Developing Faith Integration in a Principles of Corporate Finance Course

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ABSTRACT: This paper provides a high-level approach to faith integration for commonly taught topics in a principles of corporate finance course. The paper presents a review of the literature on faith integration, frequently taught corporate finance topics, and the integration of faith and corporate finance. The paper then presents faith integration opportunities for six commonly taught corporate finance topics and concludes with a brief summary and discussion of future research.

INTRODUCTION

Faith integration has been a growing area of scholarship; however, it has also been acknowledged that it is no easy task due to few Christian business faculty members having in-depth training in faith integration or biblical scholarship (Dupree, 2015; Roller, 2021). This challenge is no doubt even greater for new faculty who are new to faith integration.

This paper's purpose is an attempt to help close this gap by providing an outline of faith integration connections to course-specific content while allowing the faculty member to apply their own pedagogical techniques to the application of the connection. The paper starts with a review of the literature on faith integration, frequently taught topics in an introductory corporate finance course, and the integration of faith and corporate finance. The paper presents six topics found in a principles of corporate finance course and outlines faith integration opportunities for each topic. The paper concludes with a summary and discussion of future research.

LITERATURE REVIEW

Faith Integration

Faith integration must have cooperation between the individual and the Holy Spirit (Chewning, 2001). In the same work, Chewning (2001), outlined twelve unique ways to integrate biblical teaching. One method outlined was described as "cherry-picking" (Chewning, 2001, p. 142), which is the selection of a specific passage and applying it directly to a given situation, and was suggested as the most likely method of integration (Chewning, 2001). Another method outlined was direct biblical integration to a given discipline, where Scripture is applied to discipline specific subjects (Chewning, 2001).

Building off of Chewning (2001), Roller (2013) outlines 21 methods for educators to engage students in faith integration. Roller (2013) organizes the 21 methods by intentionality and extent of the integration (natural, intentional, or strategic) and then by the focus of the integration (instructor-centered, classroom-centered, student-centered, or program-centered). The integration of biblical perspectives into course material is specifically called out by Roller (2013) as intentional classroom-centered faith integration. In this method of integration, the instructor incorporates Scripture and biblical perspectives into the classroom to aid students in seeing connections between the academic content and Scripture. The use of classroom discussion was identified by Roller (2013) as intentional student-centered faith integration. Here students actively participate in discussions that integrate faith and academic content (Roller, 2013).

MacKay (2012) described how to apply the integration of faith and learning to a discipline. She noted that the topic, when examined from a faith-based perspective, allows the student to grow both academically and spiritually.

Introductory Corporate Finance Topics

Cooley and Heck (1996) surveyed more than 205 finance professors to better understand the material covered

Table 1: Top Ten Finance Topics Ranked By Importance from Cooley and Heck (1996)

Rank	Content Area
1	Time Value of Money
2	Capital Budgeting
3	Risk and Return
4	Security Valuation
5	Cost of Capital
6	Financial Statement Analysis
7	Capital Structure
8	Interest Rates
9	Working Capital Management Principles
10	Stocks and Bonds Long-Term Financing

Note: From Cooley and Heck (1996, p. 4)

Table 2: Top Ten Finance Topics Ranked By Importance from Krishnan et al. (1999)

Rank	Content Area
1	Time Value of Money
2	Financial Statement Analysis, Cash Flows, and Taxes
3	Security Valuation
4	Financial Forecasting
5	Working Capital
6	Common Stock and the Investment Banking Process
7	Capital Budgeting
8	Long-Term Debt:Types of Bonds and Bond Ratings
9	Risk and Return Analysis, Portfolio Concepts, CAPM, Beta
10	Dividend Policy

Note: From Krishnan et al. (1999, p. 75)

and the organization of an introductory finance course. The survey revealed the top 20 finance topics ranked by importance (Cooley & Heck, 1996). The top 10 from Cooley and Heck (1996) can be found in Table 1.

