

Understanding and Developing Appropriate Museum Debt Policy:  
Practical Capital Structure Analysis for Museums

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## Abstract

This thesis provides a template, in three parts, designed to enable museum financial management to comprehensively address and analyze museological capital structure both from a theoretical and practical perspective. To this end, this thesis first proposes a methodology to understand and develop museological financial philosophy, then offers a process to evaluate and value museum capital structure, and finally, unites fiscal philosophy and capital structure analysis by proposing a strategy for designing and constructing practical museum debt policy.

In the first section, the thesis presents and substantiates a case for elevating the importance of the business of museums by proposing that museological organizations adopt and communicate a *fiscal* mission statement. The thesis then provides a practical format for museum management, as well as trustees and board members, to define and formalize desired financial practices and goals. Specifically, museological fiscal mission statements must address organizational philosophy regarding financial governance, priorities, strategies, and communication.

In the next section, the complexity of nonprofit capital structure analysis is addressed, as well as the need for museums, in particular, to examine and quantify the manner in which they support their assets. After reviewing the history of museum funding streams, the thesis proposes analyzing museum financial structure by conceptually separating the operating business from the collections and any endowment. A substantiated methodology is offered for valuing the museum operating business using a market based approach that analyzes museum revenue both as perpetuity and to comparable commercial revenue streams.

In the final section, guidelines are provided for creating organizational debt policy. First, the thesis argues that an appropriate capital structure mix is critical to effectively carry out the museological strategic mission, and that though it adds additional risk, debt is a flexible financial tool that should be utilized. However, debt requires discipline; a discipline that mandates formalized policy. To create an outline for formalizing policy, the latter half of this section adapts research from the higher education and healthcare industries, incorporates specific ideas regarding fiscal mission statements and capital structure, and details the formulation of a hypothetical museum debt policy.

## Dedication

To my wife, Cindy, and my children, Joy, Max, and Alex.

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Though the task of writing and research falls to the author, the process of thesis synthesis and its eventual production requires the labor of numerous supporting parties. Thank you, to my family and friends who have served numerous encouraging roles over the years. Thank you, to the fabulous educators and caring Museum Studies staff, as well as my wonderful Thesis Director, Mr. Mark Gold, for providing the perfect mix of direction and assistance. Finally, thank you to the Metropolitan Museum of Art in New York and its Finance Department for kindly allowing me the time and attention that was required to complete this thesis.

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## Chapter I

### Introduction

“Understanding and Developing Appropriate Museum Debt Policy: Practical Capital Structure Analysis for Museums” (hereafter, the Thesis), provides a template for museum management to specifically quantify the financial position of the institution, as well as initiate policy and procedures in congruence with the philosophical mission. Though modern methods of corporate finance were introduced as far back as 1958 with Modigliani and Miller’s groundbreaking propositions for capital structure,<sup>1</sup> nonprofit financial analysis has garnered relatively little attention, and museum specific analysis, practically none. Though museums are structurally similar to both educational institutions and health organizations, museums are typically funded differently (Young(a) 3-20). It is the subtle differences in funding that require a unique approach to museum capital structure analysis. Though fiscal considerations are often tertiary to the mission and collection, museums can benefit greatly from a clear and concise methodology for calculating the theoretical maximum institutional leverage, and enacting a philosophy of fiscal prudence that supports the analysis. To this end, this Thesis will provide: an algorithm for defining a museum’s organizational fiscal mission and strategy; a practical guide to calculating capital structure and appropriate leverage; and a template for implementing the analysis in a formalized debt policy.

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<sup>1</sup> In Franco Modigliani and Merton Miller’s “The Cost of Capital, Corporation Finance, and the Theory of Investment,” two important propositions posit that, in the absence of external factors, the amount of equity or debt that finances an institution’s assets is irrelevant (Modigliani, and Miller 261-297).

All museums have a financial philosophy. Usually, the philosophy is an informal attitude among management. Ideally, it is explicitly stated, formalized in some manner. Though the use of leverage and resulting capital structure impacts nearly every decision a museum makes, formalized analysis and documentation is rare. How much leverage do museums use? Though the absolute level is not readily available, it may be estimated. According to the most recent information available at the National Center for Charitable Statistics (NCCS), nearly 4,000 museums registered as 501(c)(3) nonprofit organizations in the U.S., and classified as “A5” by the National Taxonomy of Exempt Entities, held over \$42.2 billion in assets.<sup>2</sup> Using information obtained from Internal Revenue Service (IRS) Form 990 filings and a sample of the 500 largest museums, it is estimated that American museums currently have approximately \$5.8 billion of debt outstanding.<sup>3</sup> Nevertheless, most nonprofit organizations are ideologically mission focused and entertain debt financing only as a last resort when contemplating capital resource allocations (Swoboda, and Swoboda 294-295). The uncomfortable attitude toward organizational indebtedness understandably stems from a lack of emphasis and experience. One often quoted handbook of museology, *The Manual of Museum Management*, fails to even mention debt in its entire section entitled “Financial Management” (Lord(a), and Lord 158-190). The scarcity of research on nonprofit leverage may have origins in the limitations on debt issuance by 501(c)(3) institutions imposed by the government until relatively recent changes in U.S. tax code (Taxpayer

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<sup>2</sup> The NCCS compiles its information from Internal Revenue Service (IRS) Form 990. The most current statistics available in the NCCS database contain information from reports submitted no later than November 2010.

<sup>3</sup> IRS statistics from 2006 indicate that 60 percent of nonprofits use leverage, and large museum nonprofits average a debt to asset ratio of roughly 13.8 percent (Yetman 244; National Center for Charitable Statistics).

Relief Act of 1997). For a variety of reasons, museums have begun to use more debt and, regardless of size, should articulate a leverage philosophy in the form of a fiscal mission statement. To this end, Chapter II focuses on developing the appropriate considerations for museum managers to contemplate when formulating a financial strategy, and posits that the fiscal mission should rank equally in importance to the philosophical mission, and necessarily be recognized as such by the American Association of Museums (AAM).

After identifying the basic tenets on which a fiscal mission statement should be created, Chapter III provides a usable methodology for understanding museological capitalization and calculating the appropriate organizational leverage.

“Capitalization as concept is not typically a part of the current nonprofit lexicon – nor that of funders. ...all nonprofits have a capital structure, the lack of a rational approach to it is a largely unnamed and therefore a quietly powerful problem. Because [calculating] capital structure is not an explicit part of practice, people don’t even know it’s missing” (Miller 6).

Inattention to capitalization, or capital structure, in museums as well as in other nonprofits, largely results from a lack of historical emphasis and instruction. For museums, a permanently changed funding landscape, or the shift from primarily endowment support to one that requires participation in commercial activities, has altered the manner in which museums support their assets and, hence, necessitates a greater awareness and vigilance of museum financing. While overlaying traditional corporate financial analysis on nonprofit businesses is complex, museums do have relatively predictable revenue streams that may be considered distinct internal and external sources of equity (Khodjamirain 3). Internally, museums may have multiple organizationally-generated revenue streams including admissions, retail sales, catering, memberships, rentals, special events, education, publications, and contracted services (Lord(a), and

Lord 162-176). Externally, museums garner public aid through government subsidies and grants, as well as donative capital from private sources such as endowments, sponsorships, and donations (Young(a) 4-5). Conceptually dividing a museum into three basic components: a warehouse, an investment fund, and an operating entity, allows a rational market based valuation of the portion of the business that is primarily obligated to creditors. Considering the aforementioned internal and external sources, this Thesis uses a derived value for theoretical or virtual equity to provide a new methodology for calculating organizational value and appropriate organizational leverage.

Chapter IV unites leverage philosophy with capitalization concepts and provides an outline for drawing up and implementing institutional debt policy. Formalized debt policy clarifies the specific position of museum management with regard to capitalization and leverage, as well as highlights the resulting expected or targeted financial institutional conduct. As noted above, museums typically consider debt use on only a project-by-project basis, a requirement of the capital budgeting process. This type of analysis is dated and limited. The fragmented nature of project-by-project analyses raises overall borrowing costs, as well as complicates risk management. Establishing debt policy permits museum financial managers to consider debt as permanent capital and provides a framework to consider the overall leverage of the institution when making decisions; a portfolio approach. If managed appropriately, the portfolio approach allows a museum to reduce its financial risk and lower its borrowing costs (KPMG, Prager, Sealy, & Co., LLC, and BearingPoint, Inc. 36-44). This Thesis draws from policy research in the higher education and healthcare industries to derive a model for practical museum debt policy formulation. However, integral to museum debt policy are the products of

Chapter II and Chapter III, the fiscal mission and capitalization calculation. Additionally, a sample debt policy is woven throughout the chapter. The amalgamation of the three chapters provides a template for museum managers to develop a comprehensive debt policy in line with the museum's overall mission and long-term strategic objectives. Armed with such a framework, debt becomes not a burden, but a flexible tool to forward the museum mission in perpetuity.

## Chapter II

### The Museological Fiscal Mission Statement

The first step in elevating financial measurement and accountability in museums is to establish a common and recognizable foundation from which to build and gain acceptance. Museums are both comfortable and familiar with the importance and institutional impact of the mission statement as required by the American Association of Museums (AAM) for accreditation. A *fiscal* mission statement is a logical starting point for museums to begin to implement a culture of greater financial awareness. The adoption of a fiscal mission statement will encourage increasing the level of financial sophistication in museums, as well as convey both internally and externally the importance of operational efficiency in a manner that is both accepted and understood in the industry.

Museums are accustomed to mission statements and appreciate their necessity and importance. Creating a fiscal mission statement requires that museum management examine the business of the museum and enunciate the institutional financial philosophy in a concise and coherent manner. The mere process of creation and subsequent revision will inform and keep institutional leadership knowledgeable as to the operational state of the museum. Once established, a well thought out fiscal mission statement helps guide the decision making processes that involve project selection, as well as any other institutional capital allocation. Additionally, a fiscal mission statement provides parties

external to the museum a tool to assess the financial philosophy of the institution. Communicating sound financial philosophy in a logical manner increases confidence among those external parties with a vested interest in the success and longevity of nonprofit institutions (Keating, and Frumkin 3-15). Hence, rating agencies, financial intermediaries, governmental bodies, and donors, will reward those institutions whose solid policies are articulated with clarity and thus, adoption of fiscal mission statements will benefit the museum sector as a whole.

As the idea of creating a museological fiscal mission statement is a new one, this Thesis substantiates its necessity, suggests essential philosophical components, and provides a framework of construction usable by museums of any reasonable scale. The AAM should adopt the fiscal mission statement as another standard of accreditation.

