PREVENTING INSTITUTIONAL FAILURE: A REVIEW OF OPERATIONAL AND FINANCIAL VARIABLES AT THEOLOGICAL GRADUATE SCHOOLS

by

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ABSTRACT

JOHN C EVERETT. Preventing institutional failure: a review of operational and financial variables at theological graduate schools. (Under the direction of DR. ALAN MABE)

Theological graduate schools have faced many challenges over the past twenty years, but many have thrived and survived through the efforts of great leaders, strong faculty and staff, dedicated supporters, and supportive organizations. There have been a number of closures, mergers, and accreditation withdrawals with struggling theological graduate schools due to various reasons including enrollment reduction issues, financial exigency, rising tuition, endowment concerns, and the changing landscape of the church just to note a few. Studying the financial strengths and weaknesses at theological graduate schools provides an opportunity to address the relationship of financial and operational variables at these schools.

This quantitative study determined if there is a relationship between financial and non-financial variables and the financial stability and instability at 161 theological graduate schools in the United States. The study utilized financial and non-financial data from two time periods, 2011 and 2021 with the following variables: financial responsibility composite score (FRCS), independent theological schools, university-embedded theological schools, denomination, region, minority serving, enrollment, tuition, expenditures, endowment, library volumes, and faculty FTE.

The study included correlation analysis, trend analysis, and multiple regression analysis. The multiple regression analysis included nine models reviewing the relationship of independent and dependent variables. Independent theological schools had a statistically significant p-value for the financial responsibility composite score with negative differences in these scores compared to the university-embedded theological graduate schools. Roman Catholic theological schools had a statistically significant p-value and yield a difference of .5156 for the financial

responsibility composite scores in 2011. In 2021, endowment levels and expenditure levels had statistically significant p-values and yielded differences of -.0012 and -.0002 respectively for the financial responsibility composite scores. Enrollment levels and Midwestern schools had strong p-values, but the results were not statistically significant for financial responsibility composite scores.

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Finally, I want to acknowledge the Association of Theological Schools (ATS) for the data that the organization supplied and also to the staff of ATS for their continuous support of my work and theological graduate schools.

DEDICATION

I dedicate this work to my deceased ancestors including my father, grandparents and great-grandparents who made huge sacrifices for me. I had the fortune of being directly influenced by these important people. Also, I dedicate this work to the many spiritual leaders who have positively influenced my life and my family in so many ways. Finally, my friend Dr. Lamont Foster, who has two doctoral degrees, encouraged me to pursue my doctorate. May he rest in peace.

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LIST OF ABBREVIATIONS

ATS Association of Theological Schools

ACTS Association of Chicago Theological Schools

CFI Composite Financial Index

CUNA Change in Total Net Assets

FASB Financial Accounting Standards Board

FTE Full-Time Equivalent

FRCS Financial Responsibility Composite Scores

HBTS Historically Black Theological School

ITC Interdenominational Theological School

IVM Institutional Viability Metric

SACSCOC The Southern Association of Colleges and Schools Commission on Colleges

TGS Theological Graduate Schools

USA United States of America

CHAPTER 1: INTRODUCTION

Theological graduate schools (TGS) of the Association of Theological Schools (ATS) have faced challenging enrollment and financial issues with fifty mergers, closures, and accreditation withdrawals from 2010-2021 (Yamada, 2021). Of those fifty mergers, twenty-seven similar organizational restructurings occurred at an accelerated rate from 2017-2021 (Yamada, 2021). ATS is comprised of more than 270 private theological graduate schools (Association of Theological Schools, n.d.). There are independent schools and university-embedded or college-embedded schools. The independent schools are freestanding schools and are not under the auspice of or supported by a university or college (Association of Theological Schools, n.d.). These independent schools have a separate board of trustee, president and dean of academic affairs, and many are called seminaries or theological seminaries. Many are denominational affiliated, and these schools receive no support from a university or college. Examples include Fuller Theological Seminary, Dallas Theological Seminary, Princeton Theological Seminary, Gordon-Conwell Theological Seminary, Southeastern Baptist Theological Seminary, and Hood Theological Seminary in North Carolina (Association of Theological Schools, n.d.).

University-affiliated schools or university-embedded schools are integral parts of larger teaching or research universities with multiple professional schools and graduate programs.

These university-embedded schools receive direct support from the main university (Association of Theological Schools, n.d.). The university-embedded schools tend to be schools of divinity or schools of theology and include Duke Divinity School of Duke University, Harvard Divinity School of Harvard University, Candler School of Theology at Emory University and Campbell Divinity School of Campbell University in North Carolina. College-affiliated schools or college-embedded schools are integrally related to four-year colleges or teaching universities that have

limited additional graduate or professional programs and also tend to be schools of divinity, or theology. These theological schools receive support from the governing college. Some of these college-affiliated schools include Knox College and Holy Apostles College and Seminary (See Appendix A for list of ATS Theological Graduate Schools).

Statement of Problem

Gin (2020) reviewed 45 ATS schools that merged, closed, or withdrew between 2003-2018. The study showed that some of the reasons for the disruption with the schools included downward enrollment trends and upward tuition trends. Other issues included the schools' low average primary reserve ratio, which is related to changes in expenditures, upward changes in expenditures per full-time student, and no new degree programs. Thomas (2023) discussed the recent closure of the Interdenominational Theological Center (ITC) in Atlanta, Georgia as its board of trustees declared financial exigency. ITC is one of six historically African American theological seminaries in the United States and was comprised of six denominational seminaries within the ITC structure during its history.

Gose (2002) observed an increase in attendance of students at evangelical seminaries, which are characterized by their fundamental and Bible-oriented theological approach. These evangelical seminaries include a variety of institutions, such as Baptist seminaries, non-denominational seminaries, and some seminaries with a conservative leaning. This growth in enrollment occurred during the mid-1900s as part of the broader evangelical movement (Gose, 2002). These schools are not as financially sound as the more mainline or traditional Protestant seminaries such as the Episcopalians, United Methodists, Lutheran, and Presbyterians theological graduate schools. Many of these traditional mainline denominational schools were established more than a century ago and have sizable endowments that can sustain these schools

while facing stagnant or declining enrollments. Most of the evangelical schools were established within the past sixty to seventy years and are dependent upon students and strongly rely on tuition revenue. Martin and Samuels (2009) described that two at-risk indicators of stressed higher education institutions are tuition dependency of more than 85% and an enrollment of less than 1,000 students which puts many theological graduate schools at risk for financial concerns. In 2021, 95% of theological graduate schools had enrollment levels of less than 1,000, and 78% had enrollment levels between 1-300 students (Association of Theological Schools, n.d.). Martin and Samuels (2009) also determined that there are seven major causes of fragility among religiously affiliated institutions including (a) location of institution, (b) burden of liberal arts education, (c) challenges with church relations, (d) church-campus governance conflicts, (e) institutional independence and political decision-making, (f) costs of residence life, and (g) faith and accountability. The low enrollment levels at many theological graduate schools can be problematic and cause financial woes for presidents, chief financial officers, chief enrollment officers and chief development officers at these institutions (Meinzer, 2021).

The U. S. Department of Education uses the financial responsibility composite score (FRCS) to measure the financial health of educational institutions (U.S. Department of Education, n.d.). The Department of Education sought to create a measure that would allow them to identify institutions that might fail or be close to being financially disrupted, which would perhaps have an impact on the ability of its students/graduates to pay back their federal loans.

If campuses are at the upper end of the scale, the Federal Government has confidence in continuing their participation in the federal grant and loan programs. If they are at the lower end the Federal Government requires additional reassurance and maybe even a secure bond to protect taxpayer money. The word "responsibility" in the title of the composite score is not meant to

convey any further characterization of the institutions or its leaders. The score is based on certain descriptive outcomes, which is all the Federal Government needs for its purposes. Likewise, I am choosing to use the scale found in the composite score, but not to assign anything beyond that to the institution or its leadership (Chabotar, 2011; U.S. Department of Education, n.d.).

Chabotar (2011) wrote that the financial responsibility composite score as defined herein on p. 15 measures the adequacy of cash flow, budget surplus and deficits, debt, and net worth and is based on three ratios: primary reserve ratio, net income ratio, and equity ratio. A school with a score above 1.5 is considered financially responsible without the need for oversight. Even if a school has a composite score of 1.5 or more, the institution must have sufficient cash reserves, be current in paying debt, and must not have an audited financial statement denoting concerns about the survival of the school. Schools with scores of less than 1.5 but greater than or equal to 1.0 require additional governmental oversight. These schools are subject to cash monitoring and other governmental participation requirements. A school with a score less than 1.0 is considered not financially responsible by the U.S. Department of Education (U.S. Department of Education, n.d.). Theological graduate schools with trending low financial responsibility composite scores are at risk for financial instability, accreditation issues, organizational mergers, organizational closures, and reorganization (Chabotar, 2011).

Gose (2002) noted that budgetary problems were present at well-known seminaries such as Union Theological Seminary. Union Seminary, which developed a worldwide reputation in the 1960s with professors like Reinhold Niebuhr, a widely known theologian, faced a \$2.75-million budget deficit in 2002. Union Seminary had a large Ph.D. program but did not have undergraduate students to subsidize its program. Another well-established United Methodist graduate theological school, Iliff School of Theology founded in 1892 dropped full-time

equivalent enrollment about 12% from 1996 to 2002 (Gose, 2002). The United Methodist Church support had decreased from 30% of the budget in 1970 to 20% in 2002. Iliff used more aggressive fundraising and development strategies to increase funds from private donors and foundations. However, with more pressure on student revenue, the school had to draw down on its endowment at a rate of 8% to 9% a year which is double the normal draw of 4% to 5% at most colleges and universities (Gose, 2002). Continuing such a financial adjustment approach can lead to financial instability and organizational failure.

Theological graduate schools that continue to experience expenditure management problems run the risk of financial uncertainty and potential closure. Scharen (2019) shared that Andover Newton, the oldest freestanding theological school in the United States closed its Boston campus, relocated to Hartford, Connecticut in the academic year 2017 and is now embedded in the Yale School of Divinity. Meinzer (2021) noted that for all of the ATS schools in 2020, expenditures decreased for half of the ATS schools and increased for the other half. From 2016-2020, Meinzer (2021) pointed out that six out of ten schools had increases rather than decreases in expenditures.

Ruger and Meinzer (2014) found that from 2000-2011, there were tough times for theological education in the United States due to declining church support from local churches, regional judicators and national entities. Most theological schools receive financial and enrollment support from the church, but in recent years, the church has faced problems with attendance (Pew Research Center, 2019). This church attendance problem can impact the financial support that theological graduate schools receive from the church and denominations. The Pew Research Center (2019) noted that individuals who identify as Christians have declined 12% over the past decade which is concerning for theological graduate schools who depend on

Christians to support these schools. The Horizon Stewardship (n.d.) captured that "since 1980, giving to religious organizations has declined from 56.4% to 29% of all total charitable giving in 2019" (p.1). This continued trend can lead to uncertainty for the future stability of theological graduate schools.

Rowe (2022) highlighted that the business model and educational model of theological graduate schools need repair due to shifting markets, being trapped in mere subsistence existence, and being stuck in traditional offerings instead of emerging offerings. Rowe (2022) also emphasized as solutions that theological graduate schools must use more programs to generate revenue, must be more flexible and fluid, must share resources, must have values that demonstrate student learning outcomes, and must promote inclusion and growth. Theological graduate schools need financial support from the alumni, the church community, the general community and foundations but must maintain a sound business strategic model in order to prosper and grow (Rowe, 2022).

Analyzing the financial and operational indicators at theological graduate schools is paramount in determining the viability of these schools, particularly the independent theological graduate schools and the university-affiliated theological graduate schools. There is research that has examined trends in enrollment, revenues, expenditures at various periods for all ATS theological graduate schools (Meinzer, 2021; Ruger & Meinzer, 2014; Tanner, 2022; Wheeler et al., 2013). There is also research that has reviewed the financial health at private independent colleges (Altringer & Summers, 2015; Eckles, 2009; Eide, 2018; Gioiosa, 2017; Thrasher & Iwamasa, 2018; Toutkoushian & Raghav, 2019). However, there is limited scholarship reviewing the financial stability and instability of independent theological graduate schools and university-affiliated theological graduate schools in a comparative analysis.

Impact of Pandemic on Theological Graduate Schools

The COVID-19 pandemic impacted theological schools in a variety of ways. Hufman (2022) discussed that these schools were already dealing with flagging enrollment, deferred maintenance issues, campus size concerns, new technologies, and governance and mission mishaps. ATS Executive Director Frank Yamada, Ph.D., addressed the situation directly to a live audience and online stating that "the pandemic exacerbated what we've already known:

Theological schools are facing significant stresses in multiple ways" (Hufman, 2022, p. 28).

Most theological graduate schools switched to synchronous online education models, some hybrid models, and some continued traditional on-campus models during the pandemic. Many of these schools realized during the pandemic that digital learning was certainly doable. However, this transition to fewer students on campus affected schools in different ways with some schools selling campus property such as the Louisville Presbyterian Theological Seminary, McCormick Theological Seminary, and the Lutheran School of Theology (Hufman, 2022)

Shellnutt (2020) argued that before the pandemic, evangelical seminaries had been strategically addressing trends in financial constraints, theological education, curricula modifications, budget cuts, and campus reductions. These schools were offering more degree programs online and finding more creative ways to educate and train Christian leaders.

United Theological Seminary (n.d.) pointed out that post-pandemic, theological graduate education is headed towards an increased in the use of technology due to the advantages of accessibility and flexibility for the student. United Theological Seminary (n.d.) stated that "trends point to a student body seeking education that fits within secular career and family obligations. Schools once tethered to a physical campus are now expanding their offerings to students anywhere through virtual instruction" (p. 1.).

Purpose

The purpose of this quantitative study is to determine if there is a relationship between financial and non-financial variables and the financial stability and instability at theological graduate schools in the United States. The study utilized financial and non-financial data from two time periods, 2011 and 2021. This study will support school officials in understanding what key indicators can assist them in preventing acute financial instability and potential institutional failure.

Research Questions

The key quantitative research questions include the following:

- 1. What characteristics of theological graduate schools in the United States are associated with financial stability and instability?
- 2. Can the results of question one be used to predict which theological graduate schools are at risk for financial instability and potential failure?

Figure 1 shows a list of independent and dependent variables or indicators that were used to address these questions. In this study, the dependent variables included the financial responsibility composite scores for the years 2011 and 2021, and changes in financial responsibility composite scores between 2011 and 2021. The U. S. Department of Education requires for-profit and non-profit educational institutions to annually submit audited financial statements to the Department to demonstrate that they are maintaining the standards of financial responsibility necessary to participate in Title IV programs. This financial responsibility composite score is derived from the annual financial audit and is a composite of three financial ratios (U.S. Department of Education, n.d.). The independent variables include school type, enrollment, denomination, minority-serving, region, endowment, expenditures, faculty FTE,

library volume, and tuition were gathered from the annual data tables of the Association of Theological Schools (Association of Theological Schools, n.d.).

Figure 1

Independent and Dependent Variables or Indicators

Independent Variables

School type

Enrollment 2011 and 2021

Denomination

Minority-Serving

Region

Endowment 2011 and 2021

Expenditures 2011 and 2021

Faculty FTE 2011 and 2021

Tuition 2011 and 2021

Library Volumes 2011 and 2021

Dependent Variables or Indicators

Financial Responsibility Composite Scores-Years 2011 and 2021

Changes in Financial Responsibility
Composite Scores-Years 2011 and
2021

Conceptual Framework

There are three concepts that govern the framework of this study in gaining understanding that could be used to prevent institutional failure and providing effective financial and operational management at theological graduate schools. These concepts are integrated to provide a rich framework for this inquiry. First, Howard Bowen, an economist and college president, asserted in his "revenue theory of cost" that because colleges are dependent on outside revenue sources such as tuition, donations, government grants, foundation grants, and corporate funding, and these finite amounts are the only restrictions that curb higher education expenditures (Bowen, 1980). He highlighted that colleges' pursuit of prestige, excellence, and

influence can increase their desire to raise and spend as much money as is available to the institution (Bowen, 1980).

Another important perspective that guided this study includes Breneman (1994) and Townsley (2002, 2009) in the concept of private colleges and universities properly managing revenue and expenditure. Regarding revenues, Breneman (1994) established that private colleges were heavily dependent upon tuition and fees. Further, Townsley (2002, 2009) noted that small independent private colleges that depend too much on student revenue are most vulnerable to various institutional instabilities. Because of competition, rising costs, and student demand fluctuations, private colleges may be forced to compromise their mission and values to get and retain students.

Thirdly, the use of financial and non-financial indicators in higher educational institutions to increase our understanding of these indicators that in turn can be used to increase the stability of theological graduate school has influenced this study. Gilmartin (1981) looked at sixty-one indicators selected as possibly being related to institutional viability for colleges and universities. Martin and Samuels (2009) listed twenty at-risk indicators of stressed higher education institutions, and including tuition dependency of more than 85%, a ratio of less than one-to-three between the endowment and operating budget, an average tuition increase greater than 8% for five years, institutional enrollment of 1000 or fewer students, a lack of online programs being developed, and no new degree or certificate program created in two years. Townsley (2002, 2009) outlined how small colleges can weather tough times by using financial and business practices such as key indicators, financial management ratios, and strategic planning tools to manage and lead effectively.

These three concepts described how private higher educational institutions must contend with various internal and external financial and non-financial issues in order for these institutions to be successful in the short-term and long-term. The financial management of revenues and expenditures and effective enrollment management practices can influence the success or failure of an institution. Further, non-financial factors such as institutional leadership, board governance, faculty engagement, alumni engagement, and student success rates can impact the overall success of private higher educational institutions (Martin & Samuels, 2009; Townsley, 2002; Townsley, 2009).

Significance of Study

Theological graduate schools have helped produce many successful graduates, but there have been many challenges at these schools throughout the past decades. Despite closures, mergers, and reorganizations, many schools have continued to thrive by graduating prominent clergy, non-profit professionals, chaplains, Christian educators, and youth pastors who have positively impacted this society (Meinzer, 2020; Meinzer, 2021; Ruger & Meinzer, 2014; Smith, 2023; Wheeler et al., 2013; Yamada, 2021).

These institutions have dealt with numerous financial and non-financial impediments since their birth in the United States in the late 1600's with Harvard University training ministers. Eventually, independent seminaries such as Andover Theological Seminary and Princeton Theological Seminary opened in the early 1800's. Many traditional early private colleges such as Dartmouth, Columbia, and Brown and other colleges in the 1800's followed the pedagogical efforts and designs of these theological graduate schools (Naylor, 1977).

In 1971, theological graduate schools had just 10% female students. In 2021, the number of females enrolled has increased to 34%. In 2021, there were 10% Asian students in theological

graduate schools, 14% African American, 8% Latin-American, less than 1% Native American, 55% European American, and 10% international students (Association of Theological Schools, n.d.). Theological graduate schools have changed over the centuries and have become much more diverse in attempting to support and service a growing population in the United States (Association of Theological Schools, n.d.; Zikmund, 2010).

Keeping these important institutions of higher learning open and financially sound is preeminent to the continued growth of theological education. As such, this study's aim of reviewing the financial and operational variables in relation to financial instability is critical to the administrators in these institutions, the board of trustees who have fiduciary responsibility, the students who benefit from attending these schools, and the public who receive the spiritual and mental guidance that the graduates of these schools provide.

Significance of Denominations and Religious Freedom

The theological graduate schools of the Association of Theological Schools represent a wide array of religious thought which is important for religious freedom, freedom of thought and spiritual growth in this country. There are many schools representing different protestant denominations, Catholic, Orthodox, Moravian, Byzantine, Muslim, Buddhist, and Seven-Day Adventist theological graduate schools in addition to schools with offerings in Islam, Buddhism, and other religions and religious thought. The survival of these theological graduate schools is essential for the maintenance in the expression of religious freedom and thought in this country (Association of Theological Schools, n.d.).

Assumptions

The Association of Theological Schools (ATS) and the United States Department of Education provided the data for this study. The ATS Commission on Accrediting collects data

annually from all ATS schools for the Annual Data Tables. All data sets consist of self-reported information provided by each ATS school. There is an assumption that each school followed the ATS instructions and submitted accurate and up-to-date data (Association of Theological Schools, n.d.). The U.S. Department of Education requires for-profit and not-for-profit educational institutions to annually submit audited financial statements to the department to demonstrate they are maintaining the standards of financial responsibility necessary to participate in the Title IV programs. I utilized public data of each institution's financial responsibility composite score in this study. There is an assumption that each school followed the instructions of the U.S. Department of Education and submitted accurate and up-to-date data (U.S. Department of Education, n.d.). Inaccurate data could compromise the research, however, there are no predetermined ways to reduce the possibility of inaccurate reporting of information.

Delimitations

This study included only theological graduate schools in the United States accredited by the Association of Theological Schools in the United States and Canada (ATS) and the Commission on Accrediting of the ATS. Also, the data collected from the Association of Theological Schools and the U.S. Department of Education occurred in 2011 and 2021. These delimitations should not minimize the study's usefulness for theological graduate schools.

Definition of Key Terms

There are several important terms highlighted in this study:

Church or Denomination. Each school identifies its religious affiliation when it applies for ATS membership. Denomination indicates each institution's religious affiliation. Protestant denominational schools are affiliated with a single or primary Protestant denomination.

Inter/nondenominational includes schools with multiple or no denominational affiliation. Roman

Catholic schools are diocesan, university departments of theology, and religious order seminaries in the United States and Canada. Orthodox schools represent Greek Orthodox Archdiocese of America and Orthodox Church in America (Association of Theological Schools, n.d.).

College-Embedded or Affiliated Theological Graduate School. College-embedded schools are integrally related to four-year colleges or teaching universities that have limited additional graduate or professional programs (Association of Theological Schools, n.d.).

Endowment. These investments are held for long-term purposes in accordance with FASB (Financial Accounting Standards Board) No. 124. ATS uses the term long-term investments, but this study will use the term endowment (Association of Theological Schools, n.d.).

Enrollment. Head count enrollment is the total number of students enrolled (Association of Theological Schools, n.d.).

Expenditures. Expenditures combines educational and general expenditures with expenditures for auxiliary or ancillary enterprises, which include in most ATS schools such operations as student housing, meal service, and bookstore (Association of Theological Schools, n.d.).

Faculty FTE. Faculty FTE is the number of faculty members who would be teaching if all faculty were teaching full time (50% or more of their time) An example of the faculty FTE calculation includes Hood Theological Seminary in 2021 in which there were five full-time faculty and six adjunct faculty who taught more than 50% for a total of 11 faculty FTE for the Seminary (Association of Theological Schools, n.d.).