Krishnan et al. (1999) surveyed 275 students to better understand student perceptions and expectations of an introductory finance course. The study asked students at the end of the course to rank various finance topics in order of importance. According to Krishnan et al. (1999), the top 10 topics, according to students in the study, had similarities to those found in Cooley and Heck (1996).The top ten topics found by Krishnan et al. (1999) are listed below in Table 2.

Student perceptions on corporate finance topics have been surveyed more recently (Balachandran et al., 2006; Lai et al., 2010). Balachandran et al. (2006) surveyed students taking an introductory financial management course at two different campuses, Caulfield and Peninsula, finding that topic importance differed between the two campuses. Topics such as capital structure and cost of capital were ranked higher at Caulfield than at Peninsula. It was suggested that this may be a result of student interest in the field of finance as the Caulfield campus offered a finance major while Peninsula did not. Students at the Caulfield campus were noted as being more interested in a rigorous introductory finance course. Both campuses listed, on average, security valuation as the most important financial topic; however, at the Caulfield campus the time value of money concept was tied with security valuation (Balachandran et al., 2006). Additionally, in a study at a private university in Malaysia, students identified the concept of risk and return as being the most important financial concept from their perspective (Lai et al., 2010).

Faith Integration and Finance Education

Stewart (2003) illustrated the relationship between corporate finance and biblical principles. Stewart related the cooperation of financial markets, institutions, and the financial system to Ecclesiastes 4:12. Halberg (2010) identified faith integration opportunities through relating an interest rate formation activity to numerous biblical verses related to interest found in the Bible, such as usury (Ezekiel 18), Parable of the Bags of Gold (Matthew 25), paying your debts (Romans 13), and cost of borrowing (Proverbs 22). Adams (2011) presents a method of examining shareholder wealth maximization utilizing a sermon of John Wesley focusing on stewardship (Luke 16:1-13). Adams (2011) outlined a classroom discussion to help students examine shareholder wealth maximization from this perspective.

Lemler (2011) also illustrated a series of faith integration exercises that encouraged students to think about prices and profits topics from a biblical perspective. Lemler (2011) noted that God's commands to subdue and have dominion over God's creation (Genesis 1:26; Genesis 1:28) and to work and keep God's garden (Genesis 2:15) demonstrate the need for the concept of profit. Value creation and destruction is understood through the concept of profit, and without the concept of profit, the impact on value would be unknown (Lemler, 2011). Opportunity costs, a component of evaluating project cash flows, was related to the decision facing the man (Matthew 13:44), the merchant (Matthew 13:45-46), and the young rich man (Matthew 19:16-22) regarding a choice they had to make with their money (Lemler, 2011).

Poucher (2012) demonstrated a semester-long group project for a corporate finance course that allows students to examine a firm's history and strategic approach, perform a financial analysis of the firm, calculate the firm's weighted average cost of capital (WACC), and make capital structure decisions to fund a project that minimizes WACC. The author noted several faith integration opportunities in the project related to topics such as the need for honesty, pursuit of greed, and the need for ethical behavior (Poucher, 2012).

Liang (2012) noted a lack of integration of Scripture with the study of corporate finance within the literature. Liang (2012) integrated Scripture with three principles of corporate finance related to decision-making: risk aversion, time preference, and information asymmetry. The author related risk aversion, the making of decisions when uncertainty exists regarding the outcome, to the biblical examples of Abraham and Isaac (Genesis 22) and Jonah (Jonah 1-4) (Liang, 2012). The author noted that risk-taking behavior should be grounded in observing God's word (Liang, 2012). Liang (2012) similarly relates the concept of time preferences to the principle of the time value of money and discount rates regarding Esau trading his birthright for a meal from his brother Jacob (Gen. 25:29-33). Finally, Liang (2012) related information asymmetry, where the quality and quantity of information by individuals is not equal, to when the serpent tempted Eve to eat forbidden fruit (Genesis 3:1-7).