### Purpose of a Fiscal Mission Statement

Museums are guided by mission, but constrained by capital. The creation of a mission statement is considered a good business practice in both the for-profit and nonprofit sectors. However, the for-profit sector seems to balance the aspirational significance of a mission statement with practical results measured by profitability and enterprise value. Museums, on the other hand, seem to emphasize mission to the detriment of operational efficiency. Indeed, no modern model of museum governance is complete without tremendous attention on the mission statement, yet any discussion of operating structure is typically relegated to a subsection afterthought. This is not to suggest that museum mission statements are unimportant; they are critical. However, the

“business” of running museums deserves equal attention. Noted museum theorist Stephen Weil, in his essay entitled, “Museums: Can and Do They Make a Difference?”

acknowledges that:

“Except for those romantics who view all museums as inherently good, it ought [sic] be evident that a museum seriously lacking the resources required to achieve its purpose...cannot be evaluated as a good museum and must accordingly be considered a bad museum. ...Resources are not a frill. Adequate resources are what well-intentioned museums must consume if their good intentions are ever to be realized” (Weil 62-63).<sup>4</sup>

The resources Weil refers to in his essay are implicitly and explicitly financial. Though unromantic, a good museum must balance vision with business.

Since “mission” is such an integral part of the museological lexicon, elevating the importance of the business of museums would have a tremendously professionalizing effect. Maxwell Anderson, advocate for progressive museum practices and former president of the Association of Art Museum Directors, points out in his essay, “Metrics of Success in Art Museums,” that finding a way to measure performance in museums is critical, and without generally accepted metrics, museums will have trouble making a case for themselves in the future (Anderson 3-4). A fiscal mission statement, and the policies it suggests, would be additive to any organization, as well as lend itself to measurement. Though many in cultural industries loathe considering the importance of the financial function, a fiscal mission statement would neither subvert the ideological underpinnings of the organization, nor diminish the power of the philosophically driven romantics. It would, however, provide a principled framework for financial managers to move their institutions toward a more modern conceptualization of the museum as a

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<sup>4</sup> Weil’s entire essay was originally presented as a keynote at the 50<sup>th</sup> anniversary of the Mid-Atlantic Association of Museums in November 1997 in Rochester, NY (Weil 55).

business. Development of a fiscal mission statement should parallel that of the philosophical mission statement, but also frame the way a museum views risk.

### Developing a Fiscal Philosophy

The creation of a fiscal mission statement, specifically with regard to the museum business, entails both art and science. The art in designing a fiscal mission statement requires capturing and communicating the collective view of institutional leadership on what is operationally required to forward a museum's philosophical or strategic mission. For example, the statement should indicate leadership's appetite for financially related activities such as physical plant expansion or collections growth. The science aspect of the statement should address the overall level of financial and business risk tolerable by the organization. However, the statement should not specifically identify calculations or measurements; those should be left to the resultant policies. For example, the statement must consider the overall credit of the institution, whereas specific policy may address how new projects are strategically evaluated.

Gail Anderson's *Museum Mission Statements: Building a Distinct Identity*, one of the most comprehensive works dedicated to developing the organizational mission statement, provides an exceptional basis for outlining an institution's financial philosophy. The insights and examples offered in Anderson's compilation can be readily ported to fiscal mission statement formulation. Anderson's guide importantly references Jean Vogt, a frequently cited nonprofit management consultant, who sets forth three essential elements for mission statements:

1. identification of the market, customers, clients, or those whom services are provided;
2. the end or goal toward which services are delivered; and
3. enumeration of what services are going to be provided.

Vogt proffers that these elements should guide all aspects of an institution or run the risk that “numerous and varied parts of [the] organization [will] not function cohesively and [will] give mixed messages to [the] various audiences” (Vogt 29-32). Vogt’s elements are critical to making corporate mission statements meaningful, and are certainly applicable to museum mission statements (Anderson(a) 14-15). Likewise, Vogt’s elements are translatable to the formulation of fiscal mission statements. In a fiscal mission statement, each of the elements should be addressed within the context of the organization’s financial aims and within four broad categories, addressed below, and as outlined by Anderson in her consideration of how a modern, or reinvented, museum should function.

Anderson, in an effort to further progressive thinking by museum leadership, developed a columnar representation of museum mentality separated into dated, or current characteristics of museums, versus new, or progressive characteristics needed by museums; the traditional museum versus the reinvented museum (Anderson(a) 21). Anderson’s reinvented museum contemplates four broad categories of consideration: governance, institutional priorities, management strategies, and communication style (see Appendix A). Professionalizing financial management is but a portion of the reinvented museum, but a number of the necessary contemporary characteristics suggested by Anderson play an important role in the envisioned modernization of the museum business. Specifically, museological fiscal mission statements that address each of

Anderson's four categories using salient characteristics suggested for the reinvented museum are recommended, while communicating Vogt's three essential elements.

### Financial Governance of Museums

Financial governance refers to the exercise of authority by those parties that control fiscal and capital allocation decision making. Museums, like private corporations, are usually managed from the top down, with trustees or a board of directors sitting atop the hierarchical pyramid and setting the tone. Immediately following in importance, the museum director typically holds a board seat and serves as the fulcrum between board and staff (Genoways, and Ireland 39-60). Reporting to the director are the executive ranks. It is the executive ranks who are charged with carrying out the museum's tactical and strategic initiatives, and thus forward the tone set by the board. As with other important facets of the organization, financial matters are primarily handled by a special subcommittee of those responsible for fiscal decisions. The financial governance vision as set forth in a fiscal mission statement should reflect the tone of the board, as well as empower the finance subcommittee.

In the execution of the board's fiscal edicts, the finance subcommittee should consider the values held forth in the organizational mission statement, be progressive in its handling of fiscal responsibilities, and be publically accountable to the stated vision. These considerations, articulated appropriately, may be considered the financial philosophy of the institution. However, simply having a sound financial philosophy does not imply appropriate action. The fiscal mission statement must also indicate the

responsibility required of museum leadership at each level and give those parties the authority to execute their respective functions. Expressing the overall financial philosophy of the museum and providing suitable power to those responsible for its implementation addresses financial governance directly and succinctly. Next, the fiscal mission statement should acknowledge those priorities of the museum requiring capital allocation.

### Financial Priorities in Museums

Financial priorities in museums refer to those matters that both require capital commitment and are considered important to mission related activities. Ranking institutional priorities in museums is difficult. Museums must balance the desire to strengthen the establishment (catering to internal constituencies) with delivering relevant public services (catering to external constituencies) (Anderson(b) 5). Both require an allocation of finite resources and often both have a reasonable or logical aim. Though financial priorities are more narrowly defined than those of an entire organization, they are necessarily aligned with the overall organizational priorities and, hence, the process of ranking them is subject to the same complexity. Nonetheless, communicating a museum's financial priorities in a fiscal mission statement essentially reinforces the stated vision of the museum, though it also conveys a commitment to institutional financial competence and modern capital management allocation decisions.

Financial priorities in the reinvented museum must reflect its leadership's position on mission related activities, consider the importance of organizational financial

education, and acknowledge the necessity of staying relevant in contemporary financial matters. The strategic vision of the museum, if clearly stated, will largely dictate the prioritization of the organization's financial projects. Connecting the museum's mission to its business affirms and validates its strategic vision. Likewise, communicating organizational commitment to financial education provides credibility as to the progressive orientation of museum, as well as further emphasizes the strategic direction taken by the museum. Establishing the aforementioned as priorities allows museum leadership to frame the manner in which it approaches financial decision making and reinforces its dedication to organizational financial proficiency. Next, the fiscal mission statement must provide guidance for financial priority implementation through organizational financial strategies.

### Financial Strategies in Museums

Financial strategies refer to the initiatives and parameters set by an organization that facilitate a specific agenda with regard to the fiscal fulfillment of its financial priorities. Though an institution's financial strategies should embody economically progressive thinking, museums need always consider the philosophical mission when developing and executing the organization's business plan. Specifically, the financial strategies of the organization should convey its position with regard to the use of various methods of financing, as well as provide boundaries as to the level of risk willing to be accepted by the museum to forward its mission. Addressing tolerable risk directly is important. Strategically approaching risk management is critical or "nonprofits may find

themselves making unduly conservative decisions that fail to achieve as much impact as they might, or in some cases taking unreasonable amounts of risk for a low return” (Young(a) 1). Though financial risk often carries a negative connotation, and is sometimes difficult to quantify, it is present in every single business decision and is best addressed openly and plainly. Hence, financial strategies, as communicated in the fiscal mission statement, should describe the tools that will be employed in the pursuit of the mission, as well as convey a museum’s overall appetite for risk.

Financial strategies in economically progressive museums should present leadership’s understanding of their institution’s positioning in the competitive marketplace, demonstrate cognizance of modern financing solutions, and indicate management’s view of acceptable levels of financial risk. Competition is a normal component of a healthy operating environment. Museums, while often providing monopolistic uniqueness, must still compete for visitors, donors, and other sources of funding. The financial strategy of a museum should reflect the prioritization of its efforts to obtain competitive funding. To this end, museums can communicate varying degrees of financial sophistication by acknowledging their potential participation in capital markets or the consideration of various financing products. A museum’s financial strategies also need to communicate the management’s view on tolerable risk; most conveniently relayed in the fiscal mission statement through a self-imposed minimum credit rating. Lastly, a museological fiscal mission statement should suggest the organization’s financial communication methods to both external and internal parties.

## Communicating Financial Intent

Organizational decisions regarding financial governance, priority, and strategy, should be imparted to both internal and external constituencies of the museum through the fiscal mission statement. To this end, the fiscal mission statement must express the manner in which museum leadership intends to disseminate those decisions, both to what degree and to which audiences. Financial information communicated internally is necessarily more detailed as it will dictate a number of courses of action taken at the business operations level. Financial information disseminated externally may appropriately take a more macro, or less detailed focus, as it will be used primarily to demonstrate financial soundness to the public and guide decision making for the institution as a whole. However it is articulated, communicating financial intent through the fiscal mission statement basically pledges the degree of openness the museum intends to demonstrate, as well as undertakes a transparency that compels sound ongoing business practices.