Financial Responsibility Composite Score. The Financial Responsibility Composite Score is a key variable or indicator in this study. Section 498(c) of the Higher Education Act of 1965,

as amended, requires for-profit and non-profit institutions to annually submit audited financial statements to the Department to demonstrate they are maintaining the standards of financial responsibility necessary to participate in the Title IV programs. One of many standards, which the Department utilizes to gauge the financial responsibility of an institution, is a composite of three ratios derived from an institution's audited financial statements. The three ratios are a primary reserve ratio, an equity ratio, and a net income ratio. These ratios gauge the fundamental elements of the financial health of an institution, not the educational quality of an institution. The composite score reflects the overall relative financial health of institutions along a scale from negative 1.0 to positive 3.0. Schools with scores of less than 1.5 but greater than or equal to 1.0 require additional oversight. These schools are subject to cash monitoring and other participation requirements. A school with a score less than 1.0 may continue to participate in the Title IV programs under provisional certification (U.S. Department of Education, n.d.). (See Appendix B for the calculation of a composite score for a private institution.)

Independent Theological Graduate School. Independent Schools are freestanding higher education institutions. While these schools may have consortia relationships with colleges or universities, they are not controlled by or subsumed within the formal governance structure of a college or university (Association of Theological Schools, n.d.).

Library Volumes. The total number of printed books, serials, and periodicals reported by the theological graduate school to ATS.

Minority-Serving Schools. Minority serving schools report to the Association of Theological Schools that the primary racial or ethnic composition of the school is 50% or more Asian or Pacific Islander, Black Non-Hispanic, Hispanic, American Indian, Alaskan Native or

Inuit, Visa or Nonresident Alien or Multiracial. Non-Minority serving schools report the primary composition as White Non-Hispanic (Association of Theological Schools, n.d.).

Race. Each school identifies the predominate racial/ethnic identity of its enrolled students. The identities include Asian or Pacific Islander, Black Non-Hispanic, Hispanic, American Indian, Alaskan Native or Inuit, White Non-Hispanic, Multiracial, and Visa/Nonresident Alien (Association of Theological Schools, n.d.).

Region. For purposes of this study, the United States will be divided by the following regions according to the U.S. Census with some modifications including combining the Mid-Atlantic and Northeast states due to the number of states (U.S. Census Bureau, n.d.):

South. North Carolina, South Carolina, Georgia, Tennessee, Virginia, West Virginia, Florida, Alabama, Louisiana, Mississippi, Arkansas, Kentucky, Texas, and Oklahoma

East. Virginia, West Virginia, Maryland, Delaware, New York, New Jersey, Pennsylvania, District of Columbia, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut

Midwest. Missouri, Kansas, Nebraska, Ohio, Illinois, Indiana, Michigan, Minnesota, North Dakota, South Dakota, Iowa, and Wisconsin

West. Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming (U.S. Census Bureau, n.d.).

School category size. The ATS schools are broken down by the following size type: school type one (less than 75 students), school type two (75-150 students), school type three (151-300 students), school type four (301-500 students), school type five (501-1000 students), and school type six (more than 1000 students) (Association of Theological Schools, n.d.).

School Type. School type is defined as independent theological graduate school, university-affiliated theological graduate school or college-affiliated theological graduate school (Association of Theological Schools, n.d.).

University-Embedded or Affiliated Theological Graduate School. University-embedded schools are integral parts of larger teaching or research universities with multiple professional schools/graduate programs, typically offering research doctorates in more than one area (Association of Theological Schools, n.d.).

Theological Graduate School. The member schools of The Association of Theological Schools in the United States and Canada (ATS) and the Commission on Accrediting of ATS are graduate schools of theology that educate persons for the practice of ministry, for a range of church-related professions, and for teaching and research in the theological disciplines. They include Protestant, Roman Catholic, Orthodox, and Jewish graduate schools of theology and reflect a broad spectrum of doctrinal, ecclesiastical, and theological perspectives (Association of Theological Schools, n.d.).

Tuition. This term denotes the Master of Divinity program full-time tuition charges plus other fees related to enrollment for an academic year (Association of Theological Schools, n.d.).

Conclusion

This chapter discussed the challenges and obstacles that theological graduate schools are facing. Furthermore, this chapter provides the statement of the problem, purpose of the study, research questions, conceptual framework, significance of the study, delimitations, assumptions, and definition of key terms. Chapter two will provide a review of the history of higher education and theological education, the financial landscape of private colleges and universities, the financial landscape of theological graduate schools in the United States, financial ratios and

financial standards in higher education, organizational failure and financially stressed organizations, and the changes in the landscape of the church and church support. Chapter three will detail the quantitative methodology and research tools that will be used to conduct this study. Chapter four will present the findings of the study from the quantitative analysis that addresses the research questions. Finally, chapter five will describe the study's findings relative to the literature, the ramifications for theological graduate schools and similar institutions, and recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

The purpose of this quantitative study was to determine if there is a relationship between financial and non-financial variables and financial stability and instability at theological graduate schools in the United States. The two questions that guided this study are the following: What characteristics of theological graduate schools in the United States are associated with financial stability and instability? And Can the results of question one be used to predict which theological graduate schools are at risk for financial instability and potential failure? Ruger and Meinzer (2014) and Townsley (2002, 2009) highlighted the financial troubles in theological graduate schools and small colleges, and the attempts made to adjust to overcome these concerns in tough times. Martin and Samuel (2009) denoted key financial and operational indicators in stressed colleges and universities. The use of financial instruments such as financial ratios have been utilized to assist businesses, non-profit organizations, and higher education institutions in assessing how sound an organization is and what areas need to be improved for organizational sustainability (Andrew & Friedman, 1976; Bolda & Mack, 1983; Chabotar, 2011; Chessman et al., 2017; Dennen et al., 2022; Gin, 2020).

The literature and research specific to comparing independent and dependent theological graduate schools are limited. The literature review focused on the history of higher education and theological education, the financial landscape of private colleges, the financial landscape of theological graduate schools, financial ratios and financial standards, organizational failure and financially stressed organizations, and the change in the status of the church and church support. The following table outlines the literature review related to each theme:

Table 1A Review of Operational and Financial Variables at Theological Graduate Schools

Category	Topics
History of Higher Education and Theological Education	(ATS, n.d.; Gonzalez, 2015; Farley, 1989; McCloy, 1962; Naylor, 1977; Rowe, 2022; Shaw, n.d.; Smith, 2023; Thelin, 2011; Thelin, 2019; Townsley, 2002; Yamada, 2021; Zikmund, 2010)
Financial Landscape of Private Colleges and Universities	Expenditures, Endowments, and Revenues (Andrew & Friedman, 1976; Archibald & Feldman, 2008; Arnette, 1922; Bolda & Mack, 1983; Bowen, 1980; Breneman, 1994; Cheit, 1971; Chessman et al., 2017; Desrochers et al., 2010; Eckles, 2010; Seltzer, 2023; Thrasher & Iwamasa, 2018; Townsley, 2002; Townsley, 2009)
	Enrollment and Tuition Issues (Altringer & Summers, 2015; Breneman, 1994; Davis, 2003; Eide, 2018; Gansemer-Topf, 2021; Gioiosa, 2017; Kretovics & Ecker, 2020; Toutkoushian & Raghav, 2019; Townsley, 2009)
	Financial Health and Viability (Chessman et al., 2017; Dickmeyer, 1983; Dickmeyer & Hughes, 1980; Gansemer-Topf, 2021; Gilmartin, 1984; Martin & Samuels, 2009)
Financial Landscape of Theological Graduate Schools in the United States	Enrollment and Tuition Issues (Association of Chicago Theological Schools; Association of Theological Schools, n.d.; Chaudoin, 2021; East Texas Baptist University, 2024; Gordon-Conwell Theological School, 2024; Gose, 2002; Hammond, 2024; Meinzer, 2020; Meinzer, 2021; Ruger & Meinzer, 2014; Scharen, 2019; Seltzer, 2016; Smith, 2023; Wheeler et al., 2013; Zikmund, 2010)
	Expenditures, Endowments, and Revenues (In Trust Center for Theological Schools, 2022; Meinzer, 2021; Ruger & Meinzer, 2014; Whitford, 2022)

Table 1A Review of Operational and Financial Variables at Theological Graduate Schools and (continued)

Category	Topics
	Financial Health and Viability (Fletcher, 2015; Gin, 2020; Hood Theological Seminary, n.d.; Hufman, 2022; Hughes, 2020; Kelchen, 2019; Lilly Endowment Inc., n.d.; Martin & Samuels, 2009; Meinzer, 2020; Meinzer, 2021; National Center for Education Statistics, 2010; Reformed Theological Seminary, n.d.; Ruger & Meinzer, 2014; Shellnutt, 2020; Tanner, 2017; Thomas, 2023; United Theological Seminary, n.d.; Wheeler et al., 2013; Yamada, 2020; Yamada, 2021)
Financial Ratios and Financial Standards in Higher Education	Financial Responsibility Composite Scores (Almanac, 2018; Chabotar, 2011; Chessman et al., 2017; Fain, 2017; Fain, 2017; Kelchen, 2019; Rivard, 2014; U.S. Department of Education, n.d.)
	Financial Ratio Analysis and Financial and Operational Health Indicators (Chabotar, 1989; Chabotar, 2011; Chessman et al., 2017; Gomberg & Atelsek, 1981; Horrigan, 1968; Lundy & El-Baz, 2022)
Organizational Failure and Financially Stressed Organizations	Financially Stressed Organizations, Mergers, Closures, and Reorganizations (Arnette, 1922; Cameron & Smart, 1998; Castillo & Welding, 2023; Chessman, et al., 2017; Denneen et al, 2022; Eide, 2018; Fong, 2019; Saliashvili, 2023)
	Turnaround and Revitalization (Eaker (2008; Rowe, 2022)
Changes in the Landscape of the Church and Church Support	Christianity Decline in the Church (Barna, n.d.; Jones, 2021; Naylor, 1977; Pew Research Center, 2019; Ruger & Meinzer, 2014)
	Church Giving Trends (Horizons Stewardship, n.d.; King, 2021; Pruitt, 2023)

History of Higher Education and Theological Education

In order to appreciate the legacy of theological graduate schools and the growth of higher education in this country, this review provided a connection with the history of higher education and theological education in the United States. Thelin (2019) denoted that the oldest corporation in this country is not a business, but a college. Harvard was founded in 1636, and the university's purpose was to advance learning, educate untrained ministers, and help future generations. The college trained many Puritans and Protestant clergy in its early years and offered a classic curriculum that was based on the English university model (Farley, 1989; Gonzalez, 2015; Naylor, 1977; Smith, 2023; Thelin, 2011; Thelin, 2019).

These surviving colleges founded before 1781 highlighted longevity, prestige, and church affiliation and included the following: Harvard-Congregationalist, William and Mary-Church of England, Yale-Congregationalist, Princeton-Presbyterian, Columbia-Church of England, Brown-Baptist, Dartmouth-Congregationalist, Rutgers-Dutch Reformed, and Pennsylvania-Church of England (Farley, 1989; Gonzalez, 2015; Naylor, 1977; Smith, 2023; Thelin, 2011; Thelin, 2019). Naylor (1977) stated that some Harvard and Yale graduates stayed connected to the schools a few months or several years after graduation to deepen their knowledge of divinity to prepare for clergy licensure and local parish guidance.

The second Great Spiritual Awakening in the eighteenth and nineteenth centuries in the United States increased the number of clergies, primarily European American men preparing for ministry, and many successful clergy began to create private seminaries at their homes to prepare individuals for ministry (Naylor, 1977; Smith, 2023). This second Great Spiritual Awakening led to a demand for more clergy and to the creation of new educational institutions in this country to prepare clergy for theological training. Naylor (1977) and Smith (2023) made note that Andover

Theological Seminary, founded in 1807, was the first of the Protestant seminaries in the United States. With a three-year program for college graduates, the Andover model triggered a theological graduate school expansion including, the Unitarians starting a divinity school at Harvard in 1811, the Presbyterians founding Princeton Theological Seminary in 1812, the Auburn Theological Seminary in New York in 1818, the Episcopalians establishing the General Theological Seminary in New York City in 1819, and the Baptists starting Newton Theological Seminary in 1825. There were over fifty theological seminaries established in seventeen states by 1840. These seminaries were supported by thirteen Protestant denominations (Naylor, 1977; Smith, 2023). With this graduate school model, the growth of seminaries paralleled the growth of colleges in the 1800's. The development of both colleges and seminaries was influenced by the growing independence of churches, the need to train clergy, a growing population, the advancement of multiple denominations, and the movement westward in this country (Naylor, 1977; Smith, 2023).

In the mid-1800's in America, the seminaries were primarily schools of theology, with little concern for practical skills in pastoral duties. Seminaries provided a three-year course of professional studies and required a college education for admission. Other professional schools, such as law or medicine, did not achieve comparable academic standards until the late nineteenth or twentieth century. The divinity school and the seminary were the prototype of graduate professional schools in this country (Naylor, 1977; Smith, 2023). In highlighting the importance of these graduate theological schools relative to other graduate schools during the 1800's, the prestige and accomplishments of Andover and Princeton seminaries, Yale Divinity School, or even the average theological seminary outrivaled early medical and law schools. In the middle third of the nineteenth century, few doctors had a college education. Naylor (1977) denoted that

in the 1800's, medical schools required an apprenticeship for students, and some provided a three-to-four-month course of lectures. In 1859, the University of Chicago was the first medical school to adopt a three-year course and in 1893, John Hopkins was the first medical school to require a college degree for admission (Naylor, 1977). Apprenticeship was also the preferred choice for lawyers though more had graduated from college compared to physicians. Harvard began its law school in 1817, but few law schools existed by the mid 1800's. Most law schools offered a one-year course during this time. Harvard expanded its one-and-a-half-year law course to two years in 1870, and to three years in 1877. In the 1890s, Harvard was the first law school to require an undergraduate degree (Naylor, 1977; Smith, 2023).

Male domination and piety were ingrained in the early Christian colleges in the 1800's. The majority of college presidents and most professors in the United States were ordained ministers. Chapels were universal at private colleges and even present at some state universities (Naylor, 1977). Naylor (1977) stated, "that throughout the nineteenth century, in addition to its manifest function of training ministers, the seminary provided advanced education for many men who became professors and presidents of liberal arts colleges and theological seminaries" (p. 24). Shaw University (n.d.) highlighted how their institution, the first historically Black theological school to offer courses in the Southern United States, was founded by the American Baptist Home Mission Society and the pastor Henry Martin Tupper in 1865, through the formation of a theological class of formerly enslaved Black people in Raleigh, North Carolina. Shaw University and the Shaw School of Divinity are affiliated with the American Baptist Churches USA.

Townsley (2002) emphasized that classic independent colleges kept their place with competition from new land-grant colleges and independent colleges who were committed to

technical, engineering, and scientific degrees until the mid-19th century. This situation forced traditional independent colleges to reevaluate their curricula to meet market demand. Purdue, which started as an independent college in 1869, Cornell in 1869, John Hopkins in 1876, and Lehigh in 1874, were some of the new institutions that focused on education to address a more technical and professional labor market (Townsley, 2002). In the late 1800's and early 1900's, independent colleges began receiving large funding support from the fortune of great industrialists who had begun to become philanthropists such as John D. Rockefeller, Cornelius Vanderbilt, Asa Chandler, Andrew Carnegie, J. P. Morgan, Joseph Pulitzer, George Eastman, and Russell Sage just to note a few. College presidents at these schools turned their efforts to building relationships with rich donors and wealthy foundations instead of devoting their time to the daily grind of student support (Townsley, 2002). After World War I, despite the fact that a college degree became synonymous with high social standing and strong future income, some small colleges still focused on their religious mission or liberal arts. However, many professions changed and started viewing higher education as a necessity instead of a luxury (Townsley, 2002).

The Association of Theological Schools (ATS) (n.d.) reported that graduate theological schools or seminaries in the twenty-first century continue to grow and expand, despite closures and mergers. There are now more than 270 theological graduate schools in the United States and Canada. These graduate theological schools or seminaries conduct post-baccalaureate professional and academic degree programs to educate persons for the practice of ministry and for teaching and research in the theological disciplines and are committed to strong theological education (Association of Theological Schools, n.d.). Naylor (1977) and Smith (2023) discussed that graduate theological schools were originally framed for European-American males in the

nineteenth century, but Aleshire (2002) demonstrated how racial and ethnic enrollment has grown from less than three percent of the total ATS enrollment in 1969 to approximately 20% of the total enrollment in 1999. In 2021, there were 10% Asians in theological graduate schools, 14% African American, 8% Hispanic, less than 1% Native American, 55% European American, and 10% international students (Association of Theological Schools, n.d.). In 1971, 10% of the students were female, with that number increasing to over 35% in 2007 and 34% in 2021. Theological graduate schools have changed over the centuries and have become much more diverse in attempting to support and service a growing diverse population in the United States (Association of Theological Schools, n.d.; Zikmund, 2010).

This review has demonstrated that there is research information regarding the history of private and public higher education institutions in addition to some important literature of the history and current status of theological graduate schools.

Financial Landscape of Private Colleges and Universities

Expenditures, Endowments, and Revenues

This section includes key literature on enrollment, tuition, expenditures, revenues, endowments, and the overall institutional financial health of private colleges and universities in the United States. In Arnett (1922), his seminal textbook on college financial matters emphasized that the business officer who prepares easily understood and detailed financial reports gives his institution and the public real service. Townsley (2009) commented that independent colleges and universities lack the huge state support or friends to rescue them in tough times, but the survival of private institutions depends on the presence of strong leadership, an aggressive review of the college's financial performance and position in the marketplace, and the use of mission-driven and market-driven strategies. Cheit (1971) reviewed 41 colleges and determined

that about two-thirds of the nation's public and private, two-year and four-year institutions of higher education were in some financial difficulty in 1970. Andrew and Friedman (1976) looked at 545 colleges, and the history of 59 colleges which had closed or merged in the early 1970's. They revealed that some of the closed schools were special religious institutions, and small, private liberal art colleges with lower admissions standards were in a potentially unstable position. Andrew and Friedman (1976) denoted that small, private colleges have a history of high birth and death rates with many being underfinanced from their infancy and also many were specialized, small institutions. They found that 891 colleges were opened between the years of 1770 and 1870, and 659 of those colleges closed.

Bowen (1980) purported that higher education operates with five laws:

- The dominant goals of institutions are educational excellence, prestige and influence.
- In the quest of excellence, prestige, and influence, there is virtually no limit to the amount of money an institution could spend for seemingly fruitful education ends.
- Each institution raises all the money it can.
- Each institution spends all it raises.
- The cumulative effect of the preceding four laws is toward ever-increasing expenditure. (pp. 19-20)

Further, Bowen (1980) asserted that because colleges are dependent on outside revenue sources such as tuition, donations, government grants, foundation grants, and corporate funding, these finite amounts are the only restrictions that curb higher education expenditures. Bolda and Mack (1983) examined the financial viability of 284 private colleges with three variables: expenditures, endowment, and voluntary support. They further segmented the variables into

Carnegie classification, date of founding, size of enrollment, number of alumni solicited for purposes of fund raising, geographic region, and religious affiliation. The index was used to determine financial strength and weakness. Of the six characteristics used in the index, the size of the alumni base and enrollment at the institution were critical to a private college's financial viability.

Breneman (1994) conducted a seminal study of private liberal arts colleges and found that the majority of the costs were spent on instruction and administration. In his comparison, in 1958 the costs were 67.4%, but in 1989, the instruction and administration costs had dropped to 64%. Regarding revenues, Breneman (1994) established that private colleges were heavily dependent on tuition and fees for a large percentage of their income with 57% in 1958 and 54% in 1989. Townsley (2002) stated that small independent private colleges have been vital to the existence of American higher education since its inception providing ingenuity, leadership, and academic integrity to the United States educational system. However, small independent private colleges that depend too much on student revenue are most vulnerable to various institutional instabilities because of competition, rising costs, and student demand fluctuations which may force colleges to compromise their mission and values to get and retain students (Townsley, 2002). Archibald and Feldman (2008) stated, "that the real cost of higher education per full-time equivalent student has grown substantially over the last 75 years, and the rapid rise since the early 1980s is a cause of considerable public concern" (p.268). Archibald and Feldman (2008) defined "cost disease as the idea that technological progress that increases labor productivity (and thus reduces unit cost) is not randomly distributed across industries and the likelihood of productivity growth is related to how labor is used in the industry" (p. 272).

Desrochers et al. (2010) pointed out that during the recession in 2008, although nonprofit private institutions experienced large paper losses on their financial investments, other sources of revenue grew and spending went up, continuing an unfortunate twenty-year widening gap between public and private institutions. Public institution revenues rose from tuition to supplant lost revenues from other sources, but in private non-profit institutions, increased revenues from tuition were reallocated through tuition discounts with internal student aid and scholarships. The authors realized from their studies that rising student tuition revenues did not translate into greater education, and students were paying more while institutions were subsidizing less. Desrochers et al. (2010) stated that "this gap between prices and spending raises troubling questions about the sustainability of the funding model for the future and is the source of growing public and policy critiques of higher education" (p. 7). Desrochers et al. (2010) asserted that community colleges are educating large numbers of students while their spending per student is far less than public institutions and private colleges and universities. Private institutions' spending per student has increased significantly, but few new students were added during the 1999-2009 student period. Despite the fact that public institutions and community colleges shouldered most of the increase in enrollment, private non-profit institutions have increased spending per student at such a high level, that it will be difficult for public institutions to compete with private institutions on the basis of resources and reputation (Desrochers et al., 2010).

Eckles (2010) analyzed 93 national private liberal arts colleges to compare highly efficient colleges with inefficient colleges by reviewing graduation rates and instruction costs. Eighteen were viewed as technically efficient compared to their peers and seventy-five as technically inefficient institutions. Eckles (2010) in an analysis of the 18 technically efficient

colleges revealed that some of the lower performing schools had similar results to the top performing schools. Institutions like Goucher College, Hampden-Sydney College, and Coe College had students who entered with less prestigious academic profiles, fewer full-time faculty, lower costs per undergraduate, and graduation rates from 67-71%, but these schools pushed the envelope of expectations with limited resources. They were as technically efficient as elite schools such as Williams College and Amherst College despite students from these schools having extremely high academic profiles, higher costs per student, and very high percentages of full-time faculty.