Adams and Schiller (2015) developed a presentation for undergraduate and graduate corporate finance courses to improve critical thinking skills; one of the skills explored was logical fallacies. Adams and Schiller (2015) provide examples from Scripture for each of the logical fallacies explored. The authors relate the logical fallacies back to the financial topic of capital budgeting.

Saunders (2017) studied the differences of starting a corporate finance class with biblical content compared to current events. The study found that students who completed the course section where beginning class time was focused on biblical content responded significantly higher to the question regarding the relationship of the Bible to finance (Saunders, 2017). The author also noted that the results implied that without setting aside time to focus on faith integration, faith integration would not happen (Saunders, 2017).

FAITH-INTEGRATED INTRODUCTORY FINANCE COURSE

Over a decade, four studies were conducted to better determine which financial topics were considered to be the most important topics in an introductory finance class (Balachandran et al., 2006; Cooley & Heck, 1996; Krishnan et al., 1999; Lai et al., 2010). Throughout the literature, several topics were reliably considered to be the among the most important finance topics: financial statement analysis, time value of money, security valuation, risk and return, capital budgeting, and capital structure (Balachandran et al., 2006; Cooley & Heck, 1996; Krishnan et al., 1999; Lai et al., 2010). Utilizing these six introductory finance topics, biblical integration opportunities for an introductory corporate finance course are explored.

Financial Statement Analysis

The examination of financial statements is typically accompanied by the selection of a comparison group such as a historical performance or a peer group (Ross et al., 2019). Through the use of the comparison group, firms have an opportunity to better understand their performance. One area for biblical integration with this concept is Proverbs 27:17 (New International Version), which states, "As iron sharpens iron, so one person sharpens another." As God has called individuals to be in community with each other and build each other up, companies can also seek improvement by the utilization of comparison groups. This gives firms a better understanding of their performance strengths and areas for improvement.

Time Value of Money

Understanding the trade-off between a dollar today and a dollar tomorrow is one of the fundamental concepts in finance (Ross et al., 2019). It is through this concept that the process of compounding and discounting a sum of money by an interest rate that an investment is understood. Matthew 25:14-30 and Luke 19:11-26 can be related to the idea of investment and the concept of the time value of money. Saunders (2016) examines these Scriptures in detail and explores the debate surrounding the interpretation of these verses on the concept of investment. This debate can be used to help students wrestle with both the time value of money concept and the purpose of investment and stewardship from a biblical perspective.

Security Valuation

The present value of a security is typically viewed as the value of the asset's cash flows discounted back to the present at a defined risk-adjusted discount rate (Ross et al., 2019). One opportunity for faith integration exists by contrasting the focus on the financial value of a security and the value that God has placed on us. Matthew 16:26 and Mark 8:36-37 state, "What good will it be for someone to gain the whole world, yet forfeit their soul? Or what can anyone give in exchange for their soul?" This verse provides opportunity for exploration regarding the role of profit, the role of security markets and valuation, and traps and pitfalls that exist when money is pursued for its own sake. These topics also fit well within the biblical context of Matthew 6:19-21 and the focus on building up treasures in heaven instead of on earth.

Capital Budgeting

The determination of how a firm invests its capital to achieve its business goals is considered one of the most important tasks in corporate finance (Ross et al., 2019). Often these decisions are driven out of larger issues, such as product line, target market, location, etc., regarding the strategic approach management has outlined for the firm to achieve its goals (Ross et al., 2019). Christ's discussion on the cost of being a disciple in Luke 14:28-30 provides a biblical example of the implications of capital budgeting through the lens of building a tower. The example of estimating the costs to build the tower runs parallel to the processes surrounding capital budgeting: estimating demand and relevant revenues and costs as a result of taking on the project. This creates an opportunity for faith integration regarding the role of planning and understanding the requirements/costs of taking on a given task, even that of becoming a disciple.