Both internal and external organizational communication should embrace the sharing of knowledge, be accepting of multiple perspectives, and allow for an open and honest portrayal of the institution's financial standing. As noted previously, a soundly run museum presenting fiscal clarity will provide comfort to those parties with a vested interest in the longevity of the organization. Further, by offering organizational transparency the museum invites fresh perspectives on its financial situation that may perhaps provide options that might not otherwise have been entertained. At the very least,

parties with a vested interest in the organization react excessively to financial surprises, and even more so to negative surprises (Amir, and Livnat 1-9). Financial intermediaries, as well as other external parties, desire stability; hence, it is likely that predictability is rewarded in the financial marketplace with greater access to capital and lower rates. Additionally, having a formalized financial philosophy is evidence that the museum is acting in a prudent manner, the underlying rule required by the states' Attorneys General in the Uniform Prudent Management of Institutional Funds Act (Gary 1277-1334); a constituency that should necessarily be satisfied, if not impressed. In the end, the institution that self-examines its financial governance, priorities, and strategies, and then communicates those philosophies in a fiscal mission statement, will secure its place as an astute business operator and reap those benefits.

### Formulating the Statement

As with the standard mission statement, each museum will vary in its approach to creating a fiscal mission statement. However, using the above suggested themes, fiscal mission statement formulation is a relatively uniform and straightforward exercise. Museum leadership needs only to seriously consider the aforementioned areas of financial governance, priorities, strategies, and communication, and prepare a short statement by having two or three sentences address each. While the fiscal mission statement does demand a greater degree of detail than the strategic mission, it is still meant to serve as a guide rather than a handbook. Hence, concision is appropriate, and

any specific procedural details should be left for the institutional policies that spring forth from the guidance provided by the fiscal mission.

Again, though many of the guiding principles will be similar, the fiscal mission is meant to be a statement of convictions separate and apart from the overriding institutional mission. A template to aid fiscal mission statement formulation is provided below in Figure 2-1.

**Fiscal Mission Statement - Formulation Template: Figure 2-1**

Financial Governance

- 1 empower the necessary parties to carry out the financial mission;
- 2 allow the museum to embrace a variety of economic solutions; and,
- 3 acknowledge public responsibility for financial actions.

Financial Priorities

- 1 connect the business of the museum to the institutional vision;
- 2 identify financial education as organizationally important; and,
- 3 recognize the necessity of keeping financially current.

Financial Strategies

- 1 reference the need to stay comparably competitive;
- 2 state that the most efficient/effective methods will be used; and,
- 3 address the level of acceptable institutional risk.

Communicating Intent

- 1 forward that the organization seeks to share knowledge;
- 2 that it will accept varying perspectives; and,
- 3 offer the degree to which it pledges openness.

Once a draft of the fiscal mission statement has been written, the relevance of the statement should be critically analyzed using Vogt’s proposed three primary elements of

a meaningful mission statement. To this end, each of Vogt's elements may be paraphrased as a question:

1. Does the fiscal mission address the appropriate museum constituencies?
2. Does the fiscal mission communicate financial organizational goals clearly?
3. Does the statement describe what will be expected of the museum financially?

The answer to each of the above questions may or may not be addressed specifically in each thematic area of the statement, but each should be absolutely apparent when the statement is taken as a whole.

In sum, the fiscal mission statement is constructive by nature and fundamental to the operating plan of any museum of reasonable scale. By guiding institutional financial efficiency, the fiscal mission statement allows museums to remain relevant and competitive for future generations. As mentioned above, the process of creating the statement, as well as its periodic maintenance, forces museum leadership to stay abreast of modern financial business practices while it reinforces the philosophical mission statement. Using the suggested outline, the formulation of a museological fiscal mission statement is by no means onerous and should be included as one of the AAM's accreditation eligibility requirements.

## The fiscal mission statement and the AAM

In the for-profit sector, the mission may not be considered the reason for existence, but analysis has shown that those businesses committed to their statements of vision are often leaders of industry (Jones, and Kahaner x-xii). In the nonprofit sector, the mission statement is much more important; it serves as “the basis for all activities and decisions within the organization, and the document that forces management to better understand what the organization is all about” (Stern, and Borna 89-90). The prominence of the mission statement as a critical component of museum constitution is evident in the AAM’s “Accreditation Program Standards: Characteristics of an Accreditable Museum,” as well as in another separate, dedicated official statement entitled, “The Accreditation Commission’s Expectations Regarding Institutional Mission Statements.” While it is clear that the AAM recognizes that museums must be fiscally responsible, the business of running a museum is relegated to two, single-line standards: (1) that financial resources are legally and ethically allocated to advance the mission, and (2) that those resources provide for long-term sustainability (AAM Home: About Museums: Standards). Though lofty and admirable, the AAM standards for fiscal prudence do not demand enough financial rigor of museums. AAM standards should require a fiscal mission statement as part of the accreditation process. Museums may have a higher calling, but they are businesses and should be run accordingly. By endorsing the necessity of a fiscal mission statement, the AAM would set in place a mechanism for holding museum managers accountable to measurable standards of organizational efficiency.

## Chapter III

### Museum Capital Structure

Nonprofit capital structure is notoriously hard to conceptualize and seldom a topic of formal research. The paucity of studies on nonprofit capital structure, a mere seven scholarly papers as of June 2008, speaks directly to their necessity (Khodjamirian 1-37). Museum capital structure research is even more elusive; in fact, the terms “museum” and “capital structure” are rarely considered together. A Google search for the combined terms yields only a single legitimate entry.<sup>5</sup> Generically, capital structure is defined as the manner in which a corporation finances its assets (Brealey, and Meyers 397-398). *Encyclopedia Britannica*, however, makes the more common error of associating capital structure with for-profit entities only, and qualifies ideal capital structure as “one that provides sufficient capital for efficient and profitable operations, a maximum rate of return to stockholders at a minimum of financial risk, and a minimum dilution of control (“Capital Structure”).” In fact, the capital structure of any organization refers to the balance of equity and debt that supports its assets (Brealey, and Meyers 397-398). Taken a step further, an organization’s ratio of debt to total capitalization (total equity and total debt) is considered its leverage (Brealey, and Meyers 189-193). In traditional corporate finance, organizational capitalization is the basis for risk and return measurement. Its computation allows management to make the highest and best use of organizational

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<sup>5</sup> Internet search tool, Google, returns only a single entry that references the book, “Financing Nonprofits,” edited by Dennis R. Young, and which is cited in the bibliography of this Thesis.

resources. For-profit companies typically use appropriate traded market prices for equity and debt as a basis for calculating their organizational capital structure and leverage. For museums, as well as other corporate nonprofits, it is primarily the definition of what constitutes equity that complicates the capitalization calculation.<sup>6</sup> Museums have market determined debt prices, however, since museums do not have access to the same equity markets as for-profit companies it is necessary to conceptually construct the equity component of the capital structure. Still, among nonprofits, museums are unique. Since many museums have funding streams that are measurable, repeatable, and theoretically infinite, they have calculable capitalization and hence, measurable virtual equity.

The nonprofit capital structure research that has been written is erudite and, while useful for propagating theoretical research, has not been translated for practitioners. This Thesis builds on the existing body of nonprofit research by overlaying for-profit capitalization theory on the museum business, as well as providing a practical set of analytical measures for museum professionals to understand and use capital structure analysis. To this end, this chapter discusses the critical need to incorporate capital structure analysis in museums, introduces an approach for considering the fiscal component structure of museums, and provides methodology for deriving museological discount rates, equity substitutions, and debt values. The final section of this chapter offers a view with regard to the use of leverage in museums.

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<sup>6</sup> While nonprofits often use “fund accounting” to elucidate a firm’s net worth section in a balance sheet, it does not reveal equity per se. Fund accounting is designed to help trustees clarify the sources and uses of funds received by an organization (Herzlinger, and Sherman 94-105). By extension, it is a “book value” concept. This Thesis posits that a usable capitalization calculation requires museological equity to be calculated as a conceptual market related value.

## Necessity of Museum Capital Structure Analysis

More than most forms of nonprofit organizations, museums need to analyze the manner in which they support their assets; i.e. they must practically understand the implications of their capital structure. A comprehensive understanding of the museum as a business enterprise allows management to most efficiently deploy capital in the pursuit of the strategic mission. Three interrelated reasons dominate the necessity for museums to quantify the capital structure of their organizations. First, the circumstances of the last four decades have permanently changed the way that museums fund their organizations. Museums have moved from a predominately donative funding structure to one that depends heavily on revenue from auxiliary businesses. Second, a higher proportion of auxiliary business revenue exposes museums to business risks that require a commercial market perspective. Understanding the interrelationship between the funding sources and the manner in which they support museum assets allows management to responsively adapt in a variety of economic situations. Third, the level of competition for all museological capital sources, both donative and earned, has increased tremendously. The most effective competitive position requires a financially streamlined organization that is flexibly responsive vying for commercial revenues, yet remains attractive to parties that have, or may have, a donative interest in the museum.

Seeds of the modern museum revenue mix were sewn over 40-years ago, demarked by the creation of the National Endowment for the Arts (NEA) in 1965 (Bauerlein, and Grantham 1). Though there is ongoing debate about the appropriateness of nonprofit organizations engaging in earned income activities, museums more than

most nonprofits had little choice but to commercialize. Up until the 1960s, museums were funded in the same manner as they had been for the previous century, with unrestricted endowment funds and government support (Harris 38-42). Beginning in the 1960s, there was a profound change in the societal value accorded the visual arts, including museums (Parker III, Krens, Luers, and Rudenstine 73-86). In 1965, the United States Congress and President Lyndon Johnson addressed the change with the establishment of the NEA. A museum expansion boom began, fueling growth in the number of new institutions, as well as in increasing existing museum square footage. Attendance increased dramatically, but so did costs. Unfortunately, the pressure associated with increased maintenance and energy costs coincided with an inflationary environment that also amplified art acquisition prices and, more detrimentally, eroded the power of endowments (McFate 72-73; Harris 38-42). Though the rise of corporate sponsorships in the 1970s and 1980s replaced some of the lost revenue, museums increasingly turned to earned revenue such as admissions, merchandising, as well as sales of other goods and services, to support their operations (Toepler 99-102). In a study conducted by Neil Rudenstine, scholar and past president of Harvard University, it was found that between 1969 and 1987 the endowment share of revenue dropped from an average of 40.4 percent to 21.8 percent for the sample of museums he studied (Parker III, et. al, 73-86). His findings are reinforced in a 2006 analysis that spanned 42-years of operating history at the Metropolitan Museum of Art in New York City (Toepler 99-113). In this study, Dr. Stefan Toepler, a nonprofit researcher and instructor at George Mason University, found similarly that:

“Whereas the endowment was the single largest income source of the Museum in the 1960s, the endowment draw hovered around 10% of total revenues from the 1980s into the 1990s before going up again in the second half of the decade. Indeed, the data...suggest that commercial revenues essentially replaced the endowment as the primary source of financing within less than a 10-year span after 1968, while admissions increasingly substituted for the decline in New York City’s cash subsidies” (Toepler 104).

