor in determining if students will attend. Even if students are admitted into college the inability to receive financial assistance will affect their ability to pay for and enroll in college. Continuing to monitor and review the effects of budget reductions for financial assistance is imperative because the admission of students from diverse backgrounds is vital. Future studies should be completed to determine if the inability to receive financial assistance, which most often is awarded to students from low-income households of African Americans and Hispanics, might be affecting enrollment of these individuals at the 11 universities in the SUS.

As mentioned earlier, the number of first-time freshmen admitted continued to increase which was later reflected in the number of students who completed programs and received degrees. Since the number of degrees awarded at each university continued to increase, evidence is clear that students continued to graduate, and universities continued to provide education to those who chose to continue their college education. This continued even though the number of course sections was reduced at 9 of the 11 universities during FY 2008.

The 11 universities within the SUS received budget reductions, but the number of students enrolled at the universities continued to increase from FY 2001 through FY 2010. There were increases in the number of students (both male and female) from FY

2001 through FY 2010. This provided evidence that the SUS continued to support the needs of students and faculty in meeting the goals of the institutions. Although there was an economic crisis during the 10-year period, the number of students who were admitted to the universities continued to increase.

Although the number of instructional faculty members both full-time and part-time increased overall during the last two years reviewed, this increase is unlikely to continue in the near future. Since some political leaders have already determined that the state budget will be reduced for the upcoming FY 2013, it may be extremely difficult to continue hiring full-time faculty members or retain some of those currently employed. If this occurs, it may have unfavorable consequences. In order to continue offering needed courses, it will be necessary for the remaining full-time faculty members to teach additional courses or course overloads. There will also be hiring of additional part-time instructors to ensure that courses are available for students.

If required courses are not available for students, it will result in delays in students enrolling which will delay them from completing their programs. Such delays would be another financial burden for students and their families since it would delay students from entering into the workforce. If universities were compelled to hire additional part-time instructors to teach needed courses due to the lack of available full-time faculty members, the long-term result would be negative because the percentage of part-time instructors within a department would be greater than what is permitted by accrediting agencies.

If the number of faculty – both full-time and part-time – is reduced, this will result in increased class sizes that will make it more difficult for students to learn in large

classes. It will also decrease faculty members' ability to communicate with students or provide assistance for those students who require additional help. The increased student-to-faculty ratio will make learning and teaching more difficult for both students and faculty.

If the number of faculty members available to teach courses is limited, the option will be to reduce course sections offered. This too would have an adverse impact on students since they would not be able to enroll in courses when needed, which would result in delays in completing their programs and graduating. If this were to occur, the number of degrees awarded will begin to decrease. During FY 2010, only two universities had a reduction in the number of degrees awarded, but with reduced course sections and reduced availability of faculty members to teach courses, universities would increasingly offer fewer degrees.

Though the lottery contributed a considerable amount of funding to Florida's educational system since its establishment in 1988, it is evident that the SUS cannot continue to rely on lottery revenue for student financial assistance or capital improvements. It was evident that the decrease in FY 2010 might have a greater impact as the funding that once was generated by the lottery sales will have to be compensated from other sources.

While state-appropriated funds that the SUS received were reduced, C&G funds generated those sponsored programs increased and the SUS received stimulus money which helped to compensate for the loss of the state-appropriated funds. Although several universities received increases in C&G funding during FY 2009 and FY 2010, this source of revenue is expected to diminish over the long term. As many government

agencies are being forced to reduce their budgets, this in turn will be reflected in the number and the total dollar amount of grants that they fund. For example, NASA lost its space shuttle program which will greatly reduce the type of research and the amount of funding that the agency will support. The billion-dollar budget that was once enjoyed by NASA no longer exists and many of the activities that were once performed in-house by NASA are now performed by sub-contractors.

Since some universities received substantial grant funding from the U.S. Department of Defense research funding will be reduced or appropriated for other uses. Though universities received grant funding from federal agencies, they will not be able to rely on those types of financial resources in the near future with reductions in the national budget.

As Florida's economy struggles to recover, the amount of revenue that the state generates will not improve for years. With businesses continuing to close and companies continuing to have cutbacks and layoffs, Florida residents will not have the discretionary income that they previously enjoyed. During 2011, Florida's unemployment rate was nearly 11% and that rate was even higher in some areas. Some citizens will not have the additional income required for discretionary purchases. With the reduction in discretionary purchases, there will be a reduction in sales tax revenue, and those who would have allocated income for travel will choose not to. With less tax revenue and fewer tourism dollars, there were less state appropriations to redistribute to universities within the SUS.

Implications

After reviewing the information in Chapter 4, Data Analysis, there are five important implications that will occur for public universities within the state of Florida. This will also be occurring for other universities in the region. As the economy has not improved, it will be anticipated that additional budget reductions will occur.

First, as the economy continues to decline university administrators will depend on student tuition to compensate for the loss of state appropriations. Tuition rates were increased by 15% at several universities to ensure that the universities had adequate funding to support students and programs. Although this could have a negative impact on students attending Florida's public universities as the tuition rate continues to increase, it will become too costly for some students to attend college or to continue attending school.