Risk & Return

Given that there is a reward for bearing risk, understanding the two types of risk (systematic and unsystematic) is critical to a diversified investor and a prerequisite to understanding the security market line (SML) (Ross et al., 2019). It is through this understanding that the principle of diversification can be demonstrated (Ross et al., 2019). Ecclesiastes 11:1-2 provides a biblical example of diversification through the encouragement to invest in many ventures to sell grain across the sea as you do not know what will happen to any one individual venture. Faith integration opportunities exist to take this biblical example and supplement it with hypothetical detail on the ventures to determine if diversification was truly achieved. One such example could be whether all seven or eight ventures should all leave from/arrive at the same port. This example can then be directed to asset and sector allocation decisions to help students better understand the role of asset and sector allocation in building a diversified portfolio.

Capital Structure

The capital structure decision is how much debt a firm should have compared to equity (Ross et al., 2019). One faith-integration opportunity is the question of the role of debt financing in business. Proverbs 22:7 and Romans 13:8 provide a starting point for a discussion around the role of debt financing in business. A second question and faith integration opportunity surrounds taking on too much debt and the harm that can be done to the business and by extension its stakeholders. 1 Timothy 6:10 discusses the impact of putting the profit motive above all else and the consequences that can follow. The third opportunity surrounds the fallout of bankruptcy and how outstanding debts should be handled. Romans 13:7-8 provides a perspective on giving everyone what is owed to them and not letting debts remain outstanding. Exploring how this verse relates to current bankruptcy law provides a fertile space for reflection.

CONCLUSION

This paper presents a course-focused high-level approach to integrate faith and Scripture into an introductory finance course by connecting Scripture to various topics frequently covered. The literature review provided an overview of common topics covered in an introductory finance course, summarized the foundations of faith integration within a disciplinary context, and explored previous authors' work in faith integration in an introductory corporate finance course. Based on this literature, six common finance topics with faith integration opportunities were presented and discussed to help faith-based finance educators develop a course that provides faith-integration opportunities throughout the course.

Previous research on faith integration in an introductory finance course has explored faith integration on singular topics such as shareholder wealth maximization (Adams, 2011), interest rate formation (Halberg, 2010), opportunity costs (Lemler, 2011), and time value of money (Liang, 2012), among others (Adams & Schiller, 2015; Poucher, 2012).This article takes the research on commonly taught topics in an introductory finance course (Balachandran et al., 2006; Cooley & Heck, 1996; Krishnan et al., 1999; Lai et al., 2010) and builds upon previous faith integration in finance research to provide a high-level series of faith-integration opportunities for a single course. This approach provides the faculty member flexibility in the deployment of these intentional faith integrations opportunities (Roller, 2013). Additionally, Roller (2021) notes that extensive training in faith integration in business is limited, and there is value in good examples of biblical faith integration. This article's high-level approach provides a sampling of connections between common introductory finance concepts and Scripture to help provide faculty new to faith integration a starting point in their journey.

Several opportunities exist for future research in this area within the scope of finance and beyond. First, much of the research regarding commonly taught topics in an introductory corporate finance course is dated. Opportunity exists to repeat and extend the research by Cooley and Heck (1996) to determine if there are any changes to the commonly taught topics in an introductory corporate finance course. These integration opportunities are introductory in nature and can easily be expanded on via further biblical reflection, inclusion of other biblical thought leaders, and students' own experiences and faith journeys. Second, there is an opportunity to expand the creation of course-based faith integration outlines to other commonly taught finance courses. Indeed some groundwork has already begun in this area regarding courses in money and banking (Roller, 2021), personal finance (Newell & Newell, 2012; Poucher, 2017), and investments (Saunders, 2016). Third, this model can be expanded beyond the discipline of finance to other disciplines internal and external to business. It is believed that through the work of expanding this high-level approach to course-specific faith integration, faculty put their own unique approach to the implementation of faith integration and that the gap, as noted by Roller (2021), that exists for faculty new to faith integration can be reduced.

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