Chessman et al. (2017) declared that small and mid-sized private colleges and universities are known for small class sizes, high student-faculty interactions, a strong curriculum encouraging critical thinking and civil discourse, opportunities for self-discovery, and personal growth. Thraser and Iwamasa (2018) had results that indicated regardless of institution size, music units in private colleges consistently spent more per student than units in public universities. They also observed that small music units (less than one hundred students in public institutions or fifty students in private institutions) tended to be among the most expensive and least efficient to operate. Further in Thraser and Iwamasa (2018), mid-size units, especially public, master's-level institutions, tended to exhibit the most efficiency in terms of expenditures per student and baccalaureate-level institutions, which include liberal arts colleges and similar institutions, tended to be less efficient. Seltzer (2023) stated that per the bond rating agency Fitch Ratings Inc., the additional revenue in 2023 that colleges generate with tuition increases will not surpass increasing cost. Further, the operating performance at colleges and universities will be threatened by enrollment, labor and wage challenges.

Enrollment and Tuition Issues

In 1955, private liberal art colleges accounted for 40 percent of all higher education institutions and 26 percent of students, but by 1970 these colleges enrolled only 7.6 percent, and by 1987 they accounted for only 4.4 of total enrollments (Breneman, 1994). In the 1980's, tuition in private colleges increased by 106%, but applications at selective private schools also continued to increase (Breneman, 1994). Townsley (2009) wrote, "Colleges or universities that rely on tuition for 60% or more of their revenue are classified as tuition dependent, whereas those that receive less than 60% of their revenue from students are classified as non-tuition dependent" (p. 66).

One of the common strategies used by private colleges from the 1970's through the 2000's to increase enrollment and revenue was tuition discounting (Altringer & Summers, 2015; Davis, 2003; Kretovics & Ecker, 2020). Private colleges have used this so-called high price/high aid strategy with combined increases in their tuition prices and their institutional financial aid as their tuition pricing strategy. Davis (2003) highlighted that some colleges could increase net tuition revenue and encourage more students to enroll by giving students decent tuition discounts. Altringer and Summers (2015) and Eide (2018) saw that since the Great Recession of 2008, that the approach of using tuition discounts has been reduced. Tuition discounting does not always provide the desired enrollment increase or the appropriate tuition revenue change in concert with the discount rate. Further, Davis (2003) determined that tuition discounting can lead to other unforeseen consequences such as: (a) quality students do not always enroll, (b) lower income students pay a growing share of tuition increases, (c) lower income students may have reduced financial access, and (d) lower income students less likely to attend a private college.

Gioiosa (2017) looked at average net price on instructional and administrative expenses and enrollment levels at 866 private colleges and universities. Gioiosa (2017) data analysis revealed that "there was an inverse significant p value between average net price at all income levels and the percentage of students that enrolled in the college" (p.77). When undergraduate enrollment increased as a percentage of the total enrollment, there was a corresponding decrease in the average net price. Eide (2018) noted that enrollment at private colleges has been dwindling and deficits are increasing. The elite colleges with deep applicant pools, seemingly limitless endowment resources, and strong alumni networks are not in trouble. However, many higher education experts are concerned about small private colleges surviving. Public college systems can draw on the resources of the state government, but small private colleges tend to have small to medium size endowments and are in danger of pricing themselves out of the market with constant tuition hikes over the past ten years (Eide, 2018).

Gansemer-Topf et al. (2021) reviewed more than four hundred liberal arts colleges and found that from 2003-2013, the rate of growth of institutional aid giving levels to students had outpaced the rate of growth of net tuition revenue flowing in. The authors also found that 37% of the colleges had enrollments within one standard deviation of their profit maximizing level.

Another 11% were above the profit maximizing level and were able to increase student access but did not increase revenue levels. Thirteen percent of the liberal arts colleges were within one standard deviation of their minimum enrollment and may be at risk for tuition revenue problems (Gansemer-Topf et al., 2021).

Toutkoushian and Raghav (2019) examined the excess revenues of private, four-year nonprofit institutions from 2004 to 2016 and found that private, four-year colleges averaged double-digit excess returns. Their study showed that variations in excess revenues are connected

to a number of factors, including tuition discount rates, institution size, net tuition revenue, and yield rates. They observed that the average per-student revenues at private colleges exceeded the average expenses by about 16% per year, and excess revenues were larger prior to the recession of 2008–09. The authors found that excess revenue percentages were highest for midsize private schools, which is consistent with the application of economies and diseconomies of scale (Toutkoushian & Raghay, 2019).

Financial Health and Viability

Higher educational institutions with financial health and viability issues face potential organizational failure (Dickmeyer, 1983; Dickmeyer & Hughes, 1980). Dickmeyer and Hughes (1980) emphasized that an institution's financial condition depends on two closely related factors: its basic financial structure and the environment. Financial condition and financial risk can be assessed through four areas: financial resources, institutional flexibility, non-financial resources, and changes affecting the financial resources of the institution (Dickmeyer & Hughes, 1980). Dickmeyer (1983) recommended the following additional five indicators are used in evaluating the financial health of a higher education institution: "changes in institutional distress potential, changes in institutional financial resources, changes in academic emphasis, changes in the extent of academic opportunity, and need for more financial resources" (p. 17). Gilmartin (1981) reviewed sixty-one indicators as possibly related to institutional viability for higher education institutions. The researcher noted that twelve kinds of colleges were found to have low viability scores. These schools included small liberal art colleges, teacher colleges, two-year vocational colleges, historically Black colleges and universities, women's colleges, Presbyterian colleges, Baptist colleges, and title III federal funded institutions (Gilmartin, 1981).

Martin and Samuels (2009) defined a stressed college or university as an institution that is overly dependent on tuition or state appropriations, colleges that are smaller than they should be or need to be, and colleges that do not have a strong name-brand recognition. The authors also concluded that stressed higher education institutions had flat levels in enrollment, endowment, gifts and grants for several years, and the long-term planning efforts focused on operational sustenance instead of continued progressive growth. They also noted some additional drivers of financial stress at higher education institutions include high presidential turnover, the rising costs of technology, consumer or student demand issues, the cost of tenured faculty, and the treating of higher education like a commodity in the marketplace. Martin and Samuels (2009) listed twenty at-risk indicators of stressed higher education institutions, and some included tuition dependency of more than 85%, a ratio of less than one-to-three between the endowment and operating budget, an average tuition increased greater than 8% for five years, institutional enrollment of 1000 or fewer students, the lack of online programs being developed, and no new degree or certificate program created in two years.

This literature research of the private landscape of private colleges and universities confirmed that there is well-studied information on the revenues, expenditures, tuition, enrollment, and endowment of private higher educational institutions. As noted, private colleges and universities have experienced various financial challenges throughout their history and even concerns of late. Even so, these institutions have continued to adjust financially and operationally to survive despite some closures, mergers, and reorganizations (Chessman et al., 2017; Gansemer-Topf, 2021).

Financial Landscape of Theological Graduate Schools

Enrollment and Tuition Issues

The financial landscape of theological graduate schools and seminaries associated with the Association of Theological Schools can be viewed as precarious for some schools over the past twenty-five years. (Meinzer, 2020; Meinzer, 2021; Rowe, 2022; Smith, 2023; Yamada, 2021) This review analyzes the following areas: enrollment, tuition, expenditures, revenues, endowments, and overall institutional financial health. Gose (2002) observed that more students are attending evangelical seminaries which are not as financially sound as the more mainline Protestant seminaries governed or sponsored by the Episcopalians, Lutherans, United Methodists, and Presbyterians. Many of these mainline seminaries were established more than a century ago, and have sizable endowments that can tide them over, even though some are facing stagnant or declining enrollments. Most of the evangelical schools were established within the past sixty to seventy years and are dependent on students and strong tuition revenue for survivability. Gose (2002) noted budgetary problems were present at seminaries, for instance Union Theological Seminary, which developed a worldwide reputation in the 1960s with professors like Reinhold Niebuhr, faced a \$2.75-million budget deficit in 2002. Union had a large Ph.D. program but did not have undergraduate students to subsidize its programs. Another well-established United Methodist graduate theological school, Iliff School of Theology founded in 1892 had dropped full-time equivalent enrollment about 12% from 1996 to 2002. The United Methodist Church support had decreased from 30% of the budget in 1970 to 20% in 2002. Iliff used more aggressive fundraising and development strategies to increase funds from private donors and foundations. However, with more pressure on tuition revenue, the school had to draw down on its endowment at a rate of 8% to 9% a year which was double the normal draw of four to five percent (Gose, 2002).

Wheeler et al. (2013) stated that the first years of the twenty-first century presented major challenges for theological schools in the United States and Canada. Most North American seminaries and divinity schools, small in size and bearing high overhead costs, were hit hard by the recession of 2008. Even before the financial downturn, many schools were contending with a downward enrollment trend. Falling enrollment is the most destructive problem a school can face. It inflicts financial damage on seminaries that rely heavily on tuition payments from students. Ruger and Meinzer (2014) noted that their study of reviewing revenue at theological graduate schools is the fifth in a series of similar studies that covers five decades. Dr. L. Badgett Dillard of The Southern Baptist Theological Seminary initially looked at patterns of philanthropic support of Protestant denominational theological schools in 1971-1981, 1981-1991, and 1991-2001. The review observed that some periods experienced increasing and modest enrollment changes. Church support of many denominational theological schools declined, but individual donations increased. Ruger and Meinzer (2014) further reviewed revenue patterns from 2001-2011. Their study revealed falling enrollment and reductions in church support.

One prominent merger of two independent Lutheran theological graduate schools involved the Lutheran Theological Seminary at Gettysburg, in Pennsylvania and the Lutheran Theological Seminary at Philadelphia in 2016 (Seltzer, 2016). Other mergers of note included in 2011, three Assemblies of God institutions who voted to consolidate in Springfield, Mo. In 2009, the Jesuit School of Theology became an embedded-university theological graduate school and merged into Santa Clara University in California. (Seltzer, 2016).

On June 20, 2024, B. H. Carroll Theological Seminary merged with East Texas Baptist University after receiving approval from the regional accreditation agency, SACSCOC or the Southern Association of Colleges and Schools Commission on Colleges (East Texas Baptist University, n.d.). Hazelip Graduate School of Theology merged with Lipscomb University in 2020 as noted in Chavdoin (2021), and Northeast Seminary merged with Robert Wesleyan University in 2024 as discussed in Roberts Wesleyan University (2024).

In 2024, Gordon Conwell Theological Seminary announced a selling agreement with real estate investors for all six apartment buildings on the campus in Boston. The seminary had been in conversations to sell the entire campus (Gordon Conwell Theological Seminary, 2024).

Regarding a partnership approach, Hammond (2024) outlined the historic New York Theological Seminary partnering with Union Theological Seminary in New York. One of the most successful partnership efforts amongst theological graduate schools is a consortium in Chicago called the Association of Chicago of Theological Schools (ACTS) which was formed in 1984 by 12 theological graduate schools in Greater Chicago. The purpose of ACTS is to provide partnership with the 12 schools in the areas of student cross-registration, library access and acquisitions, interchange among faculty members in the disciplines of theological education, and interschool communication (Association of Chicago of Theological Schools, n.d.).

Scharen (2019) and Seltzer (2016) shared that Andover Newton, the oldest free-standing theological school in the United States closed its Boston campus, relocated to Hartford, Connecticut in 2016 and is now embedded in the Yale School of Divinity as of 2017. Scharen (2019) discussed how the Protestant, Catholic and Evangelical theological schools are acclimating to declining enrollment. Many are enrolling students that mimic the churches' new membership as new immigrant populations grow, and new theological education programs are

being implemented as a result. As such, the seminary and school of divinity of old are rapidly changing. Wheeler et al. (2013) noticed that twenty years ago there were more male students in master's level programs, and the loss of male students is prevalent in all denominations and religious groups except Roman Catholics. The Master of Arts programs have continued to grow while the Master of Divinity, the main degree for ordination in many denominations, has not been growing.

Over the past fifteen years, with new degree offerings, many theological graduate schools have raised their tuition rates to increase revenue and to offset the decreases in student enrollment. This may appear to be an effective revenue building strategy, but the ramifications have resulted in more student debt for these student pastors. Student debt issues are very concerning for graduates going into ministry because of low pay. Many of these students have a calling to go into ministry, but higher student debt can be an impediment to their overall spiritual and career success (Meinzer, 2020; Meinzer, 2021; Ruger & Meinzer, 2014).

Meinzer (2020) discovered that enrollment at ATS theological schools began to fall starting in 2005, and this decline was significant in all denominations of theological schools. From 2007 to 2019, between 51% and 60% of the membership had no growth and from 2015 to 2019 about 55% of ATS schools had no year-over-year growth. However, in 2020, 54% of ATS schools grew year-over-year. Meinzer (2020) made note that overall, the number of European American students enrolled is declining, and while twenty years ago the majority of students were in their thirties and forty's, the current age of students has increased. This change has resulted in many theological schools now having more minority students and older students. As noted earlier, in 2021, there were 10% Asians in theological graduate schools, 14% African American, 8% Hispanic, less than 1% Native American, 55% European American, and 10%

international students (Association of Theological Schools, n.d.). In 1971, ten percent of the students were female with that number increasing to over 35% in 2007 and now at 34% in 2021. So theological graduate schools have changed over the centuries and have become much more diverse in attempting to support and service a growing diverse population in the United States (Association of Theological Schools, n.d.; Zikmund, 2010).

Expenditures, Endowments, and Revenues

In the review of expenditures, endowments, and revenues at theological graduate schools, Ruger and Meinzer (2014) in their study revealed from 2001-2011 that: (a) there was a little more than nine percent fewer students since 2004, (b) there was a 20–30% real increase in tuition, (c) there were no percentage increases in financial aid grants, and (d) there was a continued increase in student indebtedness from undergraduate and theological studies. Further, Ruger and Meinzer (2014) found that for investments, there were two bear markets with inflation of 27% and overspending in some schools. Regarding gifts and grants, there has been a 24.3% decline in church support since 2006 and an 18.3% decline since 2008 from all other sources. In regard to cost issues, there were high fixed costs, increased educational and administrative demands, and an increase in deferred maintenance and capital renewal. Meinzer (2021) noted that from 2016-2020, six out of ten schools had increased expenditures, but in 2020, about half of ATS schools had increased expenditures and about half had decreased expenditures while the median change was flat. This demonstrates that some schools took action to control spending with the onset of the pandemic.

In Trust Center for Theological Schools (2022) showed that Princeton Theological Seminary, which is independent of Princeton University, had the highest endowment levels for theological graduate schools at \$1.45 billion. Most of the top ten schools were schools of divinity or theology embedded in private universities such as Harvard University Divinity School (\$845)

million), Yale University Divinity School (\$597 million), Candler School of Theology at Emory (\$352 million), Duke University Divinity School (\$291 million), Vanderbilt University Divinity School (\$277 million), and Perkins School of Theology at Southern Methodist University (\$248 million). The other three independent theological graduate schools were Columbia Theological Seminary (\$284 million), Pittsburgh Theological Seminary (\$262 million), and Virginia Theological Seminary (\$215 million). Eighty percent of theological graduate schools had endowment levels less than \$49 million. By denomination of the various theological graduate schools, the Presbyterian Church (USA) had nine schools with an endowment level of \$2.63 billion. The United Methodist Church had twelve schools at \$1.41 billion, the Roman Catholic Church had fifty-two schools at \$1.26 billion, the Southern Baptist Church had six schools at \$482 million, and the Evangelical Lutheran Church of America had seven schools at \$467 million (In Trust Center for Theological Schools, 2022). Whitford (2022) discussed how endowments at theological graduate schools and higher educational institutions increased due to overall stock market performance the past ten years.

Financial Health and Viability

This is a review of the financial health and viability of theological graduate schools and Christian colleges and universities. The National Center for Education Statistics (2010) stated that between 2000 and 2010, 49 Christian colleges and universities closed due to financial issues. Also, Kelchen (2019) discussed how 269 private non-profit (82) and for-profit colleges (187) failed the U.S. Department of Education financial responsibility test in 2016-2017. Fletcher (2015) identified successful strategies utilized by three Christian colleges to drive a positive net income. Christian colleges should exercise a business framework, live within their means, and avoid excess debt. These private colleges should include planning processes in their routine

structures and keep a Christ-centered mission focus emphasizing generating revenues and managing expenses (Fletcher, 2015).

Martin and Samuels (2009) determined that there are seven major causes of fragility among religiously affiliated institutions including (a) location of institution, (b) burden of liberal arts education, (c) challenges with church relations, (d) church-campus governance conflicts, (e) institutional independence and political decision-making, (f) costs of residence life, and (g) faith and accountability. The authors further noted that religiously affiliated schools and universities should use these three best practices: focus on a business model with effective teaching and learning practices and go beyond the traditional practices, encourage a strong president to take risks and help the board of trustees make bold decisions based on strategic goals, and continue seeking new segments of student marketing emphasizing organizational distinctiveness.

Yamada (2021) stated that since 2010, 50 ATS schools have merged, closed or withdrawn from ATS membership. From 2010 to 2016, there was one merger, closure, or withdrawal of an ATS school every four months. Yamada (2021) asserted that since 2017, "the average has nearly doubled to one every two months. While those numbers may seem alarming, the vast majority of these fifty schools still continue to exist and fulfill their missions, just in different forms and in different ways" (p. 1). Gin (2020) reviewed 45 ATS theological graduate schools that merged, closed, or withdrew between 2003-2018. The author created some short-term and long-term predictive factors for significant organizational change including changes in expenditures per full-time equivalent student, downward change in Master of Divinity student enrollment, low average primary reserve ratio, being located in the western region of the continent or urban area, not having added a new degree program, high average percentage of women students, and low average percentage of racial/ethnic students.

Thomas (2023) captured the recent closure of the Interdenominational Theological Center (ITC) in Atlanta, Georgia as its board of trustees declared financial exigency. ITC is one of six historically Black theological schools (HBTS) in the United States and was comprised of six denominational seminaries within the ITC structure during its history. ITS continues to struggle as more of the six denominational seminaries are seeking separate accreditation and funding models. Losing the ITC partnership model may have negative consequences for such denominational partnerships in the future for some theological graduate schools (Thomas, 2023).

In reference to the general financial and educational viability of theological schools before and during the pandemic, Hughes (2020) voiced that before the pandemic, Central Baptist Theological Seminary was doing online theological education for years and received approval from ATS in 2017 for a fully online Master of Divinity degree. The president stated that most theological institutions were considering new pedagogical delivery methods before COVID-19 (Hughes, 2020). Tanner (2017) surveyed 273 ATS theological graduate schools just before the pandemic in 2017 and found that 58% had comprehensive distance education and 44% offered degrees that were completely or mostly online. Amid the COVID-19 pandemic, Wake Forest School of Divinity used a blended pedagogical approach with face-to-face and online modalities. McAfee School of Theology at Mercer University was able to use online technology delivery systems through the benefits from a deep well of campus resources (Hughes, 2020). Reformed Theological Seminary with a campus in Charlotte offers the Master of Arts in Biblical Studies, the Master of Arts in Theological Studies, and the Master of Arts in Religion in a 100% online format through their RTS Global Education program which is approved by ATS (Reformed Theological Seminary, n.d.). Similarly, since the pandemic, Hood Theological Seminary has offered two tracks for all of their degree programs. The Track One program is a residential

offering during the week, and the Track Two program is 100% online on Friday and Saturday. All the degree programs are ATS approved including the Master of Divinity, Master of Theological Studies, Master of Arts in Chaplaincy, Master of Arts in Christian Education, Master of Arts in Christian Ministry, and the Doctor of Ministry (Hood Theological Seminary, n.d.).

In Hufman (2022), ATS Executive Director Frank Yamada, Ph.D., addressed how theological graduate schools were resilient as they faced the residue of the Covid-19 pandemic realizing that the pandemic had exposed some problem areas and some strength areas at theological graduate schools in general. Shellnutt (2020) argued that before the pandemic, evangelical seminaries had been strategically addressing trends in financial constraints, theological education, curricula modifications, budget cuts, and campus reductions. These schools were offering more degree programs online and finding more creative ways to educate and train Christian leaders. United Theological Seminary (n.d.) pointed out that post-pandemic, theological graduate education is headed towards an increased in the use of technology due to the advantages of accessibility and flexibility for the student.

Finally, the Lilly Endowment Inc. has played a significant role in financially supporting the Association of Theological Schools, ATS theological graduate schools, and national, regional and local Christian organizations to ensure that these organizations are finding ways to support Christianity, improve the church and its ministries, improve theological education, and create a better connection with the church and theological graduate schools. Some of the initiatives implemented by the Lilly Endowment include (a) improving the public understanding of religion, (b) strengthening religious institutions and networks, (c) deepening Christian life, (d) strengthening pastoral leadership, and (e) enhancing congregational vitality (Lilly Endowment Inc., n.d.).

The financial and operational landscape of theological graduate schools has helped produce many graduates, but there have been many challenges throughout the past decades. Despite closures, mergers, and reorganizations, many schools have continued to thrive by graduating prominent clergy, non-profit professionals, chaplains, and youth pastors who are positively impacting this society (Meinzer, 2020; Meinzer, 2021; Ruger & Meinzer, 2014; Wheeler et al., 2013; Yamada, 2021).

In this review of the financial landscape of theological graduate schools, there was research confirming enrollment, tuition, expenditures, endowments, and revenues issues and problems in independent and university-embedded theological graduate schools. However, there is limited data reviewing these variables in independent theological graduate schools and university-embedded theological graduate schools separately and in a comparative analysis.

Financial Ratios and Financial Standards in Higher Education Financial Responsibility Composite Scores

The review of financial ratios and financial standard in higher education consisted of financial responsibility composite scores, financial ratio analysis, and financial and operational health indicators. Chabotar (2011) wrote that the financial responsibility composite score measures the adequacy of cash flow, budget surplus and deficits, debt, and net worth and is based on three ratios: primary reserve ratio, net income ratio, and the equity ratio. In the Higher Education Act of 1965, section 498(c) requires for-profit and non-profit institutions to submit audited financial statements to the Department of Education to demonstrate they are maintaining the standards of financial responsibility necessary and one of many standards, which the Department utilizes to gauge the financial soundness of an institution, is a composite of three ratios called the financial responsibility composite score (U. S. Department of Education, n.d.)