It appeared that the increase in the number of full-time graduate students occurred as universities were experiencing the recent financial crisis. This will have been the result of individuals losing employment and returning to college to earn a degree or earn advanced degrees. If this was the rationale used by students to return to college, then as the economy recovers many of the full-time graduate students will become employed and will no longer attend college full-time thereby reducing the number of full-time graduate enrollment. This will have an adverse impact on Florida public universities that rely on tuition revenue from graduate students. Universities will continue to increase tuition rates until the economy stabilizes and the state revenue and appropriations returns to a sustainable level.

Second, as the economy continues to decline Florida public universities will continue to rely on is C&G revenue. During fiscal year (2010), there was a significant increase in C&G funding for several universities. With the reduction in state appropriations and the increase in C&G funding, universities within the SUS have been able to continue functioning in an effective manner. This will be a source of funding for future sustainability for universities.

Third, fewer students will receive financial assistance which will impact the number of students attending public universities. It is important to understand past trends to help develop strategies to provide financial support to students. This is also necessary to help determine the success of universities in providing education to students.

Fourth, with the continued budget reductions it will be more likely that the student-to-faculty ratio will increase as the number of students enrolled continues to increase with no change in the number of faculty. This will occur if universities continue to have reduced budgets and limited C&G funding. This will result in larger class sizes and fewer course sections. This will also result in an increase in the proportion of part-time instructors relative to full-time faculty members.

Finally, the effects of budget reductions may result in limited admission. With a restriction in the number of admissions, some students graduating from high school will not be admitted into public universities. There are several negative outcomes for restricting the number of freshmen into Florida public universities. Limiting the number of freshmen that universities admit will have an adverse impact for some high school graduates, Florida revenue, and employers seeking a highly skilled workforce.

The information reviewed for the 11 universities from FY 2001 through FY 2010 indicated that there were reductions in state appropriations, and changes occurring over the 10-year period relative to the number of full-time faculty members and part-time instructors. There were also changes in the number of course sections offered, the amount of financial assistance that was available, and the amount that was awarded to each student. There were changes in the number of first-time freshmen and full-time graduate students; however, those changes did not have an impact on the number of degrees awarded. Based on the data that was reviewed, while there were changes in available resources for universities within the SUS, these changes did not have an apparent impact on the function of the institutions.

Tuition costs, fees, and other college-related expenses will influenced prospective students' interest in attending postsecondary institutions within the state. However, after analyzing data from FY 2001 through FY 2010, it appears that these factors have not had an adverse impact on the variables examined and that universities within the SUS are apparently functioning effectively and providing quality education for students. This would seem to answer the question of whether universities are operating effectively even though they have experienced budget reductions during the 10 years studied.

Recommendations

Although the data indicated that the universities were apparently functioning effectively, it is recommended that further study be completed since the SUS had additional funding from stimulus money that assisted each university in maintaining its resources. However, funding from the stimulus package was allocated through FY 2012, which will have an impact different for what was seen during the 10 years reviewed. The

results are not expected to be as encouraging as those shown from FY 2001 through FY 2010.

REFERENCES

"1960 Census of Population and Housing." 1960. U.S. Census Bureau. Washington, DC. http://www.census.gov/prod/www/abs/decennial/1960.html. (September 4, 2011).

"2006 Legislative Issue Form BOG/SUS Issue: Technology Funding." 2006. Florida Board of Governors. Tallahassee, Florida. www.flbog.org/.../0045_0146_1275_23%20-%20Technology%20F. (December 1, 2011).

Allen-Meares, Paula. 2008. "Schools of Social Work Contribution to Community Partnerships: The Renewal of the Social Compact in Higher Education." *Journal of Human Behavior in the Social Environment* 18(2): 79-100.

American Recovery and Reinvestment Act of 2009, Pub.L. 111-5 (2009).

"American Recovery and Reinvestment Act of 2009: State-By-State Estimate of Key Provisions Affecting Low-and Moderating Income Individuals." 2009. Center of Budget and Policy Priorities. Washington, D.C. http://www.cbpp.org/cms/index.cfm?fa=view&id=2355. (December 1, 2011).

Aspey, Susan, Chad Colby, and Valerie Smith. 2006. "Fiscal Year 2007 Budget Request Advances NCLB Implementation and Pinpoints Competitiveness." http://www2.ed.gov/news/pressreleases/2006/02/02062006.html. (December 1, 2011).

Baade, Robert A., Robert Baumann, and Victor Matheson. 2007. "Estimating the Economic Impact of Natural and Social Disasters, with an Application to Hurricane Katrina." *Urban Studies* 44(11): 2061-2076.

Baime, David, S. and Christopher M. Mullin. 2011. "Promoting Education Opportunity: The Pell Grant Program at Community College." AACC Policy Brief 2011-03PBL. American Association of Community Colleges. Washington, DC. http://www.aacc.nche.edu/Publications/Briefs/Documents/PolicyBrief_Pell%20Grant.pdf (September 10, 2011).

Bankston, Carl, L. 2011. "The Mass Production of Credentials Subsidies and the Rise of the Higher Education Industry." *Independent Review* 15(3): 325-349.

Bankston, Carl, L. 2010. "Social Justice**:** Cultural Origins of a Perspective and a Theory." *Independent Review* 15(2): 165-178.