Though there are exceptions, the forces that originally compelled the commercialization movement in museums have permanently changed their revenue structure. Today, most reasonable size museums must engage in auxiliary businesses to some degree to support a portion of their operating costs. In his study, Rudenstine concluded that most museums will likely never return to the subsidized pre-1960s operating model, as the amount of governmental and unrestricted donor support would have to rise commensurately to offset aggregate increased operating costs. He mused, “...any full-scale return to the “old economy” seems to me highly unlikely...” (Parker III, et. al. 83).

While the specific proportionality of revenue streams vary from museum to museum, as well as change over time, the permanent introduction of significant earned revenue to the funding mix mandates a commercial business mindset. To the extent an organization relies on its auxiliary revenue to maintain its operations, it is exposed to the same business risks as for-profit enterprises (Dees 55-67). Creating a successful commercial business is a difficult task, especially for managers who have not traditionally taken a market perspective. To be sure, museums have some inherent advantages, such as the ability to use volunteer manpower and preferred tax status, as well as have access to philanthropic or donative funding sources (Dees 55-67). Nonetheless, studies indicate that at least one in five new businesses fail, and as many as two in three fail within seven years (Chaganti, and Chaganti 206-219). At best, museums

should expect auxiliary lines to fare no better than those in the for-profit space and, as commercial business practices are still relatively new in the nonprofit sector, possibly worse (Toepler 101). J. Gregory Dees, Professor of Social Entrepreneurship and Nonprofit Management at Duke University's Fuqua School of Business, states eloquently that for nonprofits "the challenge is to find a financial structure that reinforces the organization's mission, uses scarce resources efficiently, is responsive to changes, and is practically achievable." While Dees' observation expresses an ideal, the practice of quantifying capital structure helps mitigate business risk, as well as allows management to be commercially proactive rather than reactive; and importantly, competitive rather than passive.

Though permanent revenue transformation and increased business risk are reasons enough to necessitate a fresh understanding of institutional capital structure, museums must also recognize that their market has evolved and they now also vie with highly competitive commercially savvy entities; entities that have their own significant advantages, such as the ability to capitalize in traded equity markets. Museological growth pales relative to the explosive increase in entertainment, destination marketing, theme parks, professional sports, and other recreational outlets (Harris 52-53). Fierce and varied competition for both attention and capital demand that museums communicate very clearly to their constituency what they are about and what they aim to achieve (Rentschler, and Hede 151-158). One such statement is a clear and concise fiscal mission, as was demonstrated in Chapter II; another is a streamlined capital structure. "In short, those who are in a position to support nonprofit organizations could be getting more and better information that would improve their confidence in their charitable decisions and,

in the long run, increase support for the sector. The fundamental features of nonprofit organizations suggest that expanding and improving reporting and accountability systems could have significant financial benefits that are not being realized” (Keating, and Frumkin 3-15). Communicating financial sophistication with a streamlined capital structure positions a museum to compete effectively for capital from typical corporate sources such as banks, as well as demonstrates efficient use of donative funds.

### Description of Museum Capital Structure Analysis

Nonprofit organizations have a unique financial structure and museums are unique among nonprofits. A nonprofit is generally defined as:

“an organization that is barred from distributing its net earnings, if any, to individuals who exercise control over it, such as members, officers, directors, or trustees. . . . a nonprofit is not barred from earning a profit. . . . Net earnings, if any, must be retained and devoted in their entirety to financing further production of the services that the organization was formed to provide. . . . a nonprofit corporation is distinguished from a for-profit (or “business”) corporation primarily by the absence of stock or other indicia of ownership that give their owners a simultaneous share in both profits and control” (Hansmann(a) 838).

Though they are restricted by the same nondistribution constraint,<sup>7</sup> museums differ from most other nonprofit organizations in that they have a number of aspects to them that are akin to their for-profit brethren, aspects that lend themselves to valuation. To be sure, a portion of what constitutes a museum’s value is unquantifiable. However, a perceptive understanding of museum institutional structure and capital proxies allows measurement and decision making guided by appropriate leverage capacity limits. As previously noted,

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<sup>7</sup> Henry Hansmann, Professor of Law at Yale Law School, coined the term “nondistribution constraint” to concisely describe the primary difference between nonprofit organizational structure and for-profit organizational structure (Hansmann(a) 838).

museum assets are supported by a combination of earned and donative fund flows, as well as by debt. Museum earned revenue includes admission receipts, retailing operations, food concessions, and contracted services; donative income includes endowment spending, as well as repetitive contributed income such as philanthropic donation and government support (Kaiser 113-116). Despite the nondistribution constraint, the presence of unique funding streams and certain organizational behavioral tendencies supports a market-based valuation and capitalization measurement for museums. Certainly, the resulting analysis will be a conceptualization of museological value, but one that is usable for the purposes of measuring appropriate leverage limits. To make the analysis usable, museums must first be considered in a simplified framework.

### Museological Fiscal Component Structure

Museums typically take one of four legal forms: a line department, an “arms length” governmental institution, a not-for-profit association, or as a privately held entity (Lord(b), and Lord 47-51). Within each legal form there is further delineation of the organizational functions. Specifically, museum staff is usually separated into: those concerned with the museum’s assets, those concerned with its activities, and those administering the other two (Lord, and Lord (a) 25-43). The functional delineation exists regardless of form or size. However, the legal form and functional divisions have little relationship to the financial form of museums. Considering museums as three distinct fiscal components provides the appropriate framework for analytical analogy to three for-profit businesses: a warehouse, an investment fund, and an operating business. Solely for

financial analytical purposes, the great treasures of the museum, its collections, are lumped into the fiscal segment “warehouse.” Non-endowed museums do not have an “investment fund,” but do have both a warehouse and operating business. Also for analytical simplicity, the museum operating businesses include managerial and administrative functions, as well as all the scholarly, educational, and cultural stewardship functions. The three-part fiscal segmentation is hypothetically constructed to facilitate the financial calculation of museological capitalization. The capitalization value derived using the proposed analysis does not accord the museum any value for its collections, nor does it acknowledge any organizational societal value; it is simply a measurement to aid management in making certain operational financial decisions. Still, all museums have value in their collection.

Collections are the reason for organizational existence; however, they are interestingly irrelevant to the capitalization calculation in this analysis. While monetization of the collections “asset” is possible through deaccessioning, the process is subject to intense scrutiny and generates only restricted funds (“Ethics of Deaccessioning”).<sup>8</sup> With accreditation and public ire at stake, most museums abide by a strict adherence to standards such as those reaffirmed in June 2010 by the Association of Art Museum Directors (AAMD) in a report where they stated, “funds received from the disposal of a deaccessioned work shall not be used for operations or capital expenses. Such funds, including any earnings and appreciation thereon, may be used only for the acquisition of works in a manner consistent with the museum’s policy on the use of

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<sup>8</sup> It should be noted that the use of deaccessioning proceeds for collections reinvestment is an ethical choice rather than a legal one. The analysis in this Thesis assumes that the current ethical standards of practice with regard to collections monetization continue, and passes no judgment on such sales or purchase decisions.

restricted acquisition funds” (“AAMD Policy on Deaccessioning” 2-12). It was primarily the adherence to such policies that gave the Financial Accounting Standards Board (FASB) enough comfort to forgo requiring museums to calculate and disclose the fair value of their collections on their balance sheets (“Statement of Financial Accounting No. 116” 14-61).<sup>9</sup> FASB reasoned that the ethics policies promulgated by the industry regarding commitment to maintaining collections with proceeds from collection sales, demonstrated commitment and probability that “inexhaustible collections” will be maintained indefinitely. Likewise, the collection value in this analysis is not considered relevant. Museum operating business decisions should be made based on a capitalization concept that excludes the “inexhaustible collections.” Hence, principled museum management, following industry sanctioned ethical standards of practice, in a normal business environment, will neither add nor subtract value with deaccessioning transactions. For this reason, the collections can simply be analogized as a warehouse, owned and operated by the museum. The museum is obligated to manage and maintain the warehouse, but regardless of monetary value, legal status, or societal importance of its contents, it is excluded from the capitalization equation in this analysis. Value is derived from the warehouse by compensating the operating business for its management and maintenance. Direct investments in the warehouse, in the form of capital improvements, are made with the expectation of generating increased revenues. However, any addition to warehouse contents only indirectly affects the overall museum valuation.<sup>10</sup>

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<sup>9</sup> FASB recognized in their June 1993 pronouncement No. 116 that museum collections can be capitalized (valued as assets), but stopped short of requiring such analysis for financial statement presentation (“Statement of Financial Accounting No. 116” 14-61).

<sup>10</sup> For example, regardless of market value, a new bequest for the collection may bring additional visitors, but the operating business capitalization would change only in as much as the addition brought in new revenues.

The two remaining fiscal components constitute what is here termed, the “umbrella value” of a museum. The umbrella value includes the endowment, if any, and the calculated value of a museum’s operating business. While the umbrella value neglects to include the collection, the composite represents the overall financial wherewithal of an institution. The umbrella value is important in as much as it communicates financial scale, though it should not dictate management decisions regarding the operating business. Still, it is important to calculate and understand the umbrella value as it does reflect an organization’s overall financial stability.

The endowment, should one exist, can be thought of as a specified purpose investment fund (Bowman(a) 296-297). The valuation of an investment fund is a relatively straightforward exercise, and is especially so in the case of nonprofit endowments. As of July 2006, the National Conference of Commissioners on Uniform State Laws recommended that the Uniform Prudent Management of Institutional Funds Act (UPMIFA) be enacted by the various states to set a standard of care for administering endowments (Drozdowski). According to UPMIFA, an endowment exists solely to sustain its purpose of creation, namely to provide funds to its designated organization over a long period of time (Gary 1277-1334). In this model, all endowment assets are ultimately destined to support the operating business and by extension, the warehouse. Endowment expenditures, other than those directly associated with investment transactions, are captured as expenses that flow through the operating business and can therefore be considered part of the management and maintenance of the warehouse. Since costs associated with the endowment are apart from the investments themselves, the value of the investment fund is simply the market or fair value of the assets held in the

fund. However, the typically restricted nature of endowed assets requires that the fund be considered as a distinct class of equity and is generally unavailable as risk capital (Bowman(b) 271-289). Though restrictions imposed on specific assets held in an endowment will cause liquidity to vary from fund to fund, for the purposes of this analysis, transfer distributions (also termed “endowment support”) from the investment fund have an unrestricted quality and are included in the valuation of the operating entity. The salient metric is not the total funding available, but the periodic transfer of funds to the museum’s operating business; or, in UPMIFA parlance, the prudent spending rate. The prudent spending rate for each museum is different. It is formally determined by its board of trustees, but is typically based on a reasonable percentage of the rolling average of the fair market values of the assets in the fund over a number of years (Gary 1277-1334).<sup>11</sup> The spending rate, or endowment support, is often the largest single source of operating business income for museums. Since the endowment support is calculable, repeating, and theoretically infinite, it has the attributes of a perpetuity, and may appropriately be treated as such in this analysis.<sup>12</sup>

The second component of umbrella value, and the primary determinant of capitalization, is the operating business component of a museum. The operating business of a museum maintains and manages the warehouse and investment fund and is compensated for its administration. Again, for analytical simplicity in this analysis, the museum operating business includes all managerial and administrative functions, as well as the scholarly, educational, and cultural stewardship roles within the organization.