The three ratios are a primary reserve ratio, an equity ratio, and a net income ratio. The primary reserve ratio is defined as expendable net assets (or expendable equity) divided by total expenses. The equity ratio is defined as net assets (or equity) divided by total assets. The net income ratio is defined as the excess of revenue over expenses divided by total revenue. These ratios gauge the fundamental elements of the financial health of an institution, but not the educational quality of an institution (U. S. Department of Education, n.d.). A university or colleges score is translated to strength factors, weighted, and combined into a composite score ranging from -1 to +3. Institutions with scores of 1.5+ are considered a passing score. The Department of Education considers the college or university financially responsible without the need for further oversight. Institutions with composite scores between 1 and 1.4 are allowed to participate in Title IV but are subject to special requirements. Scores below one is not permitted by the Department of Education without providing some additional surety or letter of credit (Chabotar, 2011; U.S. Department of Education, n.d.).

For the period 2015-2016, Almanac (2018) described that 259 private colleges scored below the passing financial responsibility composite score with similar results as noted in Kelchen (2019) for the period 2016-2017. Fain (2017) revealed how many private colleges have criticized the Department of Education methodology for the financial responsibility composite scores. Some college officials think that the scoring method fails to use accepted accounting practices, looks retrospective, and does not grasp the intricacies of higher education. Rivard (2014) pointed out that Stanford University is a prestigious university and has wealthy donors, is doing well and had a perfect score of 3.0. However, an area of concern was that none of the Ivy League colleges with large endowments and long histories got perfect scores. Cornell University, Dartmouth University, Harvard University and Yale University all received a 2.2 on the scale, the

same scores as Cooper Union College in New York, Colleen O'Hara's Beauty Academy in California, the Joe Kubert School of Cartoon & Graphic Art in Delaware and the Diesel Driving Academy in Louisiana (Rivard, 2014). The Department of Education's office of Inspector General has acknowledged that the scoring method can be improved (Fain, 2017). I used the FRCS as a part of my study instead of other financial tools, because for theological graduate schools, the U. S. Department of Education has the public availability of the FRCS data for private institutions including theological graduate schools on their website data base. The data for other financial tools is not publicly available or publicly known.

Chessman et al. (2017) discussed another similar ratio tool, the Composite Financial Index (CFI), which is comprised of the primary reserve ratio, net income ratio, return on net assets ratio, and viability ratio. The primary reserve and the net income ratios are the same as aforementioned. The return on the net assets' ratio is the third component ratio for the CFI and is focused specifically on operations. To calculate the return on net assets ratio, divide the change in total net assets (CUNA) from the entire year by the total net assets at the beginning of the year. The last ratio is the viability ratio, which focuses on the total expenses for the year and long-term debt. To calculate the viability ratio, an institution divides its total expendable net assets by its long-term debt. The CFI ranges from -4, where an institution should consider whether financial exigency is appropriate; to 10, where an institution can deploy resources to achieve robust mission. A score of 3 or higher represents an institution that has a relatively strong position (Chessman et al., 2017; Hunter, 2012; Townsley, 2009). Finally, Chessman et al.(2017) stated that the financial ratios and the Composite Financial Index (CFI) indicated that small and midsized colleges and universities had weathered the 2007–2009 recession. In their review, 67

percent of these colleges and universities had achieved a level of financial health at or above the 3.0 CFI threshold of viability by 2013–2014.

Financial Ratio Analysis and Financial and Operational Health Indicators

Many organizations use various financial ratio analysis to determine the financial health and viability of the organization. Horrigan (1968) reviewed the use of ratio analysis from 1900-1960. The author discussed how ratios can be important for business in predicting failure up to five years in advance and can be useful for small firms for internal and external evaluations for investment and credit assessment. Gomberg and Atelsek (1981) reviewed financial and nonfinancial indicators that were developed by the American Council of Education and the National Association of College and University Business Officers that related to faculty, students, administrators, the physical plant, financial resources, estimated risk, changes affecting financial resources, and nonfinancial resources. Chabotar (1989) proposed that financial ratios which have been used in business may be good for non-profits and an analysis of tuition revenues to instructional expenditures may provide a good understanding of a college's financial condition and priorities. Using the same ratio viewed for several fiscal years allows managers' tools to identify areas of improvement or deterioration.

Lundy and El-Baz (2022) revealed that a "new EY-Parthenon metric shows that 40% of US higher education institutions are at or nearing financial and operational risk. EY-Parthenon Institutional Viability Metric (IVM) incorporates measures of financial position, market demand and student outcomes to give a dynamic view of an institution's health" (p. 1). Lundy and El-Baz (2022) used six weighted IVM metrics to score an institution's risk: profit margin and reserve ratio, total enrollment over the past five years, net tuition and fees over the past five years, and delivery and outcomes including six-year bachelor's graduation rate, and full-time retention rate.

This review revealed that financial ratios and financial standards have played critical roles in assisting businesses and non-profit organizations in assessing the financial health of these organizations. Many colleges and universities including theological graduate schools utilize these tools as guides for determining financial and operational stability. Without these tools, many organizations may have experienced unforeseen organizational mishaps (Chabotar, 2011; Chessman et al., 2017; Gomberg & Atelsek, 1981; Horrigan, 1968). I choose the FRCS as the financial tool because for the theological graduate schools, the data base is publicly available at the U. S. Department of Education's website. The data for the other financial tools is not publicly available or publicly known for theological graduate schools.

Organizational Failure and Financially Stressed Organizations Financially Stressed Organizations, Mergers, Closures and Reorganizations

Institutions that experience financial stress over time are subject to potential organizational failure. As noted earlier, in Arnett (1922) this seminal textbook on college financial matters admonished higher education administrators who provide easily understood but detailed financial reports, do the college and the public a tremendous service. In Cameron and Smart (1998), regardless of whether a college is facing a deficit or surplus, fiscal stress, or limited resources, an increase in revenues does not ensure that a college will operate more effectively. Cameron and Smart (1998) emphasized that higher education institutions that develop the dirty dozen attributes have the following problems: centralization, short-term crisis mentality, lack of innovation, resistance to change, loss of morale, politicized interest groups, lack of trust, nonprioritized cutbacks, increasing conflict, lack of teamwork, restricting communication and scapegoating leaders in association with decline and downsizing are likely to be indicators of underperforming organizations.

Denneen et al. (2022) pointed out that one hundred schools closed or merged over the ten-year period studied after 2010, and one-third of universities face an unsustainable financial future so early preparation is important for the surviving schools. Eide (2018) highlighted that in Massachusetts, the Boston Conservatory merged, Wheelock College was absorbed into Boston University, Mount Ida was acquired by the University of Massachusetts, and Atlantic Union College closed. Additionally, tenured faculty were laid off at Mills College and the College of New Rochelle in New York, and Colby-Sawyer in New Hampshire decided to cut five majors, including English. Chessman et al. (2017) noted that private colleges Burlington College and St. Catherine College closed in 2016. Eide (2018) discussed how Sweet Briar College, a women's college in Virginia with an endowment of over \$80 million, was scheduled to close in 2015 but was able to revamp and stabilize its finances. Fong (2019) observed an analysis by the University Professional and Continuing Education Association that revealed of those colleges and universities that are closing, merging or consolidating, the majority are private institutions. Castillo and Welding (2023) discussed closures of colleges and universities since March of 2020 in the United States with 78% being private for-profit, 21% private non-profit, and 1% public. Saliashvili (2023) pointed out that King's College, a Christian private university in New York City made faculty cuts and cancelled fall classes in 2023.

Turnaround and Revitalization

Eaker (2008) conducted a study of forty-five private colleges to establish some common characteristics associated with experiencing financial distress. The researcher found that each institution had its unique revitalization process, and the most relevant finding was that the colleges facing financial peril implemented strong financial strategies too quickly. Instead of moving to financial measures, the most successful private colleges are those that get their

governing board involved and enhance their governance practices and share information with all organizational players such as faculty, administration, and staff (Eaker, 2008). Rowe (2022) highlighted that the business and educational models for theological graduate schools need repair due to market changes, changing student demographics, relying on traditional offerings, and continuing to exist as normal. Rowe (2022) noted that theological graduate schools must use more programs to generate revenue, must be more flexible and fluid, must share resources, must have values that demonstrate student learning outcomes, and must promote inclusion and growth.

In the review of organizational failure and financial stressed organizations, there is research regarding various organizations including private colleges and theological graduate schools. This information endorsed that there are a number of private colleges and theological graduate schools dealing with mergers, closures, and reorganizations. More research is required in comparing the differences among the theological graduate schools.

Changes in the Landscape of the Church and Church Support Christianity Declines in the Church

The Christian church has been going through changes over the past decade, and Barna (n.d.) pointed out that just one in four Americans is a practicing Christian and since 1993, one-third fewer Americans are attending weekly church service. Jones (2021) showed that "Americans' membership in houses of worship continued to decline in 2020, dropping below 50% for the first time in Gallup's eight-decade trend" (p. 1). U. S. church membership has decreased from 73% in 1937 to 47% in 2020. There are more adults with no religious preferences and fewer people with church membership. Jones (2021) noticed that "church membership is strongly correlated with age, as 66% of traditionalists -- U.S. adults born before 1946 -- belong to a church, compared with 58% of baby boomers, 50% of those in Generation X and 36% of

millennials" (p. 2). Pew Research Center (2019) discovered that both Protestantism and Catholicism are experiencing losses of population share, but Barna (n.d.) noted that Americans are still praying weekly and Bible reading is still steady. The percentage of U.S. adult Protestants has decreased to 43% from 51% in 2009. The percentage of Catholics dropped from 23% to 20%. Other categories of non-Christian groups have increased such as atheists, agnostics, no religion, and the nones or no Christian affiliated population (Pew Research Center, 2019). Many theological graduate schools depend on support for students and funding from churches so this gradual decline in Christian affiliation has the potential to decrease the demand for students (Ruger & Meinzer, 2014). Unfortunately, a shift is occurring which is the opposite of the Great Spiritual Awakening in the 1800's in which the increase in student demand expanded the theological graduate school or seminary (Naylor, 1977).

Church Giving Trends

As discussed, many theological graduate schools receive financial support from churches, Christian organizations, and denominational support. Over the past forty years, giving to Christian organizations and the church has been the leading giving category by individuals, but the percentage of giving has decreased greatly. Horizons Stewardship (n.d.) identified the following trends in religious giving since 1980. Giving to religious organizations has declined from 56.4% to 30.5% of total charitable giving by individuals. In 2018 and 2019, religious giving was down 1.7%. In general, 69% of all charitable giving in 2019 came from individual giving, and this type of giving has stayed consistent over the past 40 years. King (2021) summed that religious giving (narrowly defined as giving to congregations, denominations, missionary societies, and religious media) grew one percent in 2020, but compared to the overall five percent growth across all various forms of charitable giving, religious giving continues to lose

market share. While religious giving is still the largest giving area at 28% of total giving, the overall percentage has drastically decreased over the past four decades. Recent data by Pruitt (2023) showed that for 2022, giving to religion grew 5.2% to \$143.57 billion or 27% of total giving. However, the inflation adjusted figure showed a decline of 2.6%. As such, religious organizations and theological graduate schools must adjust to these new realities in Christianity and religious giving as they implement their strategic planning efforts by seeking support and funding from more diverse sources (Rowe, 2022).

The review of changes in the landscape of the church, church support, theological graduate schools is somewhat limited due to the recent changes in church affiliation in the United States. The church giving level trends in this country have been studied for a number of years, but further research must be conducted regarding the relationship with the support of theological graduate schools, particularly the independent theological graduate schools and church support.

Conclusion

This review looked at the history of higher education in general and theological education in particular. Operational and financial variables were reviewed in the financial landscape of private schools and theological graduate schools, financial ratios and financial standards, and organizational failure. Additionally, a review of the church and church support was completed. However, there is limited research reviewing the independent theological graduate school regarding financial instability and the relation of the independent theological graduate school and the university-embedded theological graduate schools. Further research is required, because as noted in the review of the general private colleges, the smaller colleges which are similar to the theological graduate schools with less financial backing and more internal problems, are subject

to organizational failure. The next chapter looks at the quantitative methodology used to review financial and non-financial variables at theological graduate schools.

CHAPTER 3: METHODOLOGY

Financial instability is of concern for theological graduate schools in the United States. These important schools have experienced many changes over the past twenty years, and these changes may impact the future delivery of theological education. The purpose of this quantitative study was to determine the relationship between the financial and non-financial variables and financial stability and instability at theological graduate schools in the United States which will support the school officials in understanding what indicators can assist in preventing financial instability and potential failure. This study analyzed financial and nonfinancial factors or variables of theological graduate schools in the years 2011 and 2021. This chapter includes research questions, methodology and design, the population and the sample, instrumentation, data collection and management, data analysis, specification of variables, statistical models, and limitations.

Research Questions

The research questions included the following:

- 1. What characteristics of theological graduate schools in the United States are associated with financial stability and instability?
- 2. Can the results of question one be used to predict which theological graduate schools are at risk for financial instability and potential failure?

Research Methodology and Design

This research used a quantitative nonexperimental research approach as noted in Mertens (2020) in order to compare differences in categorical and interval variables through the use of multiple regression which is the most effective analysis for this data set and the associated research questions. The use of quantitative research is a popular research method in education and the social sciences and involves testing one or more hypotheses (Coladarci & Cobb, 2014).

The quantitative method was appropriate for this study, because the approach included analyzing historical quantitative financial and non-financial data from the theological graduate institutions within the Association of Theological Schools (ATS) in the United States. Data was gathered from the annual ATS data tables and the financial responsibility composite data was obtained from audited financial statements submitted annually by these non-profits to the U.S. Department of Education for the years 2011 and 2021.

Multiple regression analysis was the primary analysis used to explain variation in an outcome by modeling the relationship between two variables while controlling for the influence of other variables. It is also used to predict an outcome by modeling the relationship between an outcome of interest and two or more variables (Baguley, 2014; Coladarci & Cobb, 2014). In this study, the dependent variables included the financial responsibility composite scores for the years 2011 and 2021, and the financial responsibility composite scores for changes between the years 2011 and 2021. The independent variables included school type, enrollment, denomination, minority serving school, region, endowment, expenditures (revenues are included but reflected as equal to expenditures which is common practice with non-profit institutions), faculty FTE, library volumes, and tuition. The variables are shown in Figure 2.

Figure 2

Independent and Dependent Variables in the Study

Independent Variables-2011 and 2021

School type Enrollment

Denomination Minority-Serving Region
Endowment Expenditures

Faculty FTE Tuition Library Volumes

Dependent Variables or Indicators

Financial Responsibility Composite Scores-Years 2011 and 2021

Changes in Financial Responsibility Composite Scores-Years 2011 and 2021

Population and Sample Selection

The population included 244 theological graduate schools in the United States that are members of and accredited by the Association of Theological Schools. There are 161 schools that were included in the study, because of the availability of the financial responsibility composite score data for those schools (See Appendix C for the list of Theological Graduate Schools in this sample). Eighty-three schools were not included, because those schools are under the financial auspice of their denomination, diocese, or church organization and do not report data to the U. S. Department of Education.

Secondary public financial and non-financial data from the Association of Theological Schools was available on the ATS website and was used in this study (Association of Theological Schools, n.d.). The ATS data of the variables was the years 2011 and 2021. The U. S. Department of Education website provided the secondary public data of the financial responsibility composite scores of each school from annual audited financial reports (U. S. Department of Education, n.d.). The data for the financial responsibility composite scores was the year 2011 and 2021 or the available data closest to those years. Mertens (2020) highlighted the use of secondary data in various quantitative research studies.

While theological graduate schools are concerned about their financial stability and instability, these are not very precise terms. To do a quantitative analysis of the various factors that might contribute to financial stability and instability, we needed a more precise quantitative measure of financial stability and instability. The scale produced by the Department of Education in their financial responsibility composite score provides such an option. By using this measure for the quantitative analysis, I am not suggesting that the score is equivalent to the common discussion of financial stability and instability of theological graduate schools, rather a measure that is widely used in higher education that will allow me to do a quantitative analysis of the

factors affecting financial stability and instability in theological graduate schools. I recognize I am using it for a different purpose than its base use by the Department of Education. There are problems with the composite score as highlighted in the literature review, and it has faced criticism, but it has continued to be used in higher education.

The financial responsibility composite score of the independent theological school is a result of a financial audit of the finances of the entire independent theological school during the school's fiscal year. The financial responsibility composite score of the university-embedded theological school is a result of a financial audit of the finances of the entire university during the school's fiscal year not only of the finances of the university-embedded school of divinity, school of theology, or theological seminary but the entire university's finances.

Instrumentation

This research used a quantitative nonexperimental research approach that measures and predicts relationships of key variables. R statistical programming software was used to perform a variety of statistical analyses, computing, and graphics (Baguley, 2014). The Annual Data Sets of the Association of Theological Schools are the secondary data sources that were utilized (Association of Theological Schools, n.d.). The financial responsibility composite scores of non-profit educational institutions were available as annual data sets through the U.S. Department of Education for each theological graduate school that has a separate tax-exempt section 501-C-3 designation noting the school as a non-profit school (U. S. Department of Education, n.d.). I choose the FRCS as the financial tool because of its public availability of the data for the theological graduate schools. The data for other financial tools such as the Composite Financial Index and the new EY-Parthenon metric are not publicly available or publicly known for ATS theological graduate schools.

Data Collection and Management

The data collection process included retrieving secondary public financial and non-financial data from the websites of the Association of Theological Schools and the U.S.

Department of Education (Association of Theological Schools, n.d.; U.S. Department of Education, n.d.). This data was downloaded to Microsoft excel spreadsheets with commaseparated values (CSV) files. The financial and non-financial data included financial responsibility composite scores for years 2011 and 2021, changes in financial responsibility composite scores for years 2011 and 2021, school type (independent theological graduate schools, university-embedded theological graduate schools, and college-embedded theological graduate schools), denomination, region, race, enrollment, endowment, expenditures, library volumes, faculty FTE and tuition. The data was transferred to the R statistical programming software to perform the statistical analyses (Baguley, 2014).

Data Analysis Procedures

The R statistical programming software is used to perform statistical computing and graphics in academia, data science, statistics, finance, and social media. The R software was used to perform multiple regression analysis. The study is designed to measure relationships and predictions with financial and non-financial variables. Consequently, the steps involved an initial correlational analysis of the aforementioned variables in order to eliminate multicollinearity with highly correlated variables. (Coladarci & Cobb, 2014; Mertens, 2020). Correlational design is used in determining whether a relationship exists among variables (Coladarci & Cobb, 2014). A trend analysis of the quantitative variables was conducted comparing changes in the years 2011 to 2021 for the following variables: financial responsibility composite scores, expenditures, enrollment, endowment, library volume, faculty FTE, and tuition. The main analysis was multiple regressions which are used to review relationships and outcomes. Multiple regression is

a statistical technique that is used to analyze the relationship between one of the single dependent variables (financial responsibility composite scores 2011 and 2021 and changes in financial responsibility composite scores 2011 and 2021) and several independent variables (school type, enrollment, denomination, minority-serving, region, endowment, expenditures, library volumes, faculty FTE and tuition) to determine association and predictability (Coladarci & Cobb, 2014; Mertens, 2020).

Specifications of Variables

Next, there was a review of the variables with source, calculations, and codes that will be included in the analysis. The data for the variables was collected for the years 2011 and 2021. For those variables with measures that are categorical, the researcher created dummy-coded (0/1) variables to indicate the group or category membership.

Church or Denomination. The religious affiliation for each school will be dummy coded: Roman Catholic, Non denomination, Baptist, Methodist, Presbyterian/Reformed, Episcopalian, Lutheran, United Church of Christ, Other, and Disciples of Church. (Association of Theological Schools, n.d.).

Endowment. This variable will be a dollar amount of investment funds (Association of Theological Schools, n.d.).

Enrollment. This variable is a whole number for student enrollment (Association of Theological Schools, n.d.).

Expenditures. This variable is a dollar amount of expenditures (Association of Theological Schools, n.d.).

Faculty FTE. This variable is the whole number of the number of faculty (Association of Theological Schools, n.d.).

Financial Responsibility Composite Score. This variable is a continuous number from a composite of three ratios with the value ranging from -1 to 3 (U.S. Department of Education, n.d.).

Library Volumes. The total number of printed books, serials, and periodicals reported by the theological graduate school to ATS.

Minority-Serving Schools. Minority serving schools report to the Association of Theological Schools that the primary racial or ethnic composition of the school is 50% or more of the following: Asian or Pacific Islander, Black Non-Hispanic, Hispanic, American Indian, Alaskan Native or Inuit, Visa or Nonresident Alien or Multiracial. Non-Minority serving schools report the primary composition as White Non-Hispanic (Association of Theological Schools, n.d.).

Region. For the region classifications, there were four dummy coded variables used to identify the groups. For purposes of this study, the regions will be separated by a slightly modified version of the United States census classification: South, East, Midwest, and West (U.S. Census Bureau, n.d.).

Theological Graduate School. The variables for theological graduate schools were coded as follows: independent theological graduate schools in one group and university-embedded theological graduate schools and college-embedded theological graduate schools as group two (Association of Theological Schools, n.d.).

Tuition. This variable is a dollar amount of the cost of attending school and is the full tuition price (Association of Theological Schools, n.d.).

Statistical Models

There were nine primary models developed to analyze independent and dependent variables for the years 2011 and 2021. Nine models were developed to analyze the variables separately and in full context. The models are noted below with research questions.

1. What characteristics of theological graduate schools in the United States are associated with financial stability and instability? The eight models addressed this question.

There was an initial trend analysis that reviewed the changes from the year 2011 to year 2021 of the quantitative variables: financial responsibility composite scores, expenditures, enrollment, endowment, library volumes, faculty FTE, and tuition. A correlational analysis was then completed for all the variables. In the regression analysis, there were eight models with the following variables: the independent variables (school type, enrollment, denomination, minority-serving, region, endowment, expenditures, library volume, faculty FTE, and tuition) and the dependent variable of financial responsibility composite scores for years 2011 and 2021 were used to evaluate the association between the independent and dependent variables using multiple regression analysis. The variables are listed below in Figure 3.

Figure 3

Independent and Dependent Variables for the Nine Models

Independent Variables-2011 and 2021

School type Enrollment

Denomination Minority-Serving

Region Endowment Expenditures

Faculty FTE Tuition Library Volumes

Dependent Variables or Indicators

Financial Responsibility Composite Scores-Years 2011 and 2021

Changes in Financial Responsibility Composite Scores-Years 2011 and 2021 *Model One*-This regression model compares independent schools to university-embedded schools with the financial responsibility composite score as the dependent variable. The model included an analysis of the year 2011 and an analysis of the year 2021.

Model Two-This regression model compares schools by region (South, East, Midwest, and West) and minority-serving schools with the financial responsibility composite score as the dependent variable. The model included an analysis of the year 2011 and an analysis of the year 2021.