Barrilleaux, Charles and Michael Berkman. 2003. "Do Governors Matters? Budgeting Rules and the Politics of State Policymaking." *Political Research Quarterly* 56(4): 409-417.

Bernanke, Ben. 1995. "The Macroeconomics of the Great Depression: A Comparative Approach." *Journal of Money, Credit, and Banking* 27 (1): 1-28.

Boulard, Garry. 2011. "$ticker $hock." *Diverse: Issues in Higher Education* 28(12): 15-16.

Bøyum, Steinar. 2010. "The Concept of Philosophical Education." *Education Theory* 60(5): 543-559.

Brogan, Frank. 2010. "Legislative Summary." State University System of Florida Board of Governors. Tallahassee, Florida. http://www.flbog.org/about/_doc/budget/budgetrequest/20102011/SUS-Legislative-Summary-Manual-Web-Version.pdf. (August 21, 2011).

Brogan, Joseph. 1996. "A Mirror of Enlightenment: The Rational Choice Debate." *Review of Politics* 58(4):793-806.

Brown v. Board of Education of Topeka, 347 U.S. 483 74 § S. Ct. 686 § 98 L. Ed. 873 (1954).

Buckman Act of 1905, Fla. Const. Art. IX, § Sec. 7 (1933).

"Bureau of Labor Statistics." 2009. 2008-2018 Employment Projections. Table 9. Employment and Total Job Openings by Postsecondary Education or Training Category, 2008-18. U.S. Department of Labor, Washington, DC. http://www.bls.gov/news.release/ecopro.t09.htm. (September 18, 2011).

Burney, Teresa. 2010. "Habitat For Humanity Slows New Home Construction." *Builder*. http://www.builderonline.com/affordable-housing/habitat-for-humanity-slows-new-construction.aspx. (September 17, 2011).

Chandler, Ralph, C. 2006. "Plato and the Invention of Political Science." In *Handbook of Organization Theory and Management*, ed. Thomas D. Lynch and Peter L. Cruise. Boca Raton, FL. CRC Press Taylor & Francis Group.

Chapman, Chris, Jennifer Laird, and Angelina KewalRamani. 2010. "Trends in High School Dropout and Completion Rates in the United States: 1972–2008." NCES 2011-012. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. http://nces.ed.gov/pubs2011/2011012.pdf. (September 20, 2011).

Chen, Rong and Edward P. St. John. 2011. "State Financial Policies and College student Persistence: A National Study." *The Journal of Higher Education* 82(5): 629-660.

Chronister, Jay, L. 1980. "Implications of the Evolving Relationships between the States and Independents Hager Education." *Peabody Journal of Education* 67(4): 233-239.

Cole, Norwood M. 1957. "The Licensing of Schoolmasters in Colonial Massachusetts the Licensing of Schoolmasters in Colonial Massachusetts." *History of Education Journal* 8(2): 68-74.

"Commission on Colleges." 2011. Southern Association of Colleges and Schools Commission on Colleges. Decatur, Georgia. http://sacscoc.org/

"Common Data Sets." Institutional Research and Effectiveness Support. University of West Florida. Pensacola, FL. http://upic.uwf.edu/OIR/Common%20Data%20Set/ . (September 20, 2011).

"Common Data Sets." Office of Decision Support and Academic Budgets. University of South Florida. Tampa, FL. http://www.ods.usf.edu/DSS/Resources/CDS.asp. (September 20, 2011).

"Common Data Sets." Office of Institutional Effectiveness and Analysis. Florida Atlantic University. Boca Raton, FL. http://www.fau.edu/iea/paradata.php. (September 20, 2011).

"Common Data Sets." Office of Institutional Planning and Research. University of Florida. Gainesville, FL. http://www.ir.ufl.edu/OIRAPPS/commondataset/default.aspx. (September 20, 2011).

"Common Data Sets." Office of Institutional Research. Florida Agricultural and Mechanical University. Tallahassee, FL. http://www.famu.edu/index.cfm?oir&CommonDataSet. (September 20, 2011).

"Common Data Sets." Office of Institutional Research. Florida State University. Tallahassee, FL. http://www.ir.fsu.edu/surveys.cfm?ID=common_data . (September 20, 2011).

Common Data Sets." Office of Institutional Research. University of Central Florida. Orlando, FL. http://www.iroffice.ucf.edu/commondataset/index.html. (September 20, 2011).

"Common Data Sets." Office of Institutional Research and Assessment. University of North Florida. Jacksonville, FL. http://www.unf.edu/oira/inst-research/Common_Data_Set.aspx . (September 20, 2011).

"Common Data Sets." Office of Planning and Institutional Performance. Florida Gulf Coast University. Fort Myers, FL. http://www.fgcu.edu/planning/InstitutionalResearch/cds.html. (September 20, 2011).

"Common Data Sets." Office of Planning and Institutional Research. Florida International University. Miami, FL. http://opir.fiu.edu/cds.htm. (September 20, 2011).

"Common Data Sets Initiative." 2011. http://www.commondataset.org/#download. (September 20, 2011).

"Crime in Florida - County Profiles". 2012. Florida Department of Law Enforcement. Tallahassee, Florida. (September 29, 2011)

Deficit Reduction Act of 2005, Pub.L. 109-171, S. 1932, § 120 Stat. 4 (2006).