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<sup>11</sup> Though UPMIFA suggests a maximum annual spending rate of seven percent, it is ultimately the state laws and individual boards that determine what is considered a prudent spending rate for a particular institution.

<sup>12</sup> A perpetuity is an annuity that is payable forever, where an annuity is a sum of money payable yearly or at other regular intervals (“Perpetuity”).

Compensation for the administration of the museum comes in the form of revenue streams that have both for-profit and, in many instances, perpetuity-like attributes. The unique mix of revenue streams and theoretically continuous funding sources directly support a portion of a museum's assets and, therefore, permits a basis for determining a proxy equity value. Proxy equity, together with the organization's debt, are the sum total of asset support. Collectively, they provide a measurable capital structure from which to determine appropriate leverage.

### Valuation Using Museological Fiscal Component Simplification

Segmenting the museum into its fiscal components permits a financial analyst to conduct enterprise valuation for a variety of purposes. As reasoned above, for the purposes of museum financial management, neither the value of the warehouse, nor the market value of the investment fund, are appropriate to include in the calculation of capital structure. Rather, the calculated value of the virtual equity and debt of the museum operating business is singularly the most critical factor in providing a capitalization measure relevant to organizational fiscal decisions. To this end, there are a number of appraisal approaches available to assess the value of the operating business component. Each methodology has both benefits and failings. Using the most appropriate analysis requires an understanding of the underlying business, but as importantly, a thoughtful consideration of the ultimate purpose for the valuation. Though a particular position regarding valuation is forwarded here, there always will be debate regarding which type of analysis is the most appropriate. Recent experiences in the nonprofit

industry point to the necessity of using some form of market based valuation to obtain a realistic valuation measurement.

During the 1980s and 1990s, a tremendous number of nonprofit health maintenance organizations (HMOs) required valuations to allow conversions from nonprofit status to for-profit status (McMahon 355-394). The impetus for the bulk of HMO conversions was a desire to have access to private capital sources, including equity markets. As no identifiable trading market for the new conversions existed, most valuations used forward looking financials and income or cash flow discounting to value the HMOs. While the appraisal methods chosen were seemingly acceptable enough for state regulators and the Internal Revenue Service, the absence of market comparables in many of the analyses gave rise to litigious contention that some HMO conversions were being mispriced (McMahon 355-394). Museums share similar opacity with regard to historical operating characteristics and lack of existing market comparables for income or cash flow. However, the distinct character of museum revenue provides an excellent possibility for relevant comparable measurement. So, though museum financial managers do not share the same interest in obtaining private capital from equity markets, the experience of the HMO conversions sheds light on the imprecise nature of valuation in the nonprofit sector, as well as the necessity to include market comparables in the analysis. In both the for-profit and nonprofit world, valuation methodologies fall into three categories: asset-based analyses, income or cash flow analyses, and market comparables analyses (Kominski 1-4).

What is the appropriate technique for appraising the operating business of a museum? As mentioned, to correctly approach the capitalization calculation in museums,

an analyst must understand the nature of the museum operating business, as well as consider the purpose of the valuation. While the nature of the operating business will be borne out of the analysis itself, the purpose of the valuation in this Thesis is to provide a simple, comparable measure to help museum management understand more completely organizational leverage and most efficiently deploy capital in the pursuit of the strategic mission. The first of the possible valuation techniques are asset-based analyses. Asset-based analyses are accounting focused and rely on the accuracy of pricing the balance sheet assets of an organization. Asset-based forms of analyses do not allow for the assessment of organizational performance, nor do they value the organization as an ongoing concern (Kominski 2). Measuring museum capitalization and leverage on a forward looking or ongoing basis is fundamental to this analysis. Hence, asset-based analyses tend to be the least appropriate category of valuation methodology for museological operating business purposes.

Discounted income or cash flow analyses are widely recognized as good assessment techniques for valuing private companies or those without directly comparable for-profit counterparts, as was noted in the above HMO conversion discussion. Seemingly, discounted income or cash flow analyses would be appropriately portable to nonprofit valuations. Yet, while discounted income or cash flow analysis *in combination with comparable market multiples* is the most complete method of appraisal for any business, museums are neither managed for profitability, nor interested in changing their organizational structure by conversion to for-profit status. That said, museums are “not prohibited from earning profits; rather, they must simply devote any surplus to financing future services or distribute it to noncontrolling persons”

(Hansmann(b) 27-42). While retaining net earnings is the most self-sufficient method of capital growth or accumulation, museums do not prioritize profit maximization. Instead, like most other nonprofits, museums attempt to optimize either the quality or the quantity of the service they produce or provide. For museum fiscal managers, this is often a matter of simply maximizing the budget. Focusing on a budget simplifies the decision making trade-off between quality and quantity optimization (Hansmann(b) 27-42). While having a budget focus may seem to imply cost containment, in fact, the absence of an ownership claim on residual earnings gives management little incentive to minimize expenses (Hansmann(b) 27-42). Hence, museum earnings, as well as cash flow figures, are not reflective of productively efficient behavior, but are managed to different ends. Specifically, museum management attempts to employ available resources, such that the services provided by the organization attain the highest and best use of all available funds. Since management tries to maximize some combination of quantity and quality of service, their efforts absorb most of the available funds and results in de minimis earnings during any given year. Though it is beyond the scope of this Thesis, a cross sectional study of reported museum income over time would likely yield earnings that tended toward zero. Rightly or wrongly, the productive inefficiencies inherent in the behavioral attributes of museum and other nonprofit managers make valuation using income or cash flow discounting, while possible, not the most appropriate method. However, measures of profitability and cash flow are only two types of value indicators; any number of factors may drive the measurable value of an organization (DePamphilis 293-294). For museums, the operating business has only one unadulterated financial measure, revenue.

Revenue analysis is inherently a market comparable analysis. However, revenue measurement is not necessarily restricted to a simple one-dimensional analysis of the top line sales figure. Museums in particular have numerous opportunities to use revenue comparable analysis on sector-specific measures such as admissions numbers, square footage, number of employees, gallery area, etc (Damodaran 548-571). Though the sector-specific measures may allow for deeper analyses, revenue and revenue multiples do refer to the top line sales figure. Aswath Damodaran, Professor of Finance at the Stern School of Business at New York University, offers three primary benefits of using revenue multiples for valuation in his book, *Investment Valuation*. First, unlike earnings and book value ratios which may be negative or insignificant, revenue multiples are available for any and all ongoing businesses. Second, unlike earnings and book value, which are heavily influenced by accounting decisions, revenue figures are relatively difficult to manipulate or manage. Last, revenue multiples are not as volatile as cash flow or earnings multiples, and are less likely to be affected by year-to-year swings (Damodaran 548-571). Though Damodaran focuses on for-profit entities, the benefits of using revenue multiples are directly applicable to the operating businesses of museums. Further, the use of revenue measures reduces or negates the effect of the fiscal behavioral tendencies of museum management to maximize the budget. Thus, revenue multiples reflect the larger fiscal decisions made for a museum over time, such as the addition of a wing, rather than those made that simply consider the year-to-year spending. Still, Damodaran warns that the biggest failing of the revenue multiple is that it may assign value to an organization losing money; and organizations must generate earnings and cash flow to have value. Though this caution must also be considered in museum

valuation, museum management's nonprofit budget maximization behavior is, to some extent, insulating. First, it may be inferred that having a budget focus requires museums to pay close attention to costs; i.e. they will seek to exercise enough operating caution to avoid collapse. And secondly, the nominal earnings experienced because of the budget maximization behavior actually forces museums to have truly comparable revenue multiples; i.e. the profitability objectives are similar, so differences in capitalization scale between museums will be reflected primarily in their revenue. Management decisions that impact revenue will generally be made with a long term, organization-wide view and are thus critical to valuation and the best metric for capital structure analysis. However, not all revenue streams are treated equally.

As noted previously, museum operating business revenues are a mix of donative funding sources and funds from businesses lines with commercial-like attributes. As Toepler pointed out, museum revenues emanate from a combination of endowment income, government appropriations, donative sources, core commercial activities, such as admissions and membership, and auxiliary businesses (Toepler 99-113). Though it is beyond the scope of this Thesis, a detailed study of each revenue line would add a significant depth of understanding regarding the characteristics of the funding streams, as well as help to better identify the most suitable market comparables. However, for descriptive simplicity, museum revenue is segmented into two categories: revenue that is predominately regular and recurring, and revenue that has a greater degree of variability. Much like a conglomerate with dissimilar business lines, both streams are valued separately then added together to obtain the worth of the museum's virtual capital.

Per Toepler, the museum sector has an extensive history with donative funding. Regular and recurring revenue in museums primarily consists of those donative sources from outside the museum that are well established, as well as those that have become formulaic periodic payments from an endowment, should one exist. While past experience does not precisely predict the future, historical revenue run rates for certain donative streams, as well as projected growth and return rates regarding endowment funding, provide a revenue figure that has perpetuity-like attributes. Revenue categorized by management as perpetuity-like may be appropriately capitalized using a perpetual compounding formula. Calculating a suitable capitalization rate<sup>13</sup> for the cash flow series is complicated. However, two prominent American economists, Eugene Fama and Michael Jensen, offer a theory that has the most practical applicability. Fama and Jensen hypothesize that donor contributions to nonprofit organizations constitute a form of equity investment. Their research posits that since donors usually hold a diversified portfolio of assets, the decision to donate to a particular organization is competitive. Since donors to nonprofits forego claims on monetary returns earned on their donations, they will choose the alternative with the lowest market value of costs. Thus, the market value rule for investment decisions applies and nonprofits may be valued using discount rates defined by outside capital markets (Fama, and Jensen 115-118). Therefore, donative revenue categorized by museum management as perpetuity-like may be capitalized using a market determined compounding rate. Computation of the rate will be different for each organization, but should consider the expected return on the investment fund, inflation, and the trustee determined prudent spending rate (Figure 3-1). Once the capitalization

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<sup>13</sup> The term “capitalization rate” may be used synonymously with the term “discount rate,” or with regard to project prioritization and selection, “hurdle rate.”

figure is calculated, the remaining business operating revenue must be considered in the context of market comparables.