Model Three-This regression model compares the schools by denominations (Roman Catholic, Non-Denomination, Baptist, Methodist and Episcopalian, Presbyterian, Lutheran and Church of Christ, and Other with the financial responsibility composite score as the dependent variable. The model included an analysis of the year 2011 and an analysis of the year 2021.

Model Four- This regression model compares the schools by independent schools, embedded schools, region (South, East, Midwest, and West) and minority serving schools with the financial responsibility composite score as the dependent variable. The model included an analysis of the year 2011 and an analysis of the year 2021.

Model Five- This regression model compares the schools by independent schools, embedded schools, denominations (Roman Catholic, Non-Denomination, Baptist, Methodist and Episcopalian, Presbyterian, Lutheran and Church of Christ, and Other with the financial responsibility composite score as the dependent variable. The model included an analysis of the year 2011 and an analysis of the year 2021.

Model Six- This regression model compares the schools by quantitative variables including expenditures, enrollment, endowment, faculty FTE, tuition and library volumes with

the financial responsibility composite score as the dependent variable. The model included an analysis of the year 2011 and an analysis of the year 2021.

Model Seven- This regression model compares the schools by independent schools, embedded schools, expenditures, enrollment, endowment, faculty FTE, tuition and library volume with the financial responsibility composite score as the dependent variable. The model included an analysis of the year 2011 and an analysis of the year 2021.

Model Eight- The first seven models were used for descriptive purposes and to identify the effects of specific variables by themselves, while this model was used to test the first research question. This full regression model of all the variables compares the schools by independent schools, embedded schools, region (South, East, Midwest, and West) and minority serving schools, denominations (Roman Catholic, Non-Denomination, Baptist, Methodist and Episcopalian, Presbyterian, Lutheran and Church of Christ, Other, expenditures, enrollment, endowment, faculty FTE, tuition and library volumes with the financial responsibility composite score as the dependent variable.

Can the results of question one be used to predict which theological graduate schools are at risk for financial instability and potential failure? This question was addressed in the trend analysis in the review of the descriptive statistics for 2011 and 2021 and regression model nine.

Model Nine- This regression model compared the differences in financial responsibility composite scores in the years 2011 and 2021 for independent schools and university-embedded schools. This model was developed to address differences from 2011 and 2021 for the key predictive dependable variable, financial responsibility composite score. We chose not to include other variables in this model, but instead focus on the financial responsibility composite score in answering the second research question.

Limitations and Delimitations

The results of this study are not applicable for use by public universities or colleges, or community colleges. A qualitative study could be the next step in this research process by talking directly with senior officials at various theological graduate schools across the country or region regarding financial sustainability and instability issues and how schools are addressing these issues.

Summary

This quantitative study analyzed and evaluated the differences between financial and non-financial variables at theological graduate schools in the United States. The researcher analyzed the relationships between financial and non-financial variables using multiple regression to review relationships and predictability with the independent and dependent variables with key models. In sum, the chapter included methodology and design, the population, instrumentation, data collection and management, data analysis, specification of variables, statistical models, and limitations. The next two chapters provided the results of these analyses with conclusions and recommendations of the research.

CHAPTER FOUR: RESULTS

Theological graduate schools have faced significant challenges over the past twenty years, particularly the past ten years. This chapter presents the descriptive, correlational, and analytical findings related to the study's research question: What characteristics of theological graduate schools in the United States are associated with financial stability and instability? Can the results of question one be used to predict which theological graduate schools are at risk for financial instability and potential failure? Specifically, the purpose of this quantitative study was to determine if there is a relationship between financial and non-financial variables and financial stability and instability at theological graduate schools in the United States. The study utilized the data from 2011 and 2021 with a focus on the key financial variable, Financial Responsibility Composite Score (FRCS). The researcher calculated correlation analysis, trend analysis, and multiple regressions.

Sample

The initial sample of theological graduate schools included all 244 of the approved Associated of Theological Schools in the United States. The sample had to be modified to include only theological graduate schools who submitted the FRCS to the Department of Education. Theological graduate schools whose financial responsibility fall under a non-educational organization such as Christian organizations like a diocese, denominational conference, association, or entity, or a special Christian organization are not required to report a FRCS to the Department of Education.

The 161 schools that participated in this study had to be accredited by the Associated of Theological Schools and submitted financial information to the U.S. Department of Education to participate in Financial Student Aid (FSA) programs such as the various Title IV programs. This

information is used to evaluate a school's financial responsibility through the submitting of audited financial statements and the calculation of the school's Financial Responsibility Composite Scores. Schools that did not report this information to the Department of Education and did not provide a composite score, did not participate in Title IV programs. As such, the schools that did not report composite scores to the Department of Education are from various denominations and regions of the country with no differentiation other than the lack of a composite score. The financial responsibility composite scores came from data in the years 2011 and 2021. However, due to how some schools report data, some data came from the year's closest to 2011 and 2021 such as 2012, 2020, and 2019.

To do a quantitative analysis of the various factors that might contribute to financial stability and instability, we needed a more precise quantitative measure of financial stability and instability. The scale produced by the Department of Education in their financial responsibility composite score provides such an option. By using this measure for the quantitative analysis, I am not suggesting that the score is equivalent to the common discussion of financial stability and instability of theological graduate schools, rather a measure that is widely used in higher education that will allow me to do a quantitative analysis of the factors affecting financial stability and instability in theological graduate schools.

Finally, categorical variables in the sample had to be coded with zero or one as the dummy codes to complete the various statistical analysis. The categorical qualitative variables for 2011 and 2021 included school type, minority serving, South, East, Midwest, West, Roman Catholic, non-denomination, Baptist, Methodist and Episcopalian, Presbyterian, Lutheran and Church of Christ, and other Christian or religious institutions. Financial quantitative variables

included FRCS, expenditures, enrollment, endowment, tuition, faculty FTE, and library volumes for 2011 and 2021.

Descriptive Statistical Review

This analysis reviewed the descriptive statistics including the median, mean, and standard deviation of the independent and dependent variables. There were 161 theological graduate schools used in the study. Of these schools, 91 were independent theological graduate schools and 70 were embedded theological graduate schools in universities or colleges. Of the 161 schools, 22 were minority-serving, and 139 served the majority population in the United States. There were 46 schools in the South, 37 schools in the East, 54 schools in the Midwest, and 24 schools in the West.

Regarding schools by denomination or religious affiliation, 25 of the schools in the study were Roman Catholic. There were 37 non-denominational schools, 16 Baptist schools, 20 Methodist, Wesleyan and Episcopalians Schools, 17 Presbyterian and Reformed schools, 23 Lutheran and Church of Christ schools, and 23 schools categorized as Other. These Other schools included religious groups such as Orthodox, Seven-Day Adventist, Buddhist, Muslim, Jewish, Mennonite, Moravian, Pentecostal, Salvation Army, Assembly of God, and Byzantine and other similar religious affiliations. Some of the denominations had to be combined due to the small sample size of the associated schools.

The following denotes the descriptive statistics for the quantitative variables in the study.

Table 2 highlights the results.

 Table 2

 Independent and Dependent Variables Descriptive Statistics for 2011 and 2021

Variables	n	2011 Mean	2021 Mean	2011 Med	2021 Med	2011 Mini	2021 Mini	2011 Max	2021 Max	2011 Standard Deviation	2021 Standard Deviation
All Schools FRCS	161	2.25	2.6	2.3	3.0	2	.5	3.0	3.0	.69	.56
Embedded Schools- FRCS	70	2.4	2.71	2.5	3.0	.6	.5	3.0	3.0	.6	.5
Independent Schools- FRCS	91	2.13	2.52	2.2	2.52	2	.6	3.0	3.0	.7	.6
Expenditures	161	\$8,067	\$8,912	\$5,293	\$5,139	0	0	\$59,678	\$62,434	9118	10232
Enrollment	161	330	297	208	169	0	0	3918	2533	439	427
Endowment	161	34	62	10	19	0	0	813	1459	82	150
Library Volumes	161	243	297	137	129	0	0	9815	12594	791	1028
Tuition	161	13,103	16,619	12,786	16,080	0	0	39,710	58,590	5208	7936
Faculty FTE	161	22	19	16	14	1	2	16	14	19	15

Note. The expenditures for 2011 and 2021 are expressed by 1000, the endowments for 2011 and 2021 are expressed by 1,000,000 and library volumes for 2011 and 2021 are expressed by 100.

An analysis of this descriptive data in Table 2 revealed changes in the positions of some theological graduate schools from 2011 to 2021. The Financial Responsibility Composite Scores for all the schools increased in mean scores from 2.25 to 2.6 and median scores from 2.3 to 3.0 from 2011 to 2021. This increase may have been attributed to the large changes in endowment investments at many schools and an increase in tuition levels. The standard deviation decreased from .69 to .56 so there is less variability around the mean. Similarly, the scores for the embedded schools increased in mean scores from 2.4 to 2.71 and median scores from 2.5 to 3.0 from 2011 to 2021. Also, the independent schools had increases in mean scores from 2.13 to 2.52

and median scores from 2.2 to 2.6 from 2011 to 2021. As observed, the overall scores for the university-embedded schools are higher than the independent schools. The overall mean enrollment decreased from 330 to 297 and the median from 208 to 169. There were very large changes in endowment levels, which impacted the financial stability of some schools. The endowment mean moved from \$34 million to \$62 million and the median increased from \$10 million to \$19 million. However, this seemingly large increase only amounts to a 6-7% annual rate of return, which for this period was well below the market rate of return. Whitford (2022) discussed how the increase in the overall stock market performance played a significant role in the endowment increases due to investments at theological graduate schools and other higher educational institutions. Enrollment levels decreased from a mean of 330 in 2011 to 297 in 2021. The median enrollment levels decreased from 208 to 169. Decreasing enrollment levels can greatly affect the student revenue for the institution. Consequently, other revenue sources must be sought.

Inflation in Higher Education

The Higher Education Price Index (HEPI) is used to measure increasing costs or the inflation rate at colleges and universities which can differ from the inflation rate measured by the Consumer Price Index (CPI) (Suttles, 2023). In analyzing the trends of tuition and expenditures as presented in Table 4 below, I considered the inflationary aspects of these variables with the higher education price index (HEPI) as noted in Suttles (2023). From 2011 to 2021, the HEPI increased by 23%. The 2011adjusted mean tuition increased from \$13,103 to \$16,117 and the adjusted median tuition increased from \$12,786 to \$15,727. These increases denote a loss in spending power based on 2011data considering the 23% increase in inflation from 2011 to 2021.

These inflationary adjusted increases were in line with the 2021 mean tuition of \$16,619 and the 2021 median tuition of \$16,080.

For expenditure levels from 2011 to 2021, with a 23% HEPI increase, the mean expenditure level increased from \$8,067 to \$9,922 and the median expenditure level increased from \$5,293 to \$6,510. Similar to the tuition numbers, these increases highlight a loss in spending power based on 2011data considering the 23% increase in inflation from 2011 to 2021. These inflationary adjusted increases were higher than the 2021 expenditure mean level of \$8,912 and the 2021 median expenditure of \$5,139.

Table 3Higher Education Price Index Adjustments for Expenditures and Tuition for 2011

Variables	n	2011 Mean	2011 Adjust Mean	2021 Mean	2011 Median	2011 Adjust Median	2021 Median	2011 Max	2011 Adjust Max	2021 Max
Expenditures	161	\$8,067	\$9,922	\$8,912	\$5,293	\$6,510	\$5,139	\$59,678	\$73,404	\$62,434
Tuition	161	\$13,103	\$16,117	\$16,619	\$12,786	\$15,727	\$16,080	\$39,710	\$48,843	\$58,590

Note. The expenditures for 2011 and 2021 are expressed by 1000.

Correlation Analysis

In order to eliminate correlation concerns, a Person's correlation analysis was conducted with the following variables: FRCS for 2011 and 2021, expenditures for 2011 and 2021, endowment levels for 2011 and 2021, enrollment for 2011 and 2021, faculty FTE 2021, tuition for 2011 and 2021, and library volumes 2011 and 2021. The results of the study in Table 4 demonstrated the following key variables.

Table 4Significant Correlation of the Study Variables

Variable	FRCS 2011	FRCS 2021	Enroll 2011	Enroll 2021	Expends 2011	Expends 2021	Endow 2011	Endow 2021	Faculty FTE 2021	Tuition 2011	Tuition 2021	Lib Vol 2011	Lib Vol 2021
FRCS 2011	1.0	.39	001	002	.03	.03	.03	.05	.08	.02	.06	.01	.02
FRCS 2021	.39	1.0	.09	.12	.11	.12	.12	.15	.18	.05	.05	.08	.08
Enroll 2011	001	.09	1.0	.85	.67	.72	.16	.16	.7	.01	.006	.07	.06
Enroll 2021	03	.12	.85	1.0	.53	.69	.11	.10	.69	07	09	.03	.03
Expends 2011	.03	.11	.67	.69	1.0	.87	,67	.67	.7	.15	.15	.17	.14
Expends 2021	.03	.12	.72	.69	.87	1.0	.66	.67	.81	.17	.22	.21	.19
Endow 2011	.03	.12	.18	.11	.67	.66	1.0	.98	.42	.09	.14	.07	.05
Endow 2021	.05	.15	.16	.10	.67	.67	.98	1.0	.45	.12	.19	.16	.14
Faculty FTE 2021	.08	.18	.70	.69	.70	.81	.42	.45	1.0	.25	.26		.26
Tuition 2011	.02	.05	.01	.07	.15	.17	.09	.12	.25	1.0	.80	.28	.01
Tuition 2021	.06	.05	.006	09	.15	.22	.14	.19	.26	.80	1.0	.29	.006
Library Vol 2011	.01	.08	.07	.03	.17	.21	.07	.16	.22	.17	.18	1.0	.96
Library Vol 2021	.02	.08	.06	.03	.14	.19	.05	.14	.26	.28	.29	.96	1.0

Note. Faculty FTE 2011 was not included in the data analysis.

This correlation analysis of the variables used in this study highlighted adequate correlation for the following variables. Expenditures in 2011 correlated with enrollment in 2011 at .67, with endowment levels in 2011 at .67, with endowment levels in 2021 at .67, and with faculty FTE 2021 at .7. Expenditures in 2021 correlated with enrollment in 2011 at .72, with

enrollment in 2021 at .69, with endowment in 2011 at .66, with endowment in 2021 at .67, and with faculty FTE in 2021 at .81. Enrollment in 2011 correlated with faculty FTE in 2021 at .7 and enrollment in 2021 correlated with faculty FTE in 2021 at .69. Endowment levels in 2011 correlated with endowment levels in 2021 at .98. Enrollment levels in 2011 correlated with enrollment levels in 2021 at .85. Expenditures in 2021 correlated with enrollment levels in 2021 at .69. Expenditures in 2021 correlated with expenditures in 2011 at .87.

Regression Model Analysis

The purpose of conducting multiple regression model analyses was to explore the relationship between the quantitative variables and categorical variables to address the following research questions:

- 1. What characteristics of theological graduate schools in the United States are associated with financial stability and instability?
- 2. Can the results of question one be used to predict which theological graduate schools are at risk for financial instability and potential failure?

There were nine multiple regression models used in the study with models 1-8 addressing question one and model 9 addressing question two. Each regression model provided the value of the F-statistic, R squared, B or the coefficient estimate, t-value, and p-value. Coladarci and Cobb (2014) and Ware et al. (2013) stated that the *F-statistics* indicates whether the regression model presents a better fit to the data than a model that contains no independent variables or if the model is useful. *R-square* shows how well the data fits the regression model, the goodness of fit, the effect size of the variables in the model. Coladarci and Cobb (2014) and Ware et al. (2013 emphasized that the closer R2 is to 1 shows how well the data fits the regression model and the effect size of the variables. *Coefficient estimate or Beta (B)* describes the relationship between

to a change in an independent variable. *The t-value* is the measurement of the statistical significance of an independent variable in explaining or understanding the dependent variable. Finally, *the p-value* is a statistical number that helps determine if there is a relationship between two variables with the values .05 or below considered to be statistically significant. We will also note variables with strong p-values between .05 to .1, even though the p-values are not statistically significant. (Baguley, 2014; Coladarci & Cobb, 2014; Ware et al., 2013)

Model One

This model compared the relationship with independent theological graduate schools and university-embedded theological graduate schools in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below are tables 5 and 6 with the results of this regression analysis. Independent theological graduate schools have a statistically significance p-value in predicting a change in the FRCS with a p-value of .0157 in 2011 and a p-value of .0275 in 2021. Independent theological school yielded a -.26 difference in the financial responsibility composite score in 2011 and a -.19 difference in 2021 compared to university-embedded theological schools. This analysis is important for independent theological graduate schools in trying to determine if the schools should consider partnering with university or a university-embedded schools to improve their financial stability. An example of this strategy is highlighted in Scharen (2019) where Andover Newton, the oldest free-standing theological school in the United States closed its Boston campus in 2019, relocated to Hartford, Connecticut and is now embedded in the Yale School of Divinity.

This regression model for 2011 explained approximately 3% of the variance ($R^2 = .036$) in the financial responsibility composite score. For the 2021 regression model, the model

explained approximately 3% of the variance (R^2 = .030) in the financial responsibility composite score. These low R-square results demonstrate a weakness in the model and a small effect size of the variables.

Table 5Regression Coefficients and Multiple R-Squared for Independent and University-embedded Schools for 2011

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.39	29.492	<.001
Model	5.96	.036			
Independent School			-0.26	-2.442	.0157

Table 6Regression Coefficients and Multiple R-Squared for Independent and University-embedded Schools for 2021

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.71	41.310	<.001
Model	4.953	.03			
Independent School			-0.19	-2.226	.0275

Model Two

This model compared the relationship with theological graduate schools that are located in different regions (South, East, Midwest, and West) and minority serving in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below

are tables 7 and 8 with the results of this regression analysis. The baseline was non-minority theological schools in the western part of the country. Theological graduate schools in the Midwest had a strong p-value in predicting a change in the FRCS with a p-value of .07 in 2011. Midwestern theological schools yielded a -.308 difference in the financial responsibility composite score in 2011. None of the variables had statistical significance p-values in 2021.

This regression model for 2011 explained approximately 3% of the variance (R^2 =.031) in financial responsibility composite score. For the 2021 regression model, the model explained approximately 1% of the variance (R^2 =.012) in financial responsibility composite score. These low R-square results demonstrate a weakness in the model and a small effect size of the variables.

Table 7Regression Coefficients and Multiple R-Squared for Schools by Region and Minority- serving for 2011

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.39728	17.054	<.001
Model	1.264	.031			
Minority			034	215	.830
South			047	271	.787
East			126	697	.4865
Midwest			308	-1.823	.070

Table 8Regression Coefficients and Multiple R-Squared for Schools by Region and Minority-serving for 2021

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.63	22.987	<.001
Model	.422	.012			
Minority			095	728	.468
South			.060	.413	.680
East			044	302	.763
Midwest			067	486	.628

Model Three

This model compared the relationship with theological graduate schools that are affiliated with different denominations (Roman Catholic, non-denomination, Baptist, Methodist and Episcopalian, Presbyterian, Lutheran and Disciples of Christ, and other Christian or religious institutions) in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below are tables 9 and 10 with the results of this regression analysis. The baseline was nondenominational theological graduate schools. Roman Catholic theological graduate schools have a statistically significance p-value in predicting a change in the FRCS with a p-value of .0236 in 2011. Roman Catholic theological schools yielded a .408 difference in the financial responsibility composite score in 2011. None of the variables had statistically significance p-values in 2021.

This regression model for 2011 explained approximately 4% of the variance

(R^2 = .041) in financial responsibility composite score. For the 2021 regression model, the model explained approximately 1% of the variance (R^2 = .009) in financial responsibility composite score. These low R-square results demonstrate a weakness in the model and a small effect size of the variables.

Table 9Regression Coefficients and Multiple R-Squared by School Denomination for 2010

Variable	F	R ²	В	t-value	p-value
Intercept			2.124	18.759	<.001
Model	1.099	.041			
Roman Catholic			.408	2.286	.0236
Baptist			.163	.792	.430
Methodist/Episcopal			.151	.788	.432
Presbyterian			.029	.142	.887
Lutheran/Church of Christ			.002	.010	.992
Other			.145	.794	.428

Table 10Regression Coefficients and Multiple R-Squared by School Denomination for 2021

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.62	28.272	<.001
Model	.235	.009			
Roman Catholic			000	002	.998
Baptist			.100	.596	.552
Methodist/Episcopal			109	698	.486
Presbyterian			036	218	.828
Lutheran/Church of Christ			050	336	.737
Other			037	249	.804

Model Four

This model compared the relationship with type of independent and university-embedded theological graduate schools and schools that are located in different regions (South, East, Midwest, and West) and minority serving in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below are tables 11 and 12 with the results of this regression analysis. The baseline was university-embedded schools and nonminority schools in the west. Independent theological graduate schools have a statistically significance p-value in predicting a change in the FRCS with a p-value of .031 in 2011 and a p-value of .0498 in 2021 while controlling for the other variables. Independent theological schools yielded a -.241 difference in the financial responsibility composite scores in 2021. Midwestern theological graduate schools had a

strong p-value in predicting a change in the FRCS with a p-value of .080 in 2011. Midwestern theological school yielded a -.295-unit difference in the financial responsibility composite score in 2011.

This regression model for 2011 explained approximately 6% of the variance (R^2 = .060) in financial responsibility composite score. For the 2021 regression model, the model explained approximately 3.5% of the variance (R^2 = .035) in financial responsibility composite score. These low R-square results are higher than the previous model, but still demonstrate a weakness in the model and a small effect size of the variables.

Table 11Regression Coefficients and Multiple R-Squared Independent and University-embedded schools,
Region, and Minority-serving Schools for 2011

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.536	16.585	<.001
Model	1.982	.06			
School Type			241	-2.176	.031
Minority			002	010	.992
South			095	543	.588
East			119	000	.501
Midwest			295	-1.763	.080

Table 12Regression Coefficients and Multiple R-Squared independent and university-embedded schools,
Region, and Minority-serving Schools for 2021

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.736	21.899	<.001
Model	1.126	.035			
School Type			179	-1.977	.0498
Minority			071	543	.5877
South			.024	.167	.8675
East			039	269	.7884
Midwest			057	418	.6767

Model Five

This model compared the relationship with type of independent or university-embedded theological graduate schools and schools that are affiliated with different denominations (Roman Catholic, non-denomination, Baptist, Methodist and Episcopalian, Presbyterian, Lutheran and Disciples of Christ, and other Christian or religious institutions) in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below are tables 13 and 14 with the results of this regression analysis. The baseline was university-embedded schools and nondenominational schools. Independent theological graduate schools had a statistically significance p-value in predicting a change in the FRCS with a p-value of .0217 in 2011 and a p-value of .0411 in 2021 while controlling for the other variables. Independent theological schools yielded a -.259 difference in the financial responsibility composite scores in 2011 and a -189 difference in the financial responsibility composite scores

in 2021. Roman Catholic theological graduate schools had a statistically significance p-value in predicting a change in the FRCS with a p-value of .0235 in 2011 while controlling for the other variables. Roman Catholic theological schools yielded a .402-unit difference in the financial responsibility composite scores in 2011.