Dennison, George M. 2010. "Reform and Re-invention in Public Higher Education." *Innovative Higher Education* 35(2):75-78.

Dillion, Erin and Andrew J. Rotherham. 2007. "State Evident: What It Means to Make "Adequate Yearly Progress" Under NCLLN." *Education Sector.* www.educationsector.org. (December 26, 2011).

"Dollars to Education." 2011. http://www.flalottery.com/inet/educationDollarToEducation.do. (September 4, 2011).

Doyle William. 2010. "U.S. Senator's Ideal Points for Higher Education: Documenting Partisanship, 1965-2004." *The Journal of Higher Education* 81(5): 619-644.

Doyle, William, R. and Jennifer A. Delaney. 2009. "Higher Education Funding: The New Normal." *Change* (July/August): 60-62.

"Education Funding." 2011. Education Fact Sheet 2010-2011. Florida House of Representatives. Tallahassee, Florida. http://www.myfloridahouse.gov/FileStores/Web/HouseContent/Approved/Web%20Site/education_fact_sheets/2011/documents/2010-11%20Education%20Funding.3.pdf. (December 1, 2011).

Ellis, Blake. 2010. "Oil Spill Could Cost Florida 195,000 jobs, $10.9 billion." *CNNMoney.com.* http://money.cnn.com/2010/06/08/news/economy/bp_oil_spill_florida/index.htm. (September 17, 2011).

Elementary and Secondary Education Act of 1965, Pub.L. 89-10, § 79 Stat. 27, 20 U.S.C. §70 (2007).

Esquith, Stephen, L. 2006. "John Rawls and Public Administration." In *Handbook of Organization Theory and Management*, ed. Thomas D. Lynch and Peter L. Cruise. Boca Raton, FL. CRC Press Taylor & Francis Group.

Ewing, Kris M., Kim A. Becker, and Bradley T. Ewing. 2010. "The Response of US College Enrollment to Unexpected Changes in Macroeconomic Activity. "*Education Economics*, 18(4): 423-434.

"Fall Student Enrollment in State University System Institutions." 2010. State University System of Florida, Board of Governors. Tallahassee, Florida. http://www.flbog.org/resources/iud/enrollment_results.php. (September 4, 2011).

Flattau, Pamela, Jerome Bracken, Richard Van Atta, Ayeh Bandeh-Ahmadi, Rodolfo del la Cruz, and Kay Sullivan. 2006. "The National Defense Education Act of 1958: Selected Outcomes" Science & Technology Policy Institute.

Florida Education Governance Reorganization Act of 2000, 229.001, F.S (2001).

Florida Education Governance Reorganization Implementation Act of 2001, 229.001, F.S. (2001).

Fenton, Richard J., John Gardner, and Sandeep Singh. 2001. "Rethinking Cuts in Public Higher Education: An American Example." *Education Economics* 9(1): 53-68.

Finney, Joni E. 2007. "State Structures for the Governance of Higher Education Florida Case Study Summary." The California Higher Education Policy Center. http://www.capolicycenter.org/florida/florida.html. (December 7, 2011).

"First Public School Site and Ben Franklin Statue." City of Boston.gov. http://www.cityofboston.gov/freedomtrail/firstpublic.asp. (December 1, 2011).

"Florida Board of Governors Regulation Development Procedure." 2002. http://www.flbog.org/documents_meetings/0043_0136_1167_27%20-%20Regulation%20Development%20Procedure%20for%20BOG%20_2_03-23-06.pdf. (September 4, 2011).

"Florida Board of Governors Notice of Proposed Regulations Amendment." 2008. http://www.flbog.org/documents_regulations/proposed/7_003_Fees_Fines_Penalties_Notice.pdf. (September 7, 2011).

"Florida Lottery and Slot Machine Revenues for Education." 2011. Education Fact Sheet. Florida House of Representatives. Tallahassee, Florida http://www.myfloridahouse.gov/FileStores/Web/HouseContent/Approved/Web%20Site/education_fact_sheets/2011/documents/2010-11%20Florida%20Lottery%20and%20Slot%20Machine%20Revenues%20for%20Education.3.pdf. (September 4, 2011).

"Florida Public High School Graduation Rates, 2008-09." 2009. Florida Department of Education, Office of Education Information and Accountability Services. Tallahassee, Florida. www.fldoe.org/eias/eiaspubs/word/gradrate0809.doc. (September 20, 2011).

Floyd, Myron F., Heather Gibson, Lori Pennington-Gray, and Brijesh Thapa. 2003. "The Effect of Risk Perceptions on Intentions to Travel in the Aftermath of September 11, 2001." *Journal of Travel & Tourism Marketing* 15(2/3): 19-38.

Fogel, Sondra J., Marc T. Smith, and Anne R. Williamson. 2008. "A Decent Home for Every Family? Housing Policy Initiatives Since the 1980s." *Journal of Sociology & Social Welfare* 35(1): 175-196.