Perpetuity Revenue Value: Figure 3-1

$$\textit{Perpetuity Revenue Value} = \frac{SR}{r - g}$$

where, *SR* = amount transferred to the operating business using the prudent spending rule,

*r* = the rate of return expected on the invested assets over the long term,

*g* = grow rate, if any, on the expected rate of return.

The remaining revenue streams are those generated from the commercial-like operating businesses of museums. As previously noted, those revenue streams are most appropriately valued using market comparables. Calculating the capitalization using those revenues requires a studied consideration of commercial entities and industry sectors with operating characteristics similar to that of the particular museum being valued. Some museums may have operating revenue that has entertainment industry or theme park-like qualities, while others may more closely mimic retailing operations. In Damodaran's book, as in most instructional finance books, the price-to-sales ratio is computed by dividing the market value of a firm's equity by its revenues.<sup>14</sup> In a typical analysis, the resulting ratio is compared to the ratios of other individual companies, or entire industry sectors, allowing analysts to make judgments on the relative value of the organization's equity price. Museums do not have equity per se, so instead of calculating a price-to-sales

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<sup>14</sup> A similar measurement, the enterprise value to sales ratio, takes into consideration an organization's debt. For this analysis, the price-to-sales ratio is preferable as it allows the calculation of a theoretically pure equity value.

ratio, the formula is reversed and the museum's virtual equity value is derived by multiplying its operating revenue by an appropriate market determined price-to-sales ratio (Figure 3-2). The resulting value reflects the portion of the capitalization that is generated by those museum revenues that are more commercial-like and have a greater degree of variability. Again, the selection of the comparable market ratio requires a high degree of vigilance. Care should be taken to use a ratio from a company or industry that has similar operating characteristics, as well as similar existing capital structure.<sup>15</sup>

Calculating Museum Operating Business Virtual Equity: Figure 3-2

First, select a comparable corporate or industry business. Next, calculate the price-to-sales ratio (PSR) for the selection using the following equation to obtain a comparable PSR:

$$\text{Price to Sales Ratio (PSR)} = \frac{\text{Market Value of Traded Equity}}{\text{Revenues}}$$

To calculate equity value, in the above equation both sides are multiplied by revenues yielding:

$$\text{Market Value of Traded Equity} = \text{Revenues} \times \text{PSR}$$

Therefore, for the purposes of this Thesis the equation becomes:

$$\text{Theoretical Value of Virtual Equity} = \text{Operating Revenues} \times \text{Comparable PSR}$$

As the selection of the ratio is critical to valuation, museum management may wish to calculate a series of values and present the appraisals in matrix form. In any case, the combination of the recurring donative revenue valuation and the market multiple revenue valuation yields the total virtual equity component of museum capitalization.

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<sup>15</sup> Since this analysis uses the price-to-sales ratio rather than the enterprise value to sales ratio, true comparability requires considering the debt or leverage of the selected company or industry sector.

However, since total capitalization requires values for both equity and debt, the debt portion of museum capital structure must also be calculated. Thankfully, the basis for debt assessment in museums is practically identical to that in for-profit entities.

Museums, as most non-profits, may borrow using both market debt and non-market or private debt (Khodjamiran 1-37). Market debt typically represents the bulk of museum borrowings and consists of mortgages, bank loans, and bonds; all with required rates of return determined by market participants. Non-market debt is sourced from parties with other than a pure investment return perspective and as such, is typically longer-term and may carry favorable rates. In any case, all debt has a defined set of terms that make it relatively simple to calculate current market value. The debt that constitutes the “debt capital” of the museum includes the summation of organizational market and non-market debt, as well as any permanent short-term or medium-term funding (Zietlow, et. al. 356-389). Finally, adding the calculated total for virtual equity and the market value of the debt yields a figure for museum capitalization. The balance between the two is the capital structure of the museum; the debt divided by the total, its leverage.

#### A view on museum leverage

Though the virtual equity capital provides the greatest portion of asset support in museums, the use of leverage, or debt capital, can afford management additional flexibility in financial resource allocation decisions. While debt is typically used as a cash flow “matching” device for specific capital projects, museums should manage their liabilities holistically and, when possible, take advantage of the financing subsidy

government affords them as tax exempt organizations.<sup>16</sup> Leverage as an anathema to museums is an outdated view. Debt has traditionally been viewed as a means for project financing, rather than as part of the overall capital structure. In *Managing Nonprofit Financial and Fiscal Operations* written only last year, the authors, Swoboda and Swoboda, propagate this negative and limited view in their introduction to their “Capital Debt Policy” section with, “No one likes debt... There are two reasons [nonprofit] organizations incur debt. ...to finance current expenditures... [and] ...to finance a capital expenditure (Swoboda, and Swoboda 294-295).” The authors later recover by endorsing sound debt policy, but their view is dated. Though still limited, there is a body of research emerging that examines nonprofit indebtedness rationally. The most comprehensive literature on nonprofit liability management is found in a book written in 2007 by John Zietlow, Jo Ann Hanking, and Alan Seidner called, *Financial Management for Nonprofit Organizations*. Zietlow et al., progressively view debt use by nonprofits in the context of a target capital structure (Zietlow, et. al. 356-389). While the book offers a somewhat simplistic capitalization analysis, the progressive consideration of debt within the context of capital structure is precisely the type of analysis forwarded here. Further, Robert Yetman, Associate Professor of Management at University of California–Davis, discusses nonprofit leverage in modern terms in his chapter, “Borrowing and Debt” in Young’s compilation, *Financing Nonprofits*. Yetman recognizes debt as an important means beyond simply financing capital projects; however, his theories are directed at generic nonprofits and stop short of providing a method for managers to make borrowing decisions (Yetman 243-268). Using the methodology outlined above, this work provides

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<sup>16</sup> Research indicates that though tax-exemption eliminates the income tax shield that interest expense provides to taxable entities, nonprofit businesses benefit indirectly from the tax shields provided to investors by participation in the municipal or tax-exempt debt markets (Wedig(b) 1247-1283).

museum management with exactly that set of tools, and hence, allows the concept of target capital structure to become part of museological financial lexicon. Expanding the concept of appropriate debt use in museums affords museums the opportunity to become more financially flexible, as well as potentially enhances productive efficiency. Whatever a particular institutions' view on debt, most literature endorses formalized policy with regard to leverage. This Thesis concurs and offers a template that incorporates fiscal mission and measurable capital structure in the following chapter.

## Chapter IV

### Considering Museological Debt

Museum assets must be financed with either equity, debt, or a combination of the two.<sup>17</sup> Since museums, as nonprofit organizations, are subject to the nondistribution constraint as defined by Hansmann, equity financing is conceptually complex and inherently more difficult to obtain than debt capital. Yet, museums must endeavor to source capital from both equity and debt providers, understanding that there are costs associated with each. The balance of equity and debt in a capital structure will vary from museum to museum, but finding an appropriate mix is critical to effectively carrying out the organizational strategic mission. Museological debt policy addresses this balance by aggregating and formalizing the fiscal mission statement and associated organizational procedures, as well as setting capital structure and financial ratio targets. Its adoption and enforcement indicates the depth of fiscal discipline within a museum and provides a framework or justification for management decisions concerning capital allocation and institutional investment.

Interestingly, museums typically originate as pure equity entities, perhaps initially capitalized with the gift of a collection or donative funding. Considering a new museum in abstraction, there is a beautiful simplicity in a pure equity capital structure; revenues equal expenses and the enterprise is completely self sustaining ad infinitum. Though new

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<sup>17</sup> Henceforth, when the Thesis refers to “equity” it is referring to the museological virtual equity as developed in the previous chapter.

museum revenue is initially anticipatory, there is measurable value apart from the collection in the operating entity, as demonstrated in the previous chapter. For museum management contented with the collections and physical presence, as well as operating the business in a state of financial equilibrium, a pure equity capital structure is completely appropriate. However, rarely does maintaining the status quo capture the strategic intent of museological mission statements. For most museums, growth is an imperative, whether that means refining a collection, expanding an education program, or constructing additional gallery space. Growth is possible for the equity only museum, but solely by investing the excess of revenues over expenses, or by receiving unsolicited donative funds. As asserted in the previous chapter, museums attempt to employ all available resources to maximize the quality and/or quantity of services offered and thus, do not prioritize profit maximization. Since museums do not prioritize profits, retaining earnings for growth is uncharacteristic behavior and contrary to their mission. And, while receiving unsolicited donative revenue is the cheapest form of equity capital, waiting for it is akin to hoping to write a book rather than putting pen to paper. Nonetheless, the previous analysis shows that increasing museum equity capital essentially equates to management decisions taken to increase revenue. Decisions made to grow revenue, by definition, require investment capital. Hence, museum growth, apart from unsolicited donation, requires obtaining investment capital through either a reallocation of existing equity or by the use of debt.

To be sure, the reallocation of existing equity is often the best source of investment capital for a museum. To the extent a reallocation creates new or enhanced sources of revenue that exceed expenses, the existing organizational equity is

appropriately being put to a higher and better use in the advancement of the museum mission. An obvious example of this may be the creation or expansion of a donation development department. Still, museum management should necessarily recognize that the investment is a reallocation of existing capital and comes at the cost of losing whatever asset it was previously supporting. Debt, on the other hand, allows management to grow the museum, but does not require the same reallocation of resources. Debt is also immediately additive to the capital structure, and may be used to support whatever asset museum management deems appropriate. Debt capital is not free, but the cost is readily discernable and typically reduces the organizational overall cost of capital.<sup>18</sup> Managed appropriately, debt provides an easily obtainable and flexible capital source with which to maximize the strategic mission of the museum.