This regression model for 2011 explained approximately 7% of the variance (R^2 = .074) in financial responsibility composite score. For the 2021 regression model, the model explained 4% of the variance (R^2 = .0358) in financial responsibility composite score. These low R-square results are higher than the previous model, but still demonstrate a weakness in the model and a small effect size of the variables.

Table 13Regression Coefficients and Multiple R-Squared for Independent and University-embedded Schools and Denomination for 2011.

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.26	17.837	<.001
Model	1.737	.074			
School Type			259	-2.319	.0217
Roman Catholic			.402	2.288	.0235
Baptist			.120	.589	.5564
Methodist/Episcopal			.192	1.014	.3122
Presbyterian			.102	.506	.6137
Lutheran/Church of Christ			.019	.108	.9145
Other			.118	.652	.5154

Table 14Regression Coefficients and Multiple R-Squared for Independent and University-embedded Schools and Denomination for 2021.

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.73	26.109	<.001
Model	.812	.0358			
School Type			189	-2.059	.0411
Roman Catholic			004	029	.9768
Baptist			.069	.413	.6801
Methodist/Episcopal			079	508	.6121
Presbyterian			.017	.105	.9162
Lutheran/Church of Christ			037	253	.8009
Other			057	386	.7001

Model Six

This model compared the relationship with expenditures, enrollment, endowment, library volume, faculty FTE, and tuition in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below are tables 15 and 16 with the results of this regression analysis. None of the variables had statistically significance p-values in 2011. For 2021, endowment levels had a statistically significance p-value in predicting a change in the FRCS with a p-value of .0226 while controlling for the other variables. Endowment levels yielded a -.0012 difference in financial responsibility composite scores. Expenditure levels had a statistically significance p-value in predicting a change in the FRCS with a p-value of .0427 in

2021 while controlling for the other variables. Expenditure levels yielded a -.00002 difference in the financial responsibility composite scores in 2021. Enrollment levels had a strong p-value in predicting a change in the FRCS with a p-value of .091 in 2021. Enrollment levels yielded a .0004 difference in the FRCS in 2021.

This regression model for 2011 explained approximately 2% of the variance (R^2 = .0158) in financial responsibility composite score. For the 2021 regression model, the model explained 6% of the variance (R^2 = .0652) in financial responsibility composite score. These low R-square results demonstrate a weakness in the model and a small effect size of the variables.

Table 15Regression Coefficients and Multiple R-Squared for Quantitative Variables for 2011

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.236	14.426	<.001
Model	.4098	.0158			
Enrollment 2011			00042	-1.292	.198
Expenditures 2011			0000001	210	.992
Endowment 2011			00023	215	.830
Library Volumes 2011			000007	092	.927
Tuition 2011			000007	549	.584
Faculty FTE 2011			.01143	1.505	.134

Table 16Regression Coefficients and Multiple R-Squared for Quantitative Variables for 2021

Variable	F	R ²	В	t-value	p-value
Intercept			2.453	21.962	<.001
Model	1.791	.0652			
Enrollment 2021			.0004	1.700	.0911
Expenditures 2021			00002	-2.043	.0427
Endowment 2021			0012	2.245	.0262
Library Volumes 2021			.00003	.640	.5229
Tuition 2021			.000003	.492	.6234
Faculty FTE 2021			.0065	1.195	.2339

Model Seven

This model compared the relationship with type of independent or university-embedded theological graduate schools, schools expenditures, enrollment, endowment, library volumes, faculty FTE, and tuition in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below are tables 17 and 18 with the results of this regression analysis. The baseline was university-embedded schools. Independent theological graduate schools had a statistically significance p-value in predicting a change in the FRCS with a p-value of .0269 in 2011 while controlling for the other variables and a strong p-value of .0611 in 2021. Independent theological schools yielded a -.249 difference in the financial responsibility

composite scores in 2011. Even though not statistically significant, there would be a -.174 difference in the financial responsibility composite score in 2021. Endowment levels had a strong p-value of .0536. Even though not statistically significant, there was a .00104 difference in the financial responsibility composite scores in 2021.

This regression model for 2011 explained approximately 5% of the variance (R^2 = .0471) in financial responsibility composite score. For the 2021 regression model, the model explained approximately 9% of the variance (R^2 = .0864) in financial responsibility composite score. These low R-square results are higher than the previous models, but still demonstrate a weakness in the model and a small effect size of the variables.

Table 17Regression Coefficients and Multiple R-Squared for Independent and University-embedded Schools and Quantitative Variables for 2011

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.397	14.177	<.001
Model	1.074	.0471			
School Type			249	-2.234	.0269
Enrollment 2011			00037	-1.143	.2548
Expenditures 2011			.1620	.128	.8983
Endowment 2011			00022	209	.8350
Library Volumes 2011			000023	324	.7460

Table 17Regression Coefficients and Multiple R-Squared for Independent and University-embedded
Schools and Quantitative Variables for 2011and (continued)

Variable	F	\mathbb{R}^2	В	t-value	p-value
Tuition 2011			.000008	663	.5080
Faculty FTE 2011			.0100	1.330	.1855

Table 18Regression Coefficients and Multiple R-Squared for Independent and University-embedded Schools and Quantitative Variables for 2021

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.550	20.861	<.001
Model	2.069	.0864			
School Type			174	-1.887	.0611
Enrollment 2021			.00035	1.629	.1055
Expenditures 2021			00002	-1.488	.1389
Endowment 2021			.00104	1.945	.0536
Library Volumes 2021			.00001	.350	.7270
Tuition 2021			.000003	.540	.5903
Faculty FTE 2021			.00045	.808	.4206

Model Eight

This combined model compared the relationship with type of independent or universityembedded theological graduate schools, schools that are affiliated with different denominations (Roman Catholic, non-denomination, Baptist, Methodist and Episcopalian, Presbyterian, Lutheran and Disciples of Christ, and other Christian or religious institutions), schools that are located in different regions (South, East, Midwest, and West), minority serving, expenditures, enrollment, endowment, library volumes, faculty FTE, and tuition in 2011 and in 2021 to the dependent variable financial responsibility composite scores in 2011 and in 2021. Below are tables 19 and 20 with the results of this regression analysis. The baseline was university-embedded schools. Roman Catholic theological graduate schools had a statistically significance p-value in predicting a change in the FRCS with a p-value of .0123 in 2011 while controlling for the other variables. Roman Catholic theological schools yielded a .5156 difference in the financial responsibility composite scores in 2011. Even though not statistically significant, independent theological graduate schools had a strong p-value of .0832. Independent theological graduate schools yielded a -.236 difference in the financial responsibility composite scores in 2011. In 2021, endowment levels had a strong p-value of .0722. Even though not statistically significant, there is .00106 increase in the financial responsibility composite score in 2021. Midwestern theological graduate schools had a strong p-value in predicting a change in the FRCS with a pvalue of .0837 in 2011. Midwestern theological school yielded a -.345-unit difference in the financial responsibility composite score in 2011.

This regression model for 2011 explained approximately 11% of the variance (R^2 = .115) in financial responsibility composite score. For the 2021 regression model, the model explained approximately 9% of the variance (R^2 = .0954) in financial responsibility composite score.

These R-square results are higher than the previous model, but still demonstrate a slight weakness in the model and a small effect size of the variables.

Table 19Regression Coefficients and Multiple R-Squared for Independent Variables in the Full Model for 2011

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			2.329	9.728	<.001
Model	1.084	.115			
School Type			286	-1.745	.0832
Minority			.05589	.321	.7490
South			05824	299	.7657
East			1499	785	.4339
Midwest			3454	-1.831	.0692
Roman Catholic			.5156	2.535	.0123
Baptist			.1900	.867	.3874
Methodist/Episcop			.2722	1.339	.1828
Presbyterian			.1378	.621	.5355
Lutheran/Church of Christ			.1743	.846	.3990
Other			.2850	1.403	.1627
Enrollment 2011			.00009283	270	.7876
Expenditures 2011			0000005850	044	.9646
Endowment 2011			.0003066	.265	.7916

Table 19Regression Coefficients and Multiple R-Squared for Independent Variables in the Full Model for 2011 and (continued)

Variable	F	\mathbb{R}^2	В	t-value	p-value
Library Volumes 2011			.00002926	.397	.6921
Tuition 2011			000007773	611	.5420
Faculty FTE 2011			.004854	.609	.5434

Table 20Regression Coefficients and Multiple R-Squared for Independent Variables in the Full Model for 2021

Variable	F	\mathbb{R}^2	B t-	value	p-value
Intercept			2.561	13.721	<.001
Model	8871	.0954			
School Type			1519	-1498	.1362
Minority			0209	148	.8829
South			04979	322	.7482
East			.0921	600	.5495
Midwest			.1124	740	.4608
Roman Catholic			.07154	.422	.6736
Baptist			.1203	.656	.5131
Methodist/Episcopal			0287	172	.8641
Presbyterian			.0348	.193	.8475

Table 20Regression Coefficients and Multiple R-Squared for Independent Variables in the Full Model for 2021 and (continued)

Variable	F	\mathbb{R}^2	В	t-value	p-value
Lutheran/Disciples of Christ			.0652	.383	.7026
Other			.0417	.247	.8053
Enrollment 2021			.00034	1.403	.1628
Expenditures 2021			000018	-1.351	.1789
Endowment 2021			.00106	1.81	.0722
Library Volumes 2021			.00002	.426	.6708
Tuition 2021			.000004	.530	.5968
Faculty FTE 2021			.0046	.778	.4381

Model Nine

This model compared the change in the financial responsibility composite score from 2011 to 2021 by reviewing independent theological graduate schools and university-embedded theological graduate schools. Below is table 21 with the results of this regression analysis. Independent theological graduate schools did not have a statistically significance p-value in the difference in the FRCS from 2011 to 2021. In comparing the change in the score from 2011 to 2021 for independent theological schools, the p-value of .534 demonstrated that the change was not statistically significant. This value is much higher than the statistically significant value of .05. This regression model explained approximately 2% of the variance (R^2 = .002) in financial

responsibility composite score. These R-square results demonstrate a weakness in the model and a small effect size of the variables.

Table 21Regression Coefficients and Multiple R-Squared for the change in the FRCS in 2011and 2021 for Independent and University-embedded schools

Variable	F	\mathbb{R}^2	В	t-value	p-value
Intercept			.32	3.805	<.001
Model	.3878	.002			
School Type	2		.07	.623	.534

Dependent T-Test

An additional review was conducted of the mean differences of FRCS of all the schools and of the Roman Catholic Schools via a dependent t-test (Coladarci & Cobb, 2014). This analysis was conducted as a result of statistically significant results for FRCS with university-embedded schools and Roman Catholic Schools in some of the regression models. The dependent t-test results in Table 22 for the FRCS of all schools were t(160) = -6.4936, p=.000000001. These results are statistically significant for a mean difference of -.357764 between 2011 and 2021. This denotes that the difference in mean scores for many of the schools decreased from 2011 to 2021. The dependent t-test results in Table 23 for the FRCS of the Roman Catholic schools were t(24) = -0.88538, p = .3847. These results are not statistically significant for a mean difference of -.092 between 2011 and 2021.

Table 22Results of the Dependent T-test of the Mean Differences of the FRCS for all the Schools for 2011 and 2021

Variables	Mean difference	T(160)	p-value
All Schools FRCS	-0.357764	-6.4936	.000000001

Table 23Results of the Dependent T-test of the Mean Differences of the FRCS for the Roman Catholic Schools for 2011 and 2021.

Variables	Mean difference	T(24)	p-value
	difference		
Roman	-0.092	-0.88538	.3847
Catholic			
Schools			
FRCS			

Summary

Multiple regression analysis was used to test the following research questions: What characteristics of theological graduate schools in the United States are associated with financial stability and instability? Can the results of question one used to predict which theological graduate schools are at risk for financial instability and potential failure? There were nine regression models for the years 2011 and 2021 used to address these questions. *The first model* compared independent theological schools against university-embedded theological schools with the results of financial responsibility composite scores favoring the university-embedded theological schools had stronger finances and stronger trends in finances when compared to independent theological schools. *The second model* compared the theological schools by region and minority serving with

no statistical significances in the year 2011 or 2021. Midwestern theological schools had the best p-value in 2011 in predicting a negative financial responsibility composite score for those schools which is not financially positive for Midwestern theological schools. The third model compared theological schools by denomination and religion with Roman Catholic theological schools in 2011 displaying favorable financial responsibility composite scores compared to the other theological schools. There was no statistical significance with any of the theological schools by denomination in 2021. The fourth model compared schools by region, minority serving, independent theological schools and university-embedded theological schools. University-embedded theological schools had more favorable financial responsibility composite scores in both 2011 and 2021. In 2011, Midwestern theological schools had a strong p-value in predicting a negative movement in the financial responsibility composite score but was not statistically significant. The fifth model compared schools by denomination and religion, independent theological schools and university-embedded theological schools. Universityembedded theological schools had more favorable financial responsibility composite scores in both 2011 and 2021. In 2011, Roman Catholic theological schools had statistically significant financial responsibility composite scores compared to the other schools. The sixth model compared the six financial variables. None of the variables were statistically significant in 2011. In 2021, endowment levels and expenditures were significant for reducing the financial responsibility composite scores for theological schools which is not positive for these two variables. The seventh model compared the six financial variables, independent theological schools and university-embedded theological schools. In 2011, university-embedded schools had a statistically significant favorable financial responsibility composite score. In 2021, universityembedded schools and endowment levels were not statistically significant but certainly impacted the financial responsibility composite scores with strong p-values. *The eighth model* which was the full model with all of the variables compared schools by region, minority serving schools, schools by denomination, six financial variables, independent theological schools and university-embedded theological schools with the financial responsibility composite score. In 2011, Roman Catholic theological schools presented favorably for predicting a positive movement in the financial responsibility composite score. University-embedded theological schools fared better than independent theological schools, but not statistically significant. In 2021, endowment levels were associated with a positive financial responsibility score, but the results were not statistically significant. The majority of the models had low R-square results, which is not ideal, but there were still many variables with statistically significant p-values. Finally, *the nineth model* compared the change in the financial responsibility composite score from 2011 to 2021 by reviewing independent theological graduate schools and university-embedded theological graduate schools. There was no statistical significance in the review of changes from 2011 to 2021.

The regression models effectively addressed the research questions. In many of the models, university-embedded theological schools showed favorable results compared to independent theological schools regarding the financial responsibility composite score. Also, in the models, other key denominational variables, regional variables, and financial variables influenced the financial responsibility composite scores of theological graduate schools. In the final chapter, I will discuss the findings, implications for practice, recommendations, and limitations of this study.

CHAPTER FIVE: DISCUSSION

Nine regression models were completed in answering the research questions. In this chapter, we will discuss the findings, implications for practice, recommendations, and limitations of this study. The multiple regression models were used to test the following research questions: what characteristics of theological graduate schools in the United States are associated with financial stability and instability? and can the results of question one used to predict which theological graduate schools are at risk for financial instability and potential failure? Addressing these research questions is important in helping leaders understand how to prevent institutional failure at theological graduate schools. By reviewing and analyzing key quantitative and qualitative operational variables at these schools, the research was able to draw some conclusions from the data analysis.

Overview

Gose (2002) highlighted some of the financial challenges that private colleges were facing in the beginning of this century. Further, Ruger and Meinzer (2014) reported how some theological graduate schools have experienced enrollment and financial issues in the first decade of the twenty-first century. Gin (2020) described some characteristics of 45 theological graduate schools that closed or merged over a ten-year span from 2003-2018. Yamada (2021) discussed how during the past ten years, 50 theological graduate schools had merged, closed, or reorganized because of accreditation issues. Castillo and Welding (2023) and Saliashvili (2023) discussed the recent increases in closures and mergers in private universities in the United States.

Additionally, Pew Research Center (2019) studied changes in the life of the church regarding attendance, faithfulness, connectivity, and generational views of the church. Horizons Stewardship (n.d.) identified negative trends in religious giving since 1980. These two views of

the church and religious giving may have future consequences for the financial survivability and stability of theological graduate schools in the United States. Theological graduate schools have faced many challenges and will continue dealing with various impediments, but many are determined to continue aggressive efforts and strategies to educate and serve their unique student population (Hufman, 2022).

Theological Graduate Schools have produced and continue to produce individuals who are pastors, chaplains, counselors, teachers, non-profit leaders, youth leaders, community leaders, Christian educators, and bishops. These women and men serve in rural, urban and suburban communities throughout the United States. The spiritual organizations that these individuals work for are centers of influence in communities. They assist individuals with a multitude of problems including addiction issues, personal insecurities, marital conflicts, individual identity crisis, lack of affordable housing issues, assisting individuals without permanent homes dilemma, acute and chronic medical issues, concerns of singles, caring for children, improving the education of children, taking care of the environment in the community, and caring for individuals who are incarcerated. Without theological graduate schools graduating these strong individuals to thrive in various communities in this country, there could potentially be gaps in dealing with social ills (Association of Theological Schools, n.d.; Barna, n.d.; Hood Theological Seminary, n.d.). We must continue to ensure that these schools remain relevant and financially solvent.

Findings

This research utilized nine regression models to address the two research questions. One of the consistent findings in many of the models denoted that independent theological schools had a statistically significant p-value of less than .05 with a decrease (R²) in the financial

responsibility composite score of those schools while the university-embedded theological graduate schools were more financially stabled with higher scores and p-values less than .05. This finding is important, because independent theological graduate schools do not have the additional financial support from a college or university which is the situation with university-embedded theological graduate schools. University-embedded schools are part of private colleges and universities and are backed by a stronger funding structure of the college or university due to large budgets and more discretion to direct university resources where they are most needed.

These schools have a university president and a university board of trustees with the dean of the theological graduate school reporting to the provost or chief academic officer who reports to the college or university president (Association of Theological Schools, n.d.).

In this study of 161 schools, 91 were independent theological graduate schools and 70 were university-embedded theological graduate schools. Gin (2020) and Yamada (2021) pointed out in the past ten years that the majority of closures and mergers have been independent theological graduate schools. Seltzer (2016) stated that thirty years ago, only 20 percent of the theological schools were university-embedded, but now due the pressures of consolidations, that number has increased to 40 percent. Hufman (2022) reported that there is a continued movement with 41 percent of theological graduate schools becoming embedded into colleges and universities. On June 20, 2024, B. H. Carroll Theological Seminary merged with East Texas Baptist University after receiving approval from the regional accreditation agency, SACSCOC (East Texas Baptist University, n.d.). Hazelip Graduate School of Theology merged with Lipscomb University in 2020 as noted in Chavdoin (2021), and Northeast Seminary merged with Robert Wesleyan University in 2024 as discussed in Roberts Wesleyan University (2024).

Other mergers have included such prominent independent theological graduate schools as the Lutheran Theological Seminary at Gettysburg, in Pennsylvania, and the Lutheran Theological Seminary at Philadelphia in 2016 (Seltzer, 2016). In 2013, the largest Evangelical Lutheran Church seminary in America had major cuts. In 2011, three Assemblies of God institutions voted to consolidate in Springfield, Mo. In 2009, the Jesuit School of Theology became a university-embedded theological graduate school and merged into Santa Clara University in California. (Seltzer, 2016).

Other efforts by theological seminaries have including selling land to raise funds which is what Colgate Rochester Crozer Divinity School executed by selling 24 acres between 2016 and 2018 (Seltzer, 2016). The school has still been rightsizing to adjust to this new strategy change. In 2024, Gordon Conwell Theological Seminary announced selling agreements with real estate investors for all six apartment buildings on the campus in Boston. The seminary had been in conversations to sell the entire campus (Gordon Conwell Theological Seminary, 2024). Regarding a partnership approach, Hammond (2024) outlined how the historic New York Theological Seminary is partnering with Union Theological Seminary in New York. One of the most successful partnership efforts amongst theological graduate schools is a consortium in Chicago called the Association of Chicago of Theological Schools (ACTS) which was formed in 1984 by 12 theological graduate schools in Greater Chicago. The purpose of ACTS is to provide partnership with the 12 schools in the areas of student cross-registration, library access and acquisitions, interchange among faculty members in the disciplines of theological education, and interschool communication. The schools include Chicago Theological Seminary, Northern Seminary, North Park Theological Seminary, Bexley Seabury Theological Seminary, Catholic Theological, Garrett-Evangelical Theological Seminary, McCormick Theological Seminary,

Loyola University of Chicago Institute of Pastoral Studies, Meadville Lombard Theological School, Trinity Evangelical Divinity School, Lutheran School of Theology at Chicago and Mundelein Seminary (Association of Chicago of Theological Schools, n.d.).

The strategy of closing and merging can be devastating to independent theological graduate schools with their alumni feeling disconnected which can impact alumni giving. Also, the president and board of trustees of the independent schools lose control to the large university president and board as a result of mergers and closures. Even the mission of the new university-embedded theological school may not be in concert with the mission and values of the old independent theological school, so these closure and merger strategies require lots of communication with all of the parties involved to ensure a successful transition as noted in Scharen (2019) and Seltzer (2016) with the merger of Andover Newton Theological Seminary into Yale Divinity School.

Other key findings included the Roman Catholic theological graduate schools' financial responsibility composite scores in 2011. The difference in the yield of the score demonstrated a statistically significant p-value. However, in 2021, the Roman Catholic theological graduate schools did not exhibit a strong p-value in determining a difference in the financial responsibility composite score. The finances of the Roman Catholic theological graduation schools may have been disrupted due to changing views of traditional Christianity across the country, and the issues that the Roman Catholic Church faced with the alleged sexual misconduct by their priests and the associated financial cost. Church attendance and giving to the church has been decreasing so that certainly could have impacted the finances of the Roman Catholic theological graduate schools (Barna, n.d.; Jones, 2021; Pew Research Center, 2019). Certainly, other issues

may have been at play to have caused this change in the strength of the Roman Catholic theological graduate schools predicting a strong financial responsibility composite score in 2021.