"FY 2009-10 Florida Budget House Democratic Caucus Perspective." 2009. Summary of Conference Report on Senate Bill 2600 (General Appropriation Act) and Conforming Bills. House Democratic Office, Tallahassee, Florida. http://www.myfloridahouse.gov/FileStores/Web/HouseContent/Approved/Minority%20Leader/Resources/FY2009-10%20Budget%20--%20A%20Florida%20House%20Democratic%20Caucus%20Perspective.pdf. (September 4, 2011).

Gilbert, Claire and Donald Heller. 2010. "The Truman Commission and its Impact on Federal Higher Education Policy Form 1947 to 2010". Working Paper No. 9 presented at the Association of Higher Education. The Pennsylvania State University, College of Education, Center for the Study of Higher Education. http://www.ed.psu.edu/educ/cshe/working-papers/CSHE%20Working%20Paper%20%239. (November 27, 2011).

Goldrick-Rab, Sara and Christopher Mazzeo. 2005. "What No Child Left Behind Means for College Access." *Review of Research in Education* 29: 107-129.

Green, Donald, W. 2007. "Adjunct Faculty and the Continuing Quest for Quality." *New Directions for Community Colleges* 140(Winter): 29-39.

Gunn, Joshua and John L. Lucaites. 2010. "The Contest of Faculties: On Discerning the Politics of Social Engagement in Academy." *Quarterly Journal of Speech* 96(4): 404-412.

Hammond, George W. and Mehmet S. Tosun. 2011. "The Impact of Local Decentralization on Economic Growth: Evidence from U.S. Counties." *Journal of Regional Science* 51(1): 47-64.

Harlow, Ralph Volney. 1929. "Aspects of Revolutionary Finance, 1775–1783." *American Historical Review* 35(1): 46-68.

Harris, Rosalind and H. Dreamal Worthen. 2004. "Working through the Challenges: Struggle and Resilience within the Historically Black Land Grant Institutions." The Journal of Education 124(3): 447-455.

Hatfield, Karen M. 2003. "Funding Higher Education for Adult Students." *New Direction for Student Services* 105 (Summer): 27-34.

Higher Education Act of 1965, Pub. L. No. 89-329 (2003).

"History of Headcount of Enrollments." Table 11. Board of Governors. State University System of Florida Facts and Figures. Tallahassee, FL. http://www.flbog.org/resources/factbooks/factbooks.php. (September 20, 2011).

Hodgson, Naomi. 2010. "What Does It Mean to Be an Educated Person?" *Journal of Philosophy of Education* 44(1): 109-123.

Hulsey, Timothy. 2010. "The Cost of, and to, Public Education." *Phi Kappa Phi Forum on Education and Academics* Spring: 24.

Impact Aid Law of 1950, P.L. 81-815 § 64 Stat. 967 (1951).

"Institutional Finance." Table 41. Board of Governors. State University System of Florida Facts and Figures. Tallahassee, FL. http://www.flbog.org/resources/factbooks/factbooks.php. (September 20, 2011).

Jackson, Olivia. 2008. "The Impact of the 9/11 Terrorist Attacks on the Economy." http://www.journalof911studies.com/volume/2008/OliviaJackson911andUS-Economy.pdf . (September 24, 2011).

Jeong, Moon-Gi and Richard C. Feiock. 2006. "Impact Fees, Growth Management, and Development." *Urban Affairs Review* 41(6): 749-768.

Johnson, Nicholas, Phil Oliff, and Erica Williams. 2011. "An Update on State Budget Cuts, At Least 46 States Have Imposed Cuts That Hurt Vulnerable Residents and Cause Job Loss." http://www.cbpp.org/files/3-13-08sfp.pdf. (September 4, 2011).

"Justification Review". 2001. State University System, Florida Department of Education. Office of Program Policy Analysis and Government Accountability. Tallahassee, Florida. http://www.oppaga.state.fl.us/reports/pdf/0128rpt.pdf. (September 4, 2011).

Kane, Thomas, J. 1999. "Assessing the U.S. Financial Aid System: What We Know, What We Need to Know." http://net.educause.edu/ir/library/pdf/ffpfp0103.pdf. (September 10, 2011).

Kim, Dongbin and John L. Rury. 2007. "The Changing Profile of College Access: The Truman Commission and Enrollment Patterns in the Postwar Era." *History of Education Quarterly* 47(3): 302-327.

Kletzer, Lori, G. 2005. "Globalization and Job Loss, From Manufacturing to Services." *Economic Perspectives*, 29(2): 38-46.

Lamore, Rex L, Terry Link, and Twyla Blackmond. 2006. "Renewing People and Places: Institutional Investment Policies that Enhance Social Capital and Improve the Built Environment of Distressed Communities." *Journal of Urban Affairs* 28(5): 429-442.

Landemore, Hélène. 2004. "Politics and the Economist-King: Is Rational Choice Theory the Science of Choice?" *Journal of Moral Philosophy* 1(2):177-196.

Landers, Jay. 2009. "American Recovery and Reinvestment Act Provides Billions for Infrastructure." *Civil Engineering* 79(3): 10-12.

Lanham Act of 1940, P.L. 849 § 54 Stat. 1125 (1951).

Lanham Act of 1941, P.L. 137 § 55 Stat. 361 (1951).