Of course, there is a downside to having debt. Since creditors have a contract as to the future value of the debt capital provided and an expectation of investment return, they have a claim on a portion of the organization (Brealey, and Myers 318-320). Generally, if financial problems arise, the credit obligations of the organization will be satisfied before other stakeholder claims. Hence, having indebtedness, or leverage, increases the risk profile of the organization by hierarchically segmenting claims on its assets; i.e. it raises the possibility that the museum may not meet all its financial obligations. Still, since debt is necessary to most effectively carry out the strategic mission, there is an amount of debt in the capital structure that allows an acceptable level of risk. Thus, if debt is used

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<sup>18</sup> Cost of capital is a hurdle rate for capital budgeting decisions. It is calculated by amalgamating proportionally the business risk (the cost of equity) and the financing risk (the cost of debt) for an entity (Brealey, and Myers 190-196). If the cost of obtaining equity exceeds the cost of borrowing, the cost of capital is lowered by adding debt to the capital structure. As debt (risk) is increased, so too does the price of borrowing. Hence, debt decreases the cost of capital only to a point. Also, as noted, some types of museum equity may be obtained very reasonably. Further exploration of museum capital cost is warranted, but beyond the scope of this Thesis.

appropriately, and managed within prudent and prescribed guidelines, the museum and all its stakeholders stand to win (Zietlow et al. 357).

## Debt Policy and Museums

A formalized debt policy is the guiding document that provides the prudent and prescribed guidelines allowing an organization to use the full and complete set of financing options available to it, including debt financing. Though it is created and adopted by museum management for museum management, it provides a framework addressing decisions that impact both external and internal stakeholders and ultimately defines institutional risk tolerance (Pladson 1-5). Museums are considered perpetual organizations, intending to maintain their existence eternally. Developing debt policy to guide decision making also forces management to appropriately take a long-range perspective in their financial planning.

While a reasonable amount of literature suggests possible ways to approach the construction of formalized debt policy, none are specifically tailored to the uniqueness of the museum business. Nonprofit debt policy research is almost exclusively geared to the healthcare and higher education industries. Nonetheless, much can be learned from the research available in those areas, as both hospitals and universities are financially similar in many ways to museums. One often quoted body of work on education finance, *Strategic Financial Analysis for Higher Education (SFAHE)*, was originally published in 1982 by Peat, Marwick, Mitchell & Co. (currently known as KPMG). Now in its sixth

edition,<sup>19</sup> SFAHE provides a succinct outline of debt policy formulation ultimately adaptable to museums. In particular, SFAHE makes a distinction between the debt capacity of an organization (addressed in this Thesis as appropriate leverage) and the debt affordability<sup>20</sup> of an organization, choosing affordability as the most important constraint (KPMG et al. 36-38). While debt affordability is obviously a constraint, and must be taken into consideration, it provides a measure for a maximum level of debt rather than an optimal level of debt. Nevertheless, the SFAHE overall approach to debt policy planning is fairly complete and helps to serve as a guide for museum policy development in this Thesis. A summary of the SFAHE recommendations can be found in Appendix B. Likewise, the Healthcare Financial Management Association (HFMA) produced a similar pamphlet in 2005, recommending debt related strategies for healthcare industry financial managers. The HFMA approach includes practical management of the debt portfolio by (1) examining capital structure, (2) determining debt capacity, and (3) looking at various modern debt options, including fixed versus variable rate debt structures and the use of swaps (HFMA 5-26). This chapter builds on the analytical foundation created through policy research in the education and healthcare industries, and incorporates the museum specific ideas regarding the creation of a fiscal mission statement and the analysis of museum capital structure.

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<sup>19</sup> SFAHE sixth edition is jointly published by KPMG, the investment banking firm, Prager, Sealy & Co., and the consulting firm, BearingPoint Inc.

<sup>20</sup> SFAHE defines “debt affordability” as an institution’s ability to absorb all incremental facilities costs within its operating budget, effectively scaling organizational indebtedness to the undistributed profit.

## A Framework for Formal Debt Policy

Beginning with a methodology originally created for educational institutions, the SFAHE sets out a reasonable set of debt policy building blocks used as a starting point for museum specific policy (KPMG et al. 35-44). In the material that follows, the basic suggestions from the SFAHE have been consolidated and reformulated to include the ideas forwarded earlier, namely, the proposals for a fiscal mission statement and conceptually constructed capital structure. While the specific constitution of the document will vary, the sections that should be included in the organizational debt policy are as follows:

1. A brief statement of purpose;
2. The introduction and promotion of the fiscal mission statement;
3. A statement of organizational objectives for the debt policy;
4. A selected number of financial measurements in the form of target ratios and capital structure that indicate the museum's tactical and strategic fiscal plan;
5. A statement of the acceptable structures and parameters for financial instruments;
6. A schedule for reviewing the fiscal health measures and the policy itself.

Generally, the adoption of an institutional debt policy, as outlined above, is promoted in a significant amount of nonprofit financial literature. For example, previously cited authors such as Yetman and Zietlow, promote the sensible use of debt by nonprofit organizations within a set of defined parameters. While the espousal of

adopting a debt policy is not directly an endorsement of the use of debt in all nonprofit institutions, most sources concur that strategically using debt as part of the capital structure adds financial flexibility and lowers the overall organizational cost of capital. For museums, formulating and formalizing a policy such as the above is critical because, as argued earlier, an optimal level of debt should consistently be a portion of the organizational capital structure. Adding financial flexibility and lowering capital cost allows museum management to make more efficient use of limited resources in propagating the strategic mission. A detailed description of the primary components of for museum debt policy, as outlined above, follows for the length of this chapter.

#### The Statement of Purpose

The debt policy statement of purpose initiates the discussion about the use of debt for organizational purposes. Generically, it includes a reference to the organization covered by the policy, mentions the strategic mission, recognizes the value of the prudent use of debt, and advances to the next section, the fiscal mission statement. It should be no more than one to three paragraphs in length. As an example, the Statement of Purpose may be constructed as follows:

Sample Museum (hereafter, the “Museum”), operating as a nonprofit corporation in the State of New York, recognizes that in order to most efficiently execute its strategic mission of preserving its collections for future generations, as well as providing education and access to those collections, it must manage its finances to maximize the quality and quantity of services provided. Accordingly, the Museum understands that financial efficiency requires the use of debt instruments when appropriate, and to the extent authorized by this document.

The purpose of this document is to provide structured guidance in the form of written policy on the strategic use of debt as a funding source, as well as ensure that the appropriate mix of funding sources is utilized while the financial health of the Museum is maintained. This document provides a definitive framework for management to evaluate the appropriate use of debt in all Museum financing decisions.

The direction provided by this document will be governed by a Fiscal Mission Statement that articulates the Museum's tenets of financial philosophy.

Again, the statement of purpose simply conveys that the museum financial management will seek to construct the most efficient capital structure for the organization. More importantly, the Statement of Purpose introduces the fiscal mission statement.

#### The Fiscal Mission Statement

A formalized fiscal mission statement, proposed as mandatory for museological operating businesses in this Thesis, sets forth the financial philosophy of the decision makers in the museum. As described in Chapter II, the fiscal mission of a museum is an encapsulation of carefully considered financial values communicated in no more than eight to twelve sentences. Where the fiscal mission statement presents the financial philosophy of the museum in its entirety, the debt policy provides an outline for implementation. Again, as noted in Chapter II, the fiscal mission statement should address museum attitudes and beliefs regarding financial governance, priorities, strategies, and communication.

The second section of the debt policy should introduce the fiscal mission statement for what it is, the financial philosophy of the museum, and then incorporate the

statement as written. As an aside, if a museum finds that its financial dealings are primarily dictated by this document, it may be appropriate to find that the only physical representation of the fiscal mission statement is in this section. In the third section, the policy frames the specific financial objectives of the museum and describes how the organization intends to use the framework established by this document.

### The Statement of Organizational Objectives

The statement of organizational objectives uses the financial philosophy, as described in the fiscal mission statement and overlays some specificity as to the principles for the use of debt, as well as a number of the constraints that should be considered.

While the debt policy objectives will not directly address every idea set forth in the overall fiscal mission statement, the general framework provides a platform for introducing the organizational borrowing needs and premises for borrowing decisions. Thus, the first set of objectives should focus on governance issues. Though each museum will have a varying managerial hierarchy, the theme of empowerment should be communicated in this section. For example, governance objectives could be written as follows:

The Museum recognizes that, though the trustees of the Museum Finance Committee will be consulted on any financial matters that significantly impact the financial standing of the organization, the Chief Financial Officer (hereafter, the “CFO”) is entrusted with all financial decision making power on a day-to-day basis. The CFO may designate additional officers of the museum as also having authority to make

financial decisions, such as those that commit financial capital or require the organization to borrow.

To this end, the CFO, and such designees, will enforce the debt policy of the Museum, as described in this document, in consultation with those departments that have a direct stake in the implementation of such policy, such as Museum retailing operations or those departments with responsibility for capital expenditures.

All significant debt related initiatives will necessarily be approved by the Finance Committee and if deemed appropriate, the Museum Board of Directors. In all cases, the financial management of the Museum shall make decisions where and when necessary in the interest of Museum business and propagating the strategic mission, and in line with the provisions in the fiscal mission statement.

Next, museum debt policy objectives should introduce the financial priorities and potential strategies that reinforce the mission statement. For higher education institutions, the SFAHE suggests a number of considerations that have been selectively chosen for museums in this Thesis. Though the financial priorities and strategies of each museum will differ, they should generally include statements that address the following:

1. The treatment of debt from a portfolio perspective;
2. The inclusion of debt in the capital structure on a permanent basis;
3. The ambition to balance risk and cost of capital, and keep both as low as possible;
4. The commitment to calculate and abide by certain specified financial measures; and
5. The periodic review of this debt policy.

To this end, the Museum may wish to enumerate this portion of the objectives section rather than state it in paragraph form. For example, this section of the museum statement of organizational objectives may be written as follows:

The following set of principles will govern the use of debt by the Museum:

1. The Museum considers “Debt” to be any or all borrowings or transactions that may obligate or lay claim to a portion of the organization.
2. In no event will Debt be incurred or structured in such a way as to expose the collections of the Museum to the claims of the holders of the Debt.
3. Debt use by the Museum will be controlled solely by the office of the CFO and managed on a consolidated basis.
4. The Museum considers long-term Debt a source of permanent capital, as it supports assets with an extended time horizon.
5. The Museum will use Debt, in its various forms, to reduce the institutional cost of capital, and solely to the extent permitted to retain creditworthiness or to remain at a certain rating level defined by rating agencies and chosen by financial management.
6. The Museum will abide by a specified set of financial measurements, as described in the next section, to insure transparency and financial wellbeing.
7. Finally, the Museum will revisit this debt policy on an annual basis to assure relevance and reiterate the philosophy, procedures, and measurements as set forth.