A few of the financial variables had statistically significant p-values in predicting a change in the financial responsibility composite score. In 2021, endowment levels at independent theological schools had a strong p-value of .0262 and yield a difference in the FRCS of -.0012. Also in 2021, expenditure levels at independent theological schools had a strong p-value of .0427 and yield a difference in the FRCS of -.00002. Enrollment levels were not statistically significant but had a high p-value of .09 and yield a difference in FRCS of .0004. Even though not statistically significant, Midwestern theological graduate schools had high p-value of .07 and yield a difference in the FRCS of -.308 in 2011. In 2021, the p-value of .08 yield a difference in the FRCS of -.295. This is not positive news for Midwest theological graduate schools.

A review of the impact of inflation on tuition and expenditures from 2011 to 2021 was conducted. It is important for senior executives at theological graduate schools to be aware of how inflation reduces spending power and with a 23% increase in the Higher Education Price Index over the ten-year period, continued efforts must be in place to address this issue (Suttles, 2023). Inflation can be a financial burden to the institution and to students by reducing their spending power.

Implications for Practice

All theological graduate schools are private institutions so the strategies that private colleges and universities employ to improve their financial situation can be applied to seminaries, schools of divinity, and schools of theology. The senior officials at theological graduate schools must continuing using these strategies to extend the life of these important institutions. One of the most important strategies that a struggling independent theological

graduate school can utilize is to improve how their resources are being managed. These are tough decisions, but the efforts may include (a) merging with another private college or university with very strong finances (b) merging with a university-embedded theological school in the region to reduce expenditures (c) partnering with another university-embedded theological graduate school regarding some degree programs to increase enrollment revenues (d) partnering with other independent theological graduate schools regarding some degree programs through consortiums to increase enrollment revenues.

The strategies utilized by theological graduate schools to combat the issue of financial instability as measured by low financial responsibility composite scores can assist in stabilizing the future direction of these institutions. This study will be useful for presidents, chief financial officers, chief operating officers, chief development officers, and chief enrollment officers at independent theological graduate schools. At university-embedded theological graduate schools, school deans, chief financial officers, chief operating officers, chief development officers, and chief enrollment officers should find the results of this study profitable. The officials and staff at the Association of Theological Schools should find this research appropriate in supporting theological graduate schools.

Some of the findings that are important to senior staff and board members at independent theological schools include the differences in mean and median financial responsibility composite scores for embedded schools compared to independent schools. Even though both types of schools had increases in composite scores from 2011 to 2021, mean and median composite scores of the embedded schools were higher. The overall FRCS was expected to be higher for embedded schools, because the score reflects the entire university's financial audit statement data and not just financial data from the school of divinity or theology. For example,

Duke University's financial responsibility composite score is the score included for Duke
Divinity School. There is no separate score for the embedded Duke Divinity School. However,
both types of schools had positive trend increases from 2011 to 2021 which is credit to the
individuals at these schools. Further, the results showed that the mean enrollment level decreased
from 330 to 297 and the median enrollment level decreased from 208 to 169. Most embedded
schools have larger total university enrollment levels (Association of Theological Schools, n.d.).
Martins and Samuels (2009) pointed out in the literature review, that one indicator of a stressed
school is a school with an enrollment level of less than 1000 students. The median enrollment for
all schools decreased from 208 to 169 students, but the median composite scores increased from
2.25 to 2.6. Thus, my research does not support that for schools with less than 1000 students, the
composite score should decrease because the schools are stressed. There may be other factors
that contribute to the increase in scores.

In the literature review, Bowen (1980) discussed how universities will continue to spend as long as they receive outside revenue. In this study, median tuition increased from \$13,000 in 2011 to \$16,000 in 2021 and median endowment levels increased \$10 million to \$19 million. However, the median expenditures remained relatively flat from 2011 to 2021 at \$5.1 million, but expenditures per student increased due to less students. My research supports Bowen (1980), because tuition per student increased, endowment per student increased, and expenditures per student increased. Bowen (1980) stated that colleges and universities have created an ever-increasing expenditure pattern as these schools strive for educational excellence, prestige, and influence. Theological graduate schools indeed sought excellence, prestige, and influence.

Despite controlling total spending, the spending per student increased.

In the literature review, Chessman et al. (2017), Denneen et al. (2022), Kretovics and Eckert (2020), and Townsley (2002, 2009) argued that one of most appropriate strategies for a university or college to maintain financial stability is to manage resources by finding ways to increase revenues, reduce expenditure, and increase the endowment level. The study showed increases in endowment levels and tuition. Expenditures were flat but expenditures per student increased. As such, my research does not support that the expenditure management efforts reduced expenditure levels to support the decrease in enrollment of students at theological graduate schools (Townsley, 2002, 2009).

Two of the best internal strategies include increasing the funds raised from external sources through the Institutional Advancement or Development Departments and implementing aggressive recruiting and student marketing strategies through the Enrollment Management Department (Kretovics & Eckert, 2020). These two efforts are revenue driving mechanisms that can be effective in assisting the school in improving its financial responsibility composite score and financial outlook. Many universities and colleges are presently forging into these efforts. Other important internal strategies include finding external entities to lease building space, classroom space, or extra housing on campus to increase revenues. Theological graduate schools also need to ensure that their endowments are being managed by respectable financial investment companies to continue maximizing investment returns when the stock market adjusts.

Finally, effective expenditure management efforts will have to be continued to identify areas to reduce cost relative to the size of the theological graduate schools including more online classes to increase revenues and reduce cost. Additionally, an expenditure spending review should include the faculty, the administrative staff, the support staff, utility usage, housing,

maintenance support, food services, new building construction, and contracted services (Chessman et al., 2017; Denneen et al. 2022; Kretovics and Eckert, 2020; Townsley 2002, 2009).

Recommendations for Further Research

Further research efforts could include a mixed-method study with quantitative and qualitative studies which would involve reviewing ten schools in the four regions of the country with various denominations. The process would include interviewing the president, chief financial officer, and chief development officer regarding the implications of the financial status of their schools and strategies that are being used to ensure financial sustainability. A review of their financial data could be included in the study as well. Another approach could entail completing a qualitative study which would include interviewing six schools that have merged or become embedded into a college or university to discuss the financial state and status of those schools. The interview would include the president, chief financial officer, chief development, chief enrollment officer, and provost. Further, a qualitative study including interviews with six peer independent theological graduate schools and university-embedded schools to discuss key issues, concerns and strategies with the executive staff (Martin & Samuels, 2009; Townsley, 2009). Finally, a qualitative study that addresses issues that are limited by the analysis of quantitative studies such as insight regarding happenings at theological graduate schools through the lens of religious leaders, administrative leaders, denominational staff, alumni, and the community.

Limitation of this Study

A limitation of this study is that the findings might not be useful for some private schools, public colleges or universities, two-year community colleges, for-profit schools, theological graduate schools in Canada, or theological graduate schools who do not report

composite scores to the U.S. Department of Education. The results certainly would not apply to any type of public higher education institution. However, small private Christian colleges or universities that rely on similar financial support as theological graduate schools may benefit from the data analysis and results. The results would not be as useful to large private colleges and universities who have become non-sectarian and do not received support from Christian organizations.

Summary

The purpose of this quantitative study was to determine the relationship between the financial and non-financial variables, and the financial stability and instability at theological graduate schools in the United States. Utilizing nine regression models, correlation analysis, and trend analysis, this approach effectively identified financial and non-financial or operational variables that could assist the senior officials at theological graduate schools. Independent theological graduate schools, Roman Catholic schools, Midwestern schools, expenditures, endowment, and enrollment were variables that had some relationship with the financial responsibility composite scores of theological graduate schools in the United States. This study is most important in assisting senior officials at theological graduate schools in ensuring that these schools remain financially and operationally viable for many years to come.

REFERENCES

- Aleshire, D. (2002). Good work: Statistics on race and ethnicity. *Colloquy*. Association of Theological Schools, The Commissioning on Accrediting.

 https://s3.amazonaws.com/ptsem.edu-assets/content/pdfs/diversity-in-theological-education.pdf
- Almanac. (2018). Private colleges with low scores on the U. S. department of education's financial test scores, 2015-2016. *The Chronicle of Higher Education, 64*(41), 80-80 https://www.chronicle.com/article/private-colleges-with-low-scores-on-the-u-s-department-of-educations-financial-responsibility-test-2015-16/
- Altringer, L., & Summers, J. (2015). Is college pricing power pro-cyclical? *Research in Higher Education*, 56(1), 777–792. http://dx.doi.org/10.1007/s11162-015-9373-z
- Andrew, L. D., & Friedman, B. D. (1976). A study of the causes for the demise of certain small, private, liberal arts colleges in the United States. Virginia Polytechnic Institute and State University, Department of Education. https://files.eric.ed.gov/fulltext/ED125486.pdf
- Archibald, R. B., & Feldman, D. H. (2008). Explaining increases in higher education costs. *The Journal of Higher Education*, 79(3), 268-295.
 - https://doi.org/10.1080/00221546.2008.11772099
- Arnett, T. (1922). College and university finance. New York General Education Board.
- Association of Chicago Theological Schools. (n.d.). *About us*. https://www.actschicago.org/about-us
- Association of Theological Schools. (n.d.). *Annual data tables*. https://www.ats.edu/Annual-Data-Tables
- Association of Theological Schools. (n.d.). *Membership*. https://www.ats.edu/Membership

- Baguley, T. (2012). Serious Stats: A guide to advanced statistics for the behavioral sciences.

 London: Springer.
- Barna (n.d.). *State of the Church 2020*. https://www.barna.com/research/changing-state-of-the-church/
- Bolda, P. J., & Mack, B. A. (1983, April 13). *A measurement of financial viability among private colleges*. American Educational Research Association, Annual Meeting, Montreal,

 Canada. https://files.eric.ed.gov/fulltext/ED231325.pdf
- Bowen, H. R. (1980,). The costs of higher education. How much do colleges and universities spend per student and how much should they spend? Jossey-Bass.
- Breneman, D. W. (1994). *Liberal arts colleges: Thriving, surviving, or endangered?* The Brookings Institution.
- Cameron, K. S., & Smart, J. (1998). Maintaining effectiveness amid downsizing and decline in institutions of higher learning. *Research in Higher Education*, *39*(1), 65-86. https://doi.org/10.1023/A:1018704428790
- Castillo, E., & Welding L. (2023). *Closed colleges: List, statistics, and major closures*. Best Colleges. https://www.bestcolleges.com/research/closed-colleges-list-statistics-major-closures/
- Chabotar, K. J. (1989). Financial ratio analysis comes to non-profits. *The Journal of Higher Education*, 60(2), 188-208. https://doi.org/10.1080/00221546.1989.11775021
- Chabotar, K. J. (2011). Will your institution pass the financial-responsibility test? *Trusteeship*, 19(4), 30-33. https://www.naicu.edu/docLib/20110802_Trustshp-FinResponsTest-07-11.pdf

- Chaudoin, K. (2021, January 1). Austin graduate school of theology, Lipscomb university announce merger. https://www.lipscomb.edu/news/austin-graduate-school-theology-lipscomb-university-announce-merger
- Cheit, E. F. (1971). The new depression in higher education: A study of financial conditions at 41 colleges and universities. McGraw-Hill Book Company.
- Chessman, H. M., Hartley, H. V., & Williams, M. (2017). *The financial resilience of independent colleges and universities*, Council of Independent Colleges.

 https://www.cic.edu/resources-research/charts-data/reports/financial-resilience-report-2018
- Coladarci, T. & Cobb, C. D. (2014). Fundamentals of statistical reasoning in education (Fourth edition.). Wiley.
- Davis, J. S. (2003). *Unintended consequences in tuition discounting*. Lumina Foundation. https://files.eric.ed.gov/fulltext/ED476666.pdf
- Denneen, J., Krafft, M., Dretler, T., & Selingo, J. (2022). *The financially sustainable university: The lost decade*. Bain & Company. https://www.bain.com/insights/financially-sustainable-university-the-lost-decade-infographic/
- Desrochers, D., Lenihan, C., & Wellman, J. (2010). *Trends in college spending*, 1998-2008.

 Delta Project on Postsecondary Education Costs, Productivity, and Accountability.

 https://files.eric.ed.gov/fulltext/ED539420.pdf
- Dickmeyer, N. (1983). Financial conditions of colleges and universities. https://files.eric.ed.gov/fulltext/ED227753.pdf
- Dickmeyer, N., & Hughes, K. S. (1980). Financial self-assessment: A workbook for colleges. https://files.eric.ed.gov/fulltext/ED198753.pdf

- East Texas Baptist University. (2024, June 20). East texas baptist university and b. h. carroll theological seminary merge following SACSCOC approval. https://www.etbu.edu/etbu-now/news/2024/06/east-texas-baptist-university-and-b-h-carroll-theological-seminary-merge-following-sacscoc-approval
- Eckles, J. E. (2009). Evaluating the efficiency of top liberal art colleges. *Research in Higher Education*, 51(1), 266-293. https://doi.org/10.1007/s11162-009-9157-4
- Eide, S. (2018). Private colleges in peril. *Education Next; Cambridge, 18*(4), 1-13. https://www.proquest.com/scholarly-journals/private-colleges-peril/docview/2231482482/se-2
- Fain, P. (2017, March 1). *Call for more fed oversight*. Inside Higher Education.

 https://www.insidehighered.com/news/2017/03/01/education-departments-inspector-general-wants-feds-more-closely-monitor-colleges
- Fain, P. (2017, March 9). Feds release financial responsibility scores. Inside Higher Education. https://www.insidehighered.com/quicktakes/2017/03/09/feds-release-financial-responsibility-scores#
- Farley, E. (1989). *Theologia-The fragmentation and unity of theological education*. Fortress Press.
- Fletcher, W. L. (2015). Expense management strategies within financially successful Christian universities. *Christian Higher Education*, *14*(4), 212-228. http://dx.doi.org:10.1080/15363759.2015.1049754
- Fong, J. (2019). *The clock is ticking...Strategic recommendations for higher education in 2019*.

 University Professional and Continuing Education Association. https://upcea.edu/the-clock-is-tickingstrategic-recommendations-for-higher-education-in-2019/

- Gansemer-Topf, A. M., Orazem, P. F., & Wohlgemuth, D. R. (2021). Do liberal arts colleges maximize profit? *Southern Economic Journal*, 88(1), 274-294. https://doi.org/10.1002/soej.12521
- Gilmartin, K. J. (1981). Measuring the viability of colleges: Who is really in distress? *American Educational Research Journal*, 21(1), 79-101. https://doi.org/10.3102/00028312021001079
- Gin, D. (2020). Predicting school closures and mergers among the ATS membership. *Colloquy Online*. Association of Theological Schools.

 https://www.ats.edu/files/galleries/predictive-modeling.pdf
- Gioiosa, M. E. (2017). Do factors associated with the increases in higher education cost affect average net price at four-year private colleges? *Strategic Enrollment Management Quarterly*, 5(1), 67-79. http://dx.doi.org/10.1002/sem3.20104
- Gonzalez, J. L. (2015). The history of theological education. Abingdon Press.
- Gordon-Conwell Theological Seminary. (2024, June 4). Gordon-Conwell and real estate

 investors enter into agreement for apartments sale.

 https://www.gordonconwell.edu/news/gordon-conwell-and-real-estate-investors-enter-into-agreement-for-apartments-sale/
- Gose, B. (2002). The ups and downs of theology enrollment. *Chronicle of Higher Education*, 49(3), 1-6. https://www.chronicle.com/
- Hammond, L. (2024). Present moment | Bright past, bold future. *In Trust Center of Theological Schools*. https://www.intrust.org/in-trust-magazine/issues/summer-2024/present-moment
- Hood Theological Seminary. (n.d.). *Online education*. https://www.hoodseminary.edu/online-and-distance-education/why-choose-hts-for-your-theological-education

- Horizons Stewardship. (n.d.) *Five troubling religious giving trends*. https://blog.horizons.net/five-troubling-religious-giving-trends
- Horrigan, J. O. (1968). A short history of financial ratio analysis. *The Accounting Review, 43*(2), 284-294. http://www.jstor.org/stable/243765
- Hufman, M. (2022). Embedded or not. *In Trust Center of Theological Schools*. https://www.intrust.org/in-trust-magazine/issues/autumn-2022/embedded-or-not
- Hufman, M. (2022). Pandemic lessons. *In Trust Center of Theological Schools*. https://www.intrust.org/in-trust-magazine/issues/summer-2022/pandemic-lessons
- Hughes, C. (August 3, 2020). Trend toward online learning gives seminaries an advantage amid COVID. *Baptist News Global*.https://baptistnews.com/article/trend-toward-online-learning-gives-seminaries-an-advantage-amid-covid/
- In Trust Center for Theological Schools. (2022). *The census investments*. https://intrust.org/Magazine/Issues/Summer-2022/The-Census
- Jones, J. M. (2021). *U.S. membership falls below majority for the first time*. Gallup Poll Social Series. https://news.gallup.com/poll/341963/church-membership-falls-below-majority-first-time.aspx
- Kelchen, R. (2019, April 15). Which colleges failed the latest financial responsibility test?

 WordPress.com. https://robertkelchen.com/2019/04/15/which-colleges-failed-the-latest-financial-responsibility-test/
- King, D. P. (2021). Giving 2021: Pandemic lessons and future religious giving. *Lilly Family School of Philanthropy*. https://blog.philanthropy.iupui.edu/2021/07/06/giving-2021-pandemic-lessons-and-the-future-of-religious-giving/

- Kretovics, M. A., & Eckert, E. (2020). Business practices in higher education: A guide for today's administrators. Routledge.
- Lilly Endowment Inc. (n.d.). Our work. https://lillyendowment.org/
- Lundy, K., & El-Baz, M. (2022). Six key financial and operational metrics pinpoint higher education. Ernst & Young-Parthenon. https://www.ey.com/en_us/education/strategy-consulting/six-key-financial-and-operational-metrics-pinpoint-higher-ed-risk
- Martin, J., & Samuels, J.E., (2009). *Turnaround: Leading stressed colleges and universities to excellence*. The Johns Hopkins University Press.
- McCloy, F. D. (1962). The history of theological education in America. *Church History, 31*(4), 449-453, https://doi.org/10.2307/3162747
- Meinzer, C. (2020). An enrollment surprise—More ATS schools grow than decline since 2006. *Colloquy Online*. Association of Theological Schools, The Commission on Accrediting. https://www.ats.edu/files/galleries/an-enrollment-surprise.pdf
- Meinzer, C. (2021). ATS schools' spending amid pandemic sheds light on tough decisions made by leaders. *Colloquy Online*. Association of Theological Schools, The Commissioning on Accrediting. https://www.ats.edu/files/galleries/ats-schools-spending-amid-pandemic.pdf
- Mertens, D. M. (2020). Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods. Sage Publications.
- National Center for Education Statistics. (2010). Digest of education statistics. https://nces.ed.gov/programs/digest/d10/tables/dt10_278.asp
- Naylor, N. A., (1977). The theological seminary in the configuration of American higher education: The ante-bellum years. *History of Education Quarterly, 17* (1), 17-30. https://doi.org/10.2307/367675

- Pew Research Center. (2019). *In U.S., decline in Christianity continues at a rapid pace*. https://www.pewresearch.org/religion/2019/10/17/in-u-s-decline-of-christianity-continues-at-rapid-pace/
- Pruitt, A. (2023). *Giving to religion in giving USA 2023*. Lake Institute on Faith and Giving. https://lakeinstitute.org/resource-library/july-issue1-2023/
- Reformed Theological Seminary. (n.d.). RTS global education. https://rts.edu/campuses/online/
- Rivard, R. (2014, March 14). *Scores of problems*. Inside Higher Education.

 https://www.insidehighered.com/news/2014/03/10/can-us-government-tell-colleges-poor-financial-shape-those-are-not
- Roberts Wesleyan University. (2024, February 21). *Roberts wesleyan and northeastern seminary unite operations*. https://www.roberts.edu/news?id=7904
- Rowe, D. (2022). Sustainable pathways series: The new ecumenism: Resource sharing and beyond. [Webinar] In Trust Center for Theological Schools.

 https://intrust.org/Resources/Webinars/entryid/937/sustainable-pathways
- Ruger, A., & Meinzer, C. A. (2014). Through toil & tribulation financing theological education 2001–2011. *Auburn Studies of the Auburn Center for the Study of Theological Education,* 18(1), 1-28. https://auburnseminary.org/report/through-toil-and-tribulation/
- Saliashvili, M. (2023, July 17). *King's college makes deep cuts in faculty, cancels fall classes*.

 Religion News Service. https://religionnews.com/2023/07/17/kings-college-makes-deep-cuts-to-faculty-but-no-word-of-closure/
- Scharen, C. (2019). The current and future directions of theological education. *CrossCurrents*, 69(1), 5-9. https://www.muse.jhu.edu/article/782676.

- Seltzer, R. (2016, May 26). Seminaries squeezed.

 https://www.insidehighered.com/news/2016/05/27/traditional-theological-schools-explore-mergers-and-campus-sales-amid-financial. Inside Higher Education
- Seltzer, R. (2023). *Higher ed faces 'deteriorating' outlook in 2023*. Higher Ed Dive. https://www.highereddive.com/news/fitch-higher-ed-2023-outlook-deteriorating-enrollment-inflation-labor-wages/638460/
- Seltzer, R. (2023). Split outlook for strong vs. weak colleges in 2023. Higher Ed Dive.

 https://www.highereddive.com/news/split-outlook-for-strong-vs-weak-colleges-in-2023-spfinds/640801/#:~:text=The%20U.S.%20higher%20education%20sector,flexibility%20set
 ting%20prices%2C%20S%26P%20projects
- Shellnutt, K. (2020). COVID-19 shutdowns are shifting seminary education. *Christianity Today*. https://www.christianitytoday.com/news/2020/april/coronavirus-seminary-fuller-southern-adapt-enrollment.html
- Smith, T. A. (2023). *The end of theological education*. William B. Eerdmans Publishing Company.
- Suttles, G. (2023). *Commonfund higher education price index-2023 update*. Commonfund Institute. https://www.commonfund.org/higher-education-price-index
- Tanner, T. (2017). Online learning at ATS schools: Part 2-looking around at our present.

 Colloquy Online. www.ats.edu/files/galleries/online-learning-part-2.pdf
- Thelin, J. R. (2011). *A history of American higher education*. (2nd ed.). Johns Hopkins University Press.