Long, Bridget, T. 2008. "The Effectiveness of Financial Aid in Improving College Enrollment: Lessons for Policy." http://gseacademic.harvard.edu/~longbr/Long_-_Effectiveness_of_Aid_-_Lessons_for_Policy_(1-08).pdf. (September 26, 2011).

Long, Bridget T. 2010. "Making College Affordable by Improving Aid Policy." *Issues in Science and Technology* 26(4): 27-38.

Losin, Peter. 1996. "Education and Plato's Parable of the Cave." *Journal of Education* 178(3): 49-65.

Lovett, Clara M. 2002. "Cracks in the Bedrock, Can U. S. Higher Education Remain Number One?" *Change* March/April: 11-15.

Matthews, Barbara. 1976. "Women, Education and History." *Theory into Practice* 15(1): 47-53.

Massachusetts Law of 1642. Mass. Const. part II, c. 5, § 2. (2008).

McNichol, Elizabeth, Phil Oliff, and Nicholas Johnson. 2011. "States Continue to Feel Recession's Impact." http://www.cbpp.org/cms/index.cfm?fa=view&id=711. (September 24, 2011).

Microsoft Office Excel. 2010, Microsoft Corp, Redmond, WA.

Moore, J. Wayne. 2008. "Property Tax Equity Implications of Assessment Capping and Homestead Exemptions for Owner-Occupied Single-Family Housing." *Journal of Property Tax Assessment and Administration* 5(3): 37-70.

Monaghan, E. Jennifer. 1988. "Literacy Instruction and Gender in Colonial New England." *American Quarterly* 40(1): 18-41.

Morpurgo, J. E. 1993. "A Universal Place of Study." *History Today* 43(2): 39.

Morrill Act of 1890, 26 Stat. 417, 7 U.S.C. § 321 (2004).

Morrill Land-Grant Act of 1862, 7 U.S.C. § 301 (2010).

National Defense Education Act, P.L. 85-864 § 72 Stat. 1580 (2011).

Neiman, Max and Stephen J. Stambough. 1998. "Rational Choice Theory and the Evaluation of Public Policy." *Policy Studies Journal* 26(3): 449-465.

"New College Fact Books." Office of Institutional Research and Assessment. New College of Florida. Sarasota, Florida. http://ncf.edu/fact-books. (September 20, 2011).

No Child Left Behind Act of 2001, Pub.L. 107-110, § 115 Stat. 1425 (2007).

North American Free Trade Agreement, P.L. 103-182, § Sec. 334 (2005).

Okunade, Albert A. 2004. "What Factors Influence State Appropriations for Public Higher Education in the United States?" *Journal of Education Finance* 30 (2): 123-138.

Parker, S. Chester. 1909. "Our Inherited Practice in Elementary Schools." *The Elementary School Teacher* 10 (2): 75-85.

Porter, Harry W. 1951. "The Lanham Act." *History of Education Journal* 3(1): 1-6.

"Public College and Universities of Florida, Tuition and Required Fees, Fall 2009-2010 for New Students in Man Campus." 2010. Board of Governors. Tallahassee, FL. http://www.flbog.org/resources/factbooks/. (September 7, 2011).

Ramsey, Paul. 2009. "Plato and the Modern American "Right": Agendas, Assumptions, and the Culture Fear." *Educational Studies* 45: 572-588.

Rawls, John. 1971. *A Theory of Justice*. Cambridge, Mass.: Harvard University Press.

"Report on e-Learning." 2010. Florida Atlantic University. Boca Raton, Florida.

http://www.fau.edu/cel/downloads/ELearning_Task_Force-Final_Aug_30_2010.pdf. (May 25, 2012).

Robinson, David and William H. Jeynes. 2010a. "Christian Character Education in Christian Higher Education: A Historical Analysis and Contemporary Challenge (Part I)." *Higher Education* 9(4): 295-315.

Robinson, David and William H. Jeynes. 2010b. Character Education in Christian Higher Education: A Historical Analysis and Contemporary Challenge (Part II). *Higher Education* 9(4): 316-335.

Rudestam, Kjell E. and Rae R. Newton. 2007. "Surviving Your Dissertation: A Comprehensive Guide to Content and Process." 3rd ed. SAGE Publication, Inc. Thousand Oaks, California.

"S. 1932 Deficit Reduction Act of 2005." 2006. Congressional Budget Office Cost Estimate. Washington, DC. http://www.cbo.gov/ftpdocs/70xx/doc7028/s1932conf.pdf. (August 30, 2011).

Samuels, Peggy. 1990. "Imagining Distance: Spanish Explorers in America." *Early American Literature* 25(3): 233-252.

Servicemen's Readjustment Act of 1944, P.L. 78-346, § 58 Stat. 284m (2003).

Smith-Hughes National Vocational Education Act of 1917, P.L. 64-347 § 39 Stat. 929 (2004).

Smith-Lever Act of 1914, 7 U.S.C. § 343 (2004).

"Sponsored Research and Contracts and Grants." Table 47. Board of Governors. State University System of Florida Facts and Figures. Tallahassee, FL. http://www.flbog.org/resources/factbooks/factbooks.php (September 20, 2011).

Stanley, Rodney E. and P. Edward French. 2005. "Enrollment Levels in Institutions of Higher Education: Are State Lotteries Making a Difference in Dixie?" *Journal of College Admission* Summer (188): 21-27.

Stark, Cynthia. 2009. "Respecting Human Dignity: Contract Versus Capabilities." *Metaphilosophy* 40(3/4): 366-381.

"State & County Quick Facts." 2010. U.S. Census Bureau. Washington, DC. http://quickfacts.census.gov/qfd/states/12000.html. (September 4, 2011).

"State University System of Florida Enrollment Plans." 2008. Board of Governors. State University System of Florida Facts and Figures. Tallahassee, FL. http://www.flbog.org/documents_meetings/0010_0162_1499_068%20SPASOC%

2009-%20SUS%20Institutional%20Enrollment%20Plans.pdf (September 20,2011).

"State Student Incentive Grant (SSIG) Program." 1972. U.S. Department of Education. Washington, DC. http://www2.ed.gov/PDFDocs/FinAidHB/ch9_s1.pdf. (December 1, 2011)

Stripling, Jack and Andrea Fuller. 2011. "Presidents Defend Their Pay as Public Colleges Slash Budgets." *Chronicle of Higher Education* 57(31): A1-A20.

Student Aid and Fiscal Responsibility Act of 2010, SAFRA; H.R. 3221 (2010).

"Summary of State Education & General Operating Appropriations and Actual FTE Students". State University System of Florida, Board of Governors. Tallahassee, Florida. www.flbog.org/.../2010-06-29_Funding-per-FTE-SUS-and-Univ_1985-2012 _(10_12_11).xls

Tandberg, David. 2010a. "Politics, Interest Groups and State Funding of Public Higher Education." *Research in Higher Education* 51(5):416-450.

Tandberg, David. 2010b. "The Politics of State Funding of Public Higher Education." *Educational Policy* 24(5): 735-778.

Tigert, Jno, J. 1933. "Co-ordination in Florida." *The Journal of Higher Education* 4(3): 138-144.

"The 2012 Statistical Abstract." 2012. Table 7. Resident Population by Sex and Age: 1980 to 2010. U.S. Census Bureau. Washington, DC. http://www.census.gov/compendia/statab/2012/tables/12s0007.pdf. (August, 9 2012).

"The Florida Council of 100 Higher Education Funding Task Force Position Paper." 2003 . http://www.fc100.org/documents/positionpaper31403.pdf. (December 1, 2011).

"The Student Aid and Fiscal Responsibility Act." 2010. *Careers & Colleges* 29(1): 20.

Toutkoushian, Robert, K. 2005. "What Can Institutional Research Do to Help Colleges Meet the Workforce Needs of States and Nations." *Research in Higher Education* 46(8): 955-984.

"Tuition Differential Fee Report." 2010. State University System of Florida, Board of Governors. Tallahassee, Fl. http://www.flbog.org/about/_doc/budget/Tuition-Differential-Report_2009-10.pdf. (September 20, 2011).

Wellman, Jane, V. 2008. "Funding Disconnect: Spending More, Getting Less." *Change* November/December: 18-25.

Wright, Rebecca. 2010. "State Education Finance and Governance Profile: Florida." *Peabody Journal of Education* 85(1): 61-65.

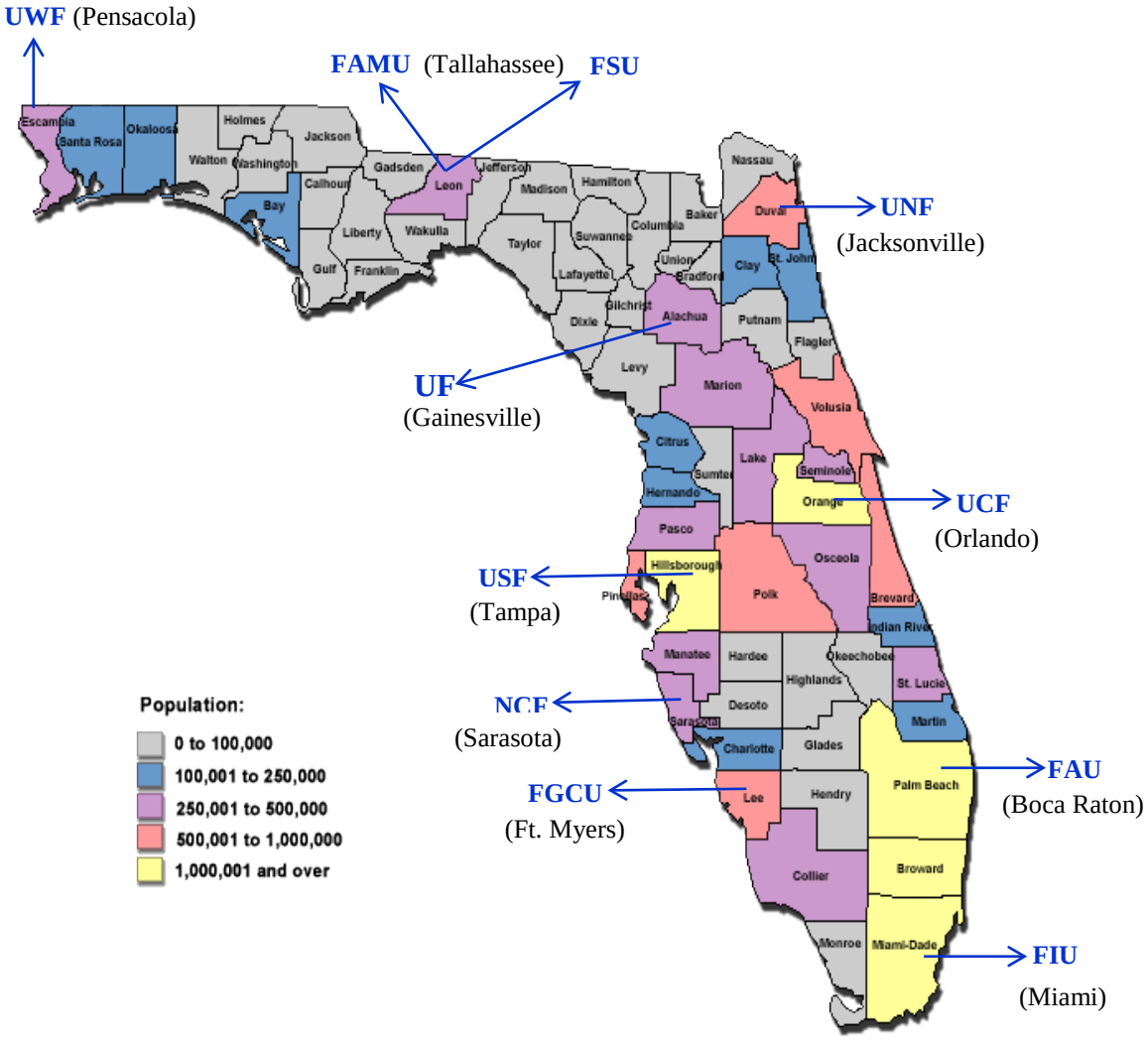
"Women in the Labor Force, 1970–2009." 2011. U.S. Bureau of Labor Statistics, Division of Information and Marketing Services, Washington, DC. http://www.bls.gov/opub/ted/2011/ted_20110105.htm. (May 24, 2012)