- Thelin, J. R. (2019). *A history of American higher education*. (3rd ed.). Johns Hopkins University Press.
- Thomas, J. (2023). *Turner theological seminary charts a new path*. The Christian Record. https://mailchi.mp/1b98abdfcc15/tcr-breaking-news-turner-theological-seminary-charts-a-new-path?e=a3770d721a
- Thrasher, M., & Iwamasa, D. (2018). An examination of financial expenditures in American tertiary music schools, 2004-18. *Journal of Performing Arts Leadership in Higher Education*, 9(1), 4-20. https://www.proquest.com/scholarly-journals/examination-financial-expenditures-american/docview/2237802172/se-2?accountid=14605
- Toutkoushian, R., & Raghav, M. (2019). Estimated profit: A look at the excess revenues of private four-year nonprofit postsecondary institutions. *Education Finance and Policy*, 16(1), 125-145. https://doi.org/10.1162/edfp_a_00287
- Townsley, M. K. (2002). *The small college guide to financial health: Beating the odds*. National Association of College and University Business Officers.
- Townsley, M. K. (2009). The small college guide to financial health: Weathering turbulent times.

 National Association of College and University Business Officers.
- Unglesbee, B. (April 10, 2024). *Goddard college in Vermont to close*. Higher Ed Dive. https://www.highereddive.com/news/goddard-college-vermont-close-prescott-college-agreement/712842/
- United Theological Seminary. (n.d.). *The future of seminary education*. https://united.edu/the-future-in-seminary-education/
- U. S. Census Bureau (n.d.). *Data and Maps.* https://www.census.gov/

- U.S. Department of Education. (n.d.). *Financial responsibility composite scores*. https://studentaid.gov/data-center/school/composite-scores
- Ware, W. B., Ferron, J. M., & Miller, B. M. (2013). (1st ed.). *Introductory statistic: A conceptual approach using R.* Routledge
- Wheeler, B. G., Ruger, A. T., & Miller, S. L. (2013). Theological student enrollment. *Auburn Studies of the Auburn Center for the Study of Theological Education*, *16*(1), 1-24. https://auburnseminary.org/report/theological-student-enrollment/
- Whitford, E. (2022, February 17). College endowments boomed in fiscal 2021. *Inside Higher Education*. https://www.insidehighered.com/news/2022/02/18/college-endowments-boomed-fiscal-year-2021-study-shows
- Yamada, F. M. (2020). Living and teaching when change is the new normal: Trends in theological education and the impact on teaching and learning. *The Wabash Center Journal on Teaching*. *1(1)*, 23-36. https://doi.org/10.31046/wabashcenter.v1i1.1580
- Yamada, F. (2021). ATS state of the industry-Presentation for the African American presidents and deans. [Paper presentation]. Association of Theological Schools, The Commissioning on Accrediting. Washington, D.C. https://www.ats.edu/eshop-events-one/details/32/ATS-African-American-Presidents-and-Deans-Gathering
- Zikmund, B. B. (2010). Three coins in the fountain: Female leadership in theological education. *Theological Education*, 45(2), 1-60.

APPENDIX A: LIST OF ALL ATS THEOLOGICAL GRADUATE SCHOOLS

Theological Graduate School	State
Abilene Christian University Graduate School of	TX
Theology	NIV
Academy for Jewish Religion	NY
Acadia Divinity College	NS
Alliance Theological Seminary	NY
Ambrose Seminary	AB CA
America Evangelical University Graduate School of	CA
Theology Anabaptist Mennonite Biblical Seminary	IN
Anderson University School of Theology	IN
Antiochian House of Studies	CA
Aquinas Institute of Theology	MO
Asbury Theological Seminary	KY
Ashland Theological Seminary	OH
Assemblies of God Theological Seminary	MO
Associated Canadian Theological Schools	BC
Athenaeum of Ohio	OH
Atlantic School of Theology	NS
Augustine Institute	CO
Austin Presbyterian Theological Seminary	TX
Azusa Pacific Seminary	CA
B. H. Carroll Theological Institute	TX
Baptist Missionary Association Theological Seminary	TX
Baptist Seminary of Kentucky	KY
Barry University Department of Theology and	FL
Philosophy	
Beeson Divinity School	AL
Berkeley Divinity School	CT
Berkeley School of Theology (CA)	CA
Bethany Theological Seminary	IN
Bethel Seminary	MN
Bexley Hall Seabury-Western Theological Seminary	IL
Federation, Inc.	264
Boston College School of Theology and Ministry	MA
Boston University School of Theology	MA
Briercrest College and Seminary	SK
Brite Divinity School	TX
Byzantine Catholic Seminary of SS. Cyril and	PA
Methodius	М
Calvin Theological Seminary	MI
Campbell University Divinity School	NC

Canadian Baptist Theological Seminary	AB
Canadian Reformed Theological Seminary	ON
Candler School of Theology	GA
Carey Theological College	BC
Catholic Distance University Graduate School of	WV
Theology	** *
Catholic Theological Union	IL
Catholic University of America School of Theology	DC
,	DC
and Religious Studies	IZ C
Central Baptist Theological Seminary	KS
Central Baptist Theological Seminary of Minneapolis	MN
Chapman Seminary	IN
Chicago Theological Seminary	IL
China Evangelical Seminary North America	CA
Christian Theological Seminary	IN
Christian Witness Theological Seminary	CA
Church Divinity School of the Pacific	CA
Claremont School of Theology	CA
Colgate Rochester Crozer Divinity School	NY
Columbia Biblical Seminary	SC
Columbia Theological Seminary	GA
Concordia Lutheran Seminary (AB)	AB
Concordia Lutheran Theological Seminary (ON)	ON
Concordia Seminary (MO)	MO
Concordia Theological Seminary (IN)	IN
Covenant Theological Seminary	MO
Dallas Theological Seminary	TX
Denver Seminary	CO
Dominican House of Studies	DC
Dominican School of Philosophy and Theology	CA
	NJ
Drew University Theological School	
Duke University Divinity School	NC
Earlham School of Religion	IN
Eastern Mennonite Seminary	VA
Ecumenical Theological Seminary	MI
Eden Theological Seminary	MO
Emmanuel Christian Seminary	TN
Emmanuel College	ON
Erskine Theological Seminary	SC
Evangelia University Graduate School of Theology	CA
Evangelical Seminary of Puerto Rico	PR
Evangelical Theological Seminary	PA
Franciscan School of Theology	CA
Freed-Hardeman University Graduate School of	TN
Theology	

E D 'C' D'11' 10 '	α
Fresno Pacific Biblical Seminary	CA
Fuller Theological Seminary	CA
Garrett-Evangelical Theological Seminary	IL
Gateway Seminary	CA
General Theological Seminary	NY
George W. Truett Theological Seminary	TX
Georgia Central University School of Divinity	GA
Gordon-Conwell Theological Seminary	MA
Grace Mission University Graduate School	CA
Grace School of Theology	TX
Grace Theological Seminary	IN
Graduate School of Theology and Ministry in Puerto	PR
Rico, St. Albert the Great	
Graduate Theological Union	CA
Grand Canyon Theological Seminary	AZ
Grand Rapids Theological Seminary	MI
Harding School of Theology	TN
Hartford International University for Religion and	CT
Peace	
Harvard University Divinity School	MA
Hazelip School of Theology	TN
Henry Appenzeller University	CA
Heritage Theological Seminary	ON
HMS Richards Divinity School Division of Graduate	CA
Studies	
Holy Apostles College and Seminary	CT
Holy Cross Greek Orthodox School of Theology	MA
Hood Theological Seminary	NC
Houston Graduate School of Theology	TX
Howard University School of Divinity	DC
Huron University College Faculty of Theology	ON
Iliff School of Theology	CO
Immaculate Conception Seminary	NJ
Institut de Formation Theologique de Montreal	QC
~ -	PR
Inter-American Adventist Theological Seminary	
Interdenominational Theological Center	GA
International Theological Seminary	CA
James and Carolyn McAfee School of Theology	GA
Jesuit School of Theology	CA
John Leland Center for Theological Studies	VA
Kairos University	SD
Kearley Graduate School of Theology	AL
Kenrick-Glennon Seminary	MO
The King's Seminary	TX
Knox College	ON

Knox Theological Seminary	FL
Lancaster Theological Seminary	PA
Lexington Theological Seminary	KY
Liberty University John W. Rawlings School of	VA
Divinity	
Lincoln Christian Seminary	IL
Logos Evangelical Seminary	CA
Logsdon Seminary of Logsdon School of Theology	TX
Louisville Presbyterian Theological Seminary	KY
Loyola Marymount University Department of	CA
Theological Studies	
Loyola University Chicago Institute of Pastoral	IL
Studies	
Luther Seminary	MN
Lutheran School of Theology at Chicago	IL
Lutheran Theological Seminary (SK)	SK
Lutheran Theological Southern Seminary	SC
M. Christopher White School of Divinity	NC
Martin Luther University College	ON
McCormick Theological Seminary	IL
McGill University School of Religious Studies	QC
McMaster Divinity College	ON
Meadville Lombard Theological School	IL
Memphis Theological Seminary	TN
Methodist Theological School in Ohio	OH
Mid-America Reformed Seminary	IN
Midwestern Baptist Theological Seminary	MO
Missio Theological Seminary	PA
Montreal School of Theology	QC
Moody Theological Seminary	IL
Moravian Theological Seminary	PA
Mount Angel Seminary	OR
Mount Saint Mary's Seminary	MD
Multnomah Biblical Seminary	OR
NAIITS An Indigenous Learning Community	PEI
Nashotah House	WI
Nazarene Theological Seminary	MO
Neal T. Jones Seminary	VA
New Brunswick Theological Seminary	NJ
New Orleans Baptist Theological Seminary	LA
New York Theological Seminary	NY
Newman Theological College	AB
North Park Theological Seminary	IL
Northeastern Seminary	NY
Northern Baptist Theological Seminary	IL
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Northwest Nazarene University Graduate School of	ID
Theology Northwest Seminary	ВС
Notre Dame Seminary	LA
Oakwood University School of Theology Graduate	AL
Department	AL
Oblate School of Theology	TX
Oklahoma Christian University Graduate School of	OK
Theology	OK
Oral Roberts University Graduate School of Theology	OK
and Ministry	OIL
Pacific Lutheran Theological Seminary	CA
Pacific School of Religion	CA
Palm Beach Atlantic University School of Ministry	FL
Graduate Department	12
Palmer Theological Seminary	PA
Payne Theological Seminary	ОН
Pentecostal Theological Seminary	TN
Perkins School of Theology	TX
Phillips Theological Seminary	OK
Phoenix Seminary	ΑZ
Pittsburgh Theological Seminary	PA
Pontifical College Josephinum	ОН
Pope St. John XXIII National Seminary	MA
Portland Seminary	OR
Presbyterian Theological Seminary in America	CA
Princeton Theological Seminary	NJ
Providence Theological Seminary	MB
Puritan Reformed Theological Seminary	MI
Queen's College Faculty of Theology	NL
Reformed Episcopal Seminary	PA
Reformed Presbyterian Theological Seminary	PA
Reformed Theological Seminary	MS
Regent College	BC
Regent University School of Divinity	VA
Regis College	ON
Robert E. Webber Institute for Worship Studies	FL
Sacred Heart Major Seminary	MI
Sacred Heart Seminary and School of Theology	WI
Saint John's Seminary (MA)	MA
Saint John's University School of Theology and	MN
Seminary	
Saint Mary Seminary and Graduate School of	OH
Theology	
Saint Meinrad School of Theology	IN

Saint Paul School of Theology	KS
Saint Paul Seminary School of Divinity	MN
Saint Sophia Ukrainian Orthodox Theological	NJ
Seminary	110
Saint Vincent Seminary	PA
Samuel DeWitt Proctor School of Theology	VA
San Francisco Theological Seminary	CA
Seattle Pacific Seminary	WA
The Seattle School of Theology and Psychology	WA
Seattle University School of Theology and Ministry	WA
Seminary of the Southwest	TX
Seventh-day Adventist Theological Seminary	MI
Shaw University Divinity School	NC
Shepherds Theological Seminary	NC
Southeastern Baptist Theological Seminary	NC
Southeastern University School of Divinity	FL
Southern Baptist Theological Seminary	KY
Southern California Seminary Graduate School of	CA
Bible and Theology	
Southwestern Baptist Theological Seminary	TX
SS. Cyril & Methodius Seminary	MI
St. Andrew's College	SK
St. Augustine's Seminary of Toronto	ON
St. Bernard's School of Theology and Ministry	NY
St. Charles Borromeo Seminary	PA
St. John Vianney Theological Seminary	CO
St. John's Seminary (CA)	CA
St. Joseph's Seminary	NY
St. Mark's College	BC
St. Mary's Seminary and University	MD
St. Patrick's Seminary and University	CA
St. Peter's Seminary	ON
St. Stephen's College	AB
St. Tikhon's Orthodox Theological Seminary	PA
St. Vincent de Paul Regional Seminary	FL
St. Vladimir's Orthodox Theological Seminary	NY
Starr King School for the Ministry	CA
Talbot School of Theology	CA
Trinity College Faculty of Divinity	ON
Trinity Episcopal School for Ministry	PA
Trinity Evangelical Divinity School	IL
Trinity Lutheran Seminary	OH
Tyndale Seminary	ON
Union Presbyterian Seminary	VA
Union Theological Seminary	NY

United Lutheran Seminary	PA
United Theological Seminary	OH
United Theological Seminary of the Twin Cities	MN
University of Chicago Divinity School	IL
University of Dubuque Theological Seminary	IA
University of Notre Dame Department of Theology	IN
University of St. Mary of the Lake Mundelein	IL
Seminary	
University of St. Michael's College Faculty of	ON
Theology	
University of St. Thomas School of Theology	TX
University of the South School of Theology	TN
Urshan Graduate School of Theology	MO
Vancouver School of Theology	BC
Vanderbilt University Divinity School	TN
Villanova University Department of Theology and	PA
Religious Studies	
Virginia Theological Seminary	VA
Wake Forest University School of Divinity	NC
Wartburg Theological Seminary	IA
Wesley Biblical Seminary	MS
Wesley Seminary	IN
Wesley Theological Seminary	DC
Western Seminary	OR
Western Theological Seminary	MI
Westminster Theological Seminary	PA
Westminster Theological Seminary in California	CA
Winebrenner Theological Seminary	OH
Wisconsin Lutheran Seminary	WI
World Mission University School of Theology	CA
Wycliffe College	ON
Yale University Divinity School	CT

APPENDIX B: CALCULATION OF FINANCIAL RESPONSIBILITY COMPOSITE SCORE

Calculation of Ratios

Primary Reserve Ratio = Adjusted equity/Total Expenses = \$760,000/\$9,500,000 = 0.80

Equity Ratio = Modified Equity/Modified Expenses = \$810,000/\$2,440,000 = 0.332

Net Income Ratio = Income before taxes/Total Revenues = \$510,000/\$10,010,000 = 0.051

Calculation of Strength Factor Score

Primary Reserve Strength Factor Score = 20 x Primary Reserve Ratio 20 x 0.080 = 1.600

Equity Strength Factor Score = 6 x Equity Ratio 6 x 0.332 = 1.992

Net Income Strength Factor Score = 1 + (33.3 x Net Income Ratio) 1 + (33.3 x 0.051) = 2.698

Calculation of Weighted Score

Primary Reserve Weighted Score = 30% x Primary Reserve Strength Factor Score 0.30 x 1.600 = 0.480

Equity Weighted Score = 40% x Equity Strength Factor Score 0.40 x 1.992 = 0.797

Net Income Weighted Score = 30% x Net Income Strength Factor Score 0.30 x 2.698 = 0.809

Composite Score

Sum of All Weighted Scores 0.480 + 0.797 + 0.809 = 2.086 rounded to 2.1

*The definition of terms used in this ratios and applicable strength factor algorithms and weighting percentages are found in the Student Assistance General Provisions (regulations) (34 CFR 668) Subpart L (U.S. Department of Education, n.d.)

APPENDIX C: LIST OF ATS SCHOOLS IN STUDY

Theological Graduate School
Abilene Christian University Graduate School of Theology
Anderson University School of Theology
Asbury Theological Seminary
Ashland Theological Seminary
Assemblies of God Theological Seminary
Austin Presbyterian Theological Seminary
Baptist Seminary of Kentucky
Barry University Department of Theology and Philosophy
Beeson Divinity School
Bethany Theological Seminary
Bethel Seminary
Bexley Hall Seabury-Western Theological Seminary Federation, Inc.
Boston College School of Theology and Ministry
Boston University School of Theology
Brite Divinity School
Byzantine Catholic Seminary of SS. Cyril and Methodius
Calvin Theological Seminary
Campbell University Divinity School
Candler School of Theology
Catholic Theological Union
Catholic University of America School of Theology and Religious Studies
Chapman Seminary
Chicago Theological Seminary
Christian Theological Seminary
Church Divinity School of the Pacific
Claremont School of Theology
Colgate Rochester Crozer Divinity School

Columbia Biblical Seminary	SC
Columbia Theological Seminary	GA
Concordia Seminary (MO)	MO
Concordia Theological Seminary (IN)	IN
Covenant Theological Seminary	MO
Dallas Theological Seminary	TX
Denver Seminary	CO
Dominican House of Studies	DC
Dominican School of Philosophy and Theology	CA
Drew University Theological School	NJ
Duke University Divinity School	NC
Earlham School of Religion	IN
Eastern Mennonite Seminary	VA
Ecumenical Theological Seminary	MI
Eden Theological Seminary	MO
Emmanuel Christian Seminary	TN
Erskine Theological Seminary	SC
Evangelical Theological Seminary	PA
Franciscan School of Theology	CA
Fuller Theological Seminary	CA
Garrett-Evangelical Theological Seminary	IL
General Theological Seminary	NY
George W. Truett Theological Seminary	TX
Gordon-Conwell Theological Seminary	MA
Grace Theological Seminary	IN
Graduate Theological Union	CA
Grand Rapids Theological Seminary	MI
Harding School of Theology	TN
Hartford International University for Religion and Peace	CT

Harvard University Divinity School	MA
Hazelip School of Theology	TN
HMS Richards Divinity School Division of Graduate Studies	CA
Holy Cross Greek Orthodox School of Theology	MA
Hood Theological Seminary	NC
Houston Graduate School of Theology	TX
Howard University School of Divinity	DC
Iliff School of Theology	CO
Immaculate Conception Seminary	NJ
Inter-American Adventist Theological Seminary	PR
Interdenominational Theological Center	GA
James and Carolyn McAfee School of Theology	GA
Jesuit School of Theology	CA
Kairos University	SD
Kenrick-Glennon Seminary	МО
Lancaster Theological Seminary	PA
Lexington Theological Seminary	KY
Lincoln Christian Seminary	IL
Logsdon Seminary of Logsdon School of Theology	TX
Louisville Presbyterian Theological Seminary	KY
Loyola Marymount University Department of Theological Studies	CA
Luther Seminary	MN
Lutheran School of Theology at Chicago	IL
Lutheran Theological Southern Seminary	SC
M. Christopher White School of Divinity	NC
McCormick Theological Seminary	IL
Meadville Lombard Theological School	IL
Memphis Theological Seminary	TN
Methodist Theological School in Ohio	ОН

Midwestern Baptist Theological Seminary	MO
Missio Theological Seminary	PA
Moody Theological Seminary	IL
Moravian Theological Seminary	PA
Mount Angel Seminary	OR
Mount Saint Mary's Seminary	MD
Multnomah Biblical Seminary	OR
Nashotah House	WI
Nazarene Theological Seminary	MO
New Brunswick Theological Seminary	NJ
New York Theological Seminary	NY
North Park Theological Seminary	IL
Northeastern Seminary	NY
Northern Baptist Theological Seminary	IL
Northwest Nazarene University Graduate School of Theology	ID
Oblate School of Theology	TX
Oral Roberts University Graduate School of Theology and Ministry	OK
Pacific Lutheran Theological Seminary	CA
Pacific School of Religion	CA
Palmer Theological Seminary	PA
Payne Theological Seminary	ОН
Pentecostal Theological Seminary	TN
Perkins School of Theology	TX
Phillips Theological Seminary	OK
Phoenix Seminary	ΑZ
Pittsburgh Theological Seminary	PA
Pontifical College Josephinum	ОН
Princeton Theological Seminary	NJ
Reformed Episcopal Seminary	PA

	PA
Regent University School of Divinity	VA
Sacred Heart Major Seminary	MI
Sacred Heart Seminary and School of Theology	WI
Saint Meinrad School of Theology	IN
Saint Paul School of Theology	KS
Saint Paul Seminary School of Divinity	MN
Saint Vincent Seminary	PA
Samuel DeWitt Proctor School of Theology	VA
San Francisco Theological Seminary	CA
The Seattle School of Theology and Psychology	WA
Seattle University School of Theology and Ministry	WA
Seventh-day Adventist Theological Seminary	MI
Shaw University Divinity School	NC
Shepherds Theological Seminary	NC
Southeastern Baptist Theological Seminary	NC
St. Bernard's School of Theology and Ministry	NY
St. Charles Borromeo Seminary	PA
St. Vladimir's Orthodox Theological Seminary	NY
Talbot School of Theology	CA
Trinity Episcopal School for Ministry	PA
Trinity Evangelical Divinity School	IL
Trinity Lutheran Seminary	ОН
Union Presbyterian Seminary	VA
Union Theological Seminary	NY
	PA
United Lutheran Seminary	
·	ОН
United Theological Seminary	OH MN

University of Dubuque Theological Seminary	IA
University of Notre Dame Department of Theology	IN
University of St. Mary of the Lake Mundelein Seminary	IL
University of St. Thomas School of Theology	TX
University of the South School of Theology	TN
Urshan Graduate School of Theology	MO
Vanderbilt University Divinity School	TN
Wake Forest University School of Divinity	NC
Wartburg Theological Seminary	IA
Wesley Biblical Seminary	MS
Wesley Theological Seminary	DC
Western Seminary	OR
Western Theological Seminary	MI
Westminster Theological Seminary	PA
Westminster Theological Seminary in California	CA
Winebrenner Theological Seminary	ОН
World Mission University School of Theology	CA
Yale University Divinity School	CT

Note: This list includes ATS Theological Graduate Schools that submit annual financial data to the U.S. Department of Education for the development of the school's financial responsibility composite score (FRCS). ATS Theological Graduate Schools whose financial reporting institution includes a non-educational institution such as a church, diocese, denomination association, or Christian organization do not submit financial data to the U.S. Department of Education for the development of the school's financial responsibility composite score. Those schools are not included on this list.