APPENDIX A:

Florida Population Map and University Locations

Appendix A

Florida Population Map and University Locations



Source: Florida Department of Law Enforcement

APPENDIX B:

Institutional Review Board Oversight Screening Form
for Graduate Student Research

Valdosta State University Graduate School

Institutional Review Board Oversight Screening Form for Graduate Student Research

Project Title: The Impact of Budget Reductions for Higher Education in Florida: Is the State University System Functioning...

Name: Brenda Posey

Department: Public Administration

E-mail: biposey@valdosta.edu

Telephone: 407-207-2503

Faculty Advisor: Dr. James Peterson

Please indicate the academic purpose of the proposed research:

- ☒ Doctoral Dissertation
- ☐ Master's Thesis
- ☐ Other:

1. ☐ YES ☒ NO **Will you utilize *existing identifiable private* information about living individuals?** "Existing" information is data that were previously collected for some other purpose, either by the researcher or, more commonly, by another party. "Identifiable" means that the identities of the individuals can be ascertained by the researcher by name, code number, pattern of answers, or in some other way, regardless of whether or not the researcher needs to know the identities of the individuals for the proposed research project. "Private" information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place or information provided for specific purposes that the individual can reasonably expect will not be made public (e.g., a medical record or student record).

   Note: If you are using data that: (1) are publicly available; (2) were collected from individuals anonymously (i.e., no identifying information was included when the data were first collected); (3) will be de-identified before being given to the researcher, (i.e., the owner of the data will strip identifying information so that the researcher cannot ascertain the identities of individuals); or (4) do not include any private information about the individuals, regardless of whether or not the identities of the individuals can be ascertained, your response to Question 1 should be NO.

2. ☐ YES ☒ NO **Will you *interact* with individuals to obtain data?** "Interaction" includes communication or interpersonal contact between the researcher and the research participant, such as testing, surveying, interviewing, or conducting a focus group. It does not include observation of public behavior when the researcher does not participate in the activities being observed.

3. ☐ YES ☒ NO **Will you *intervene* with individuals to obtain data?** "Intervention" includes manipulation of the individual or his/her environment for research purposes, as well as using physical procedures (e.g., measuring body composition, using a medical device, collecting a specimen) to gather data for research purposes.

If you answered YES to ANY of the above questions, your research is subject to Institutional Review Board oversight. Please discard this form and complete and submit an IRB application. Do not begin your research until your application has been reviewed by the IRB and you are informed of the outcome of the review.

• • • • • • • • • • • • •

If you answered NO to ALL of the above questions, your research is not subject to Institutional Review Board oversight. Stop here, sign below, secure your faculty advisor's signature, and submit this form to the Graduate School. Please remember that, even though your project is not subject to IRB oversight, you should still observe ethical principles in the conduct of your research.

STUDENT CERTIFICATION: I certify that my responses to the above questions accurately describe my proposed research.

Student's Signature: Brenda Posey Date: 10/24/11

FACULTY ADVISOR CERTIFICATION: I have reviewed the student's proposed research and concur that it is not subject to Institutional Review Board oversight.

Faculty Advisor's Signature: [signature] Date: 11-14-11