The statement of objectives should then introduce the following section that will include the measurement goals for the museum.

#### Financial Targets and Measurement

In this section, management must define the specific set of statistics that will govern the use of debt in the museum. Accordingly, there are a variety of measurements available to nonprofit institutions that help management gauge institutional financial

strength. Financial ratios describe a relationship between numbers obtained from an organization's balance sheet, operating statement, and cash flow statement (Chabotar 188-208). Analyzing financial ratios over several periods, or in comparison to other institutions, allows management to identify areas of organizational strength or weakness. To maintain understandability and simplicity, the measurements defined in museum debt policy should consider only those ratios that are specifically relevant to the museum operating business.

The quantity of statistics included in the policy is not as important as their relevance. For educational debt policy, the SFHAE suggests no more than two to four ratios; for healthcare nonprofits, the HMFA suggests five ratios related to debt capacity. For museum debt policy, this Thesis suggests managers use at least four financial measurements to describe financial standing with respect to liquidity and debt structure. The metrics should be calculated as often as practicable and communicated to financial management on a regular basis. To convey organizational liquidity, or tactical measurements, the two suggested financial ratios are a "current ratio" and a form of debt service ratio; to convey debt structure, or strategic measurements, the two suggested financial ratios are a debt to total capitalization ratio and a debt to equity ratio.

### Liquidity Measurement

The first two suggested financial ratios are the current ratio, and the debt service ratio. Together they provide a reasonable measure of a museum's ability to draw upon short-term resources to meet obligations.

Current ratio. Kent Chabotar, professor of political science and president of Guilford College, notes in his study entitled, “Financial Ratio Analysis Comes to Nonprofits,” that most nonprofits “are concerned with their cash balances because they can survive only as long as they have sufficient cash to sustain their services” (p. 190). As nonprofits, museums suffer from the same liquidity imperative and necessarily need to constantly monitor their ability to service imminent obligations. While a number of financial ratios address an organization’s ability to meet short-term expenses, the current ratio is simple in concept and is indicative of the total readily available capital (Brealey, and Myers 675-700). The current ratio is defined as:

Current Ratio: Figure 4-1

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The current ratio divides a museum’s short-term unrestricted assets (cash, short-term investments, inventories, and receivables) by its current liabilities, where “current” means convertible or obligated to pay within a year or less (Chabotar 188-208). Including the current ratio in the debt policy insures that despite whatever decisions are made with regard to capital structure, financial management of the museum is forced to keep a close watch on liquidity.

The debt policy should dictate a target multiple for the current ratio that provides comfort, but is not overly cautious. Chabotar suggests a current ratio of 2:1 (or 2.0 times) accommodates the possibility that a high proportion of the assets are receivables or

inventories and therefore not immediately available to satisfy obligations. He cautions that a current ratio much above 2.0 times may be excessive and cause the organization to lose incremental return on assets, as well as lead to criticism that the nonprofit may be hoarding funds rather than deploying them to deliver services. Still, museum management will have the best understanding of what is the most appropriate target for its own purposes and operating style.

Debt service ratio. All sources agree that the debt service ratio is a measurement critical to organizational debt policy, though they differ on the calculation method. For the healthcare industry, the HFMA defines debt service coverage as the relationship between current profitability and maximum annual debt service, an acronym they define as MADS. While the HFMA approach is not unique, it summarizes the totality of debt affordability for a museum. Specifically, the HFMA defines the debt service ratio as:

Debt Service Ratio: Figure 4-2

$$\text{Debt Service Ratio} = \frac{\text{Revenue less Expenses + Interest + Depreciation + Amortization}}{\text{Maximum Annual Debt Service}}$$

As can be seen in the above formula, the debt service ratio may use figures from the museum's operating statement to calculate an unburdened cash flow figure and divide it by a fully burdened debt service figure. The unburdened cash flow figure, or the numerator, represents the total cash generated by the operating business of the museum and available to be used for debt service. The fully burdened debt service figure, or the denominator, represents the total amount of cash required to pay all principal and interest

expenses in the same year. The SFAHE succinctly describes the debt service ratio in the following way:

“This is an important ratio because it gives the analyst a level of comfort that the institution has a net revenue stream available to meet its debt burden should economic conditions change. A high ratio is considered advantageous, while a low ratio or declining trend give reason for concern regarding the institution’s ability to sustain its operations...”

Like the current ratio, the debt service ratio should have a target multiple dictated by museum debt policy. Unlike the current ratio, there is no upper limit to the ratio; essentially, the higher the better. However, museum management should examine industry comparables to determine the appropriate target level for their particular institution.

Where the two financial measurements suggested above define tactical measurements for museum debt policy, i.e. they insure that the museum will adhere to principles of solvency; the following two suggested statistics provide strategic measurement guidelines.

## Debt Structure

As noted previously, the appropriate amount of debt in museums, or any nonprofit organization, is rarely treated as a calculated component of capital structure. Yet, most research indicates that some optimal level of debt is strategically desirable. For higher education, the SFAHE recognizes the benefit of debt as a permanent part of the capital structure and the need for its measurement and monitoring in organizational debt policy. Specifically, the SFAHE states:

“In creating debt policy, the focus is on debt as a perpetual portion of the capitalization of the institution, similar to endowment funds. Furthermore, debt should be viewed as part of a process and not as individual transactions” (SFAHE 40).

The SFAHE goes on to state that though nonprofits do not have shareholder equity in the traditional sense, the measurement of leverage is important as stakeholders “tend to benefit from strategic leverage if return on borrowed money exceeds interest costs.” Prior to the theory presented in this Thesis, museums were unable to value their operating business equity, and leverage measurement allowed only the use of net assets (an accounting convention) as a proxy for capitalization. The measurement of leverage in this manner remains a valuable management tool. However, the market-based calculation of museological equity, though theoretical, provides a fair basis for a value driven capitalization figure, and thus allows management to consider debt use in a true capital structure context. To this end, the following two statistics utilize concepts derived in the previous chapter to help balance tactical and strategic debt policy considerations.

Debt to capitalization value. The debt to capitalization value is a financial leverage statistic that represents the debt in the museum capital structure as a percent of the total value of the museum operating business. It may be calculated in the following manner:

Debt to Capitalization Value: Figure 4-3

$$\text{Debt to Capitalization Value} = \frac{\text{Debt}}{\text{Derived Equity Value} + \text{Debt}}$$

The debt in the above equation should relate to any indebtedness of the museum that is considered long-term in nature. The derived equity value is that value for museological equity as calculated in the manner presented in the previous chapter. Museum debt policy may use this statistic for two purposes, as a maximum acceptable level of indebtedness and as a strategically targeted level of indebtedness. While developing specific percentages is an institution specific exercise that should be based on financial realities and the tenets set forth in the fiscal mission statement, financial managers would benefit from modeling the effects of various debt levels on their museum before formalizing the percentages in the debt policy.

Debt to equity ratio. The debt to equity ratio is simply a variation of the debt to capitalization value. It provides yet another easily calculable measure to help guide the strategic use of debt in the capital structure. The debt to equity formula is:

Debt to Equity Ratio: Figure 4-4

$$\text{Debt to Equity} = \frac{\text{Debt}}{\text{Derived Equity Value}}$$

While simply an extension of the debt to capitalization, the debt to equity ratio is a new concept, as there is the conceptual equity component. In any case, the museum may choose both a target level and maximum level for this ratio when setting forth the guidelines in the debt policy.

## Statement of Acceptable Financing Structures

The use of debt in museums is no longer simply a question of the amount borrowed. Debt may take a number of forms and debt policy must address what forms and related financial instruments are acceptable. This section of the policy relays those concepts and related parameters in a statement of acceptable financing structures. While the SFAHE provides limited help with regard to this section, the HFMA offers a number of suggestions for strategically evaluating potential financing structures. For museums, the statement of acceptable financing structures may be very general or very detailed, but should address the following:

1. The use of traditional and nontraditional debt;
2. The acceptable mix of fixed versus floating rate debt;
3. The use of swaps and other derivatives; and,
4. The diversification of the debt portfolio.

As with the other sections, the mandates will be necessarily be institutionally specific, however, museum debt policy should address each of above concepts. An example of the type of verbiage that the policy may contain is as follows:

Sample Museum may structure its debt portfolio using a combination of traditional and nontraditional indebtedness, containing fixed and variable rate debt, which may utilize swaps and other derivative instruments. In all cases, indebtedness incurred by Sample Museum will conform to the tenets set forth in this debt policy. Sample Museum shall conform to the following guidelines:

Traditional versus Nontraditional Debt. Sample Museum will endeavor to maintain the lowest blended cost of debt capital available through the use of traditional indebtedness, such as bank lines and bond offerings, and where

appropriate, nontraditional indebtedness, such as off-balance sheet financing, receivables financing, and other potential vehicles.

**Fixed versus Floating Rate Debt.** Sample Museum will maintain a mix of floating and fixed rate debt that reflects management's view of changing interest rates and acceptable level of financial risk. However, Sample Museum recognizes that variable rate obligations increase financial risk and will at no time allow a variable rate exposure that exceeds 50% or more of its total debt portfolio.

**Swaps and Other Derivatives.** Sample Museum will employ swaps and other derivative financial instruments primarily in an effort to manage the museum's variable rate exposure. However, if a situation arises where using swaps or other derivatives in a different capacity is deemed to be in line with this debt policy and benefits the overall strategic mission of the museum, alternative financing may be considered. In any case, the use of swaps or other derivatives must be presented and approved by the CFO and Finance Committee.

In sum, Sample Museum will monitor and regularly adjust the debt portfolio such that the museum maintains strategic long-term capital that balances the reduced cost of capital with the financial risk to the institution.

Again, the statement of acceptable financing structures may be much more detailed than what is presented above. For instance, the HFMA offers a fairly complete set of evaluation criteria when considering traditional and nontraditional debt financing (Appendix C). Museum management may consider the inclusion of such detail in debt policy necessary. Likewise, greater specificity with regard to fixed versus floating rate debt targets or a listing of exactly which derivative instruments are permitted may be required.

#### Schedule of Formal Review

Formalized museum debt policy should be considered a living document, reviewed for relevance at least annually by the Finance Committee. While the financial

beliefs and tenets set forth in the fiscal mission statement may never change, the mix of museum operating businesses will change over time and require adjustments be made to the statistical measures. As above, the schedule of review section may simply read as:

Sample Museum will review this debt policy on an annual basis, during the second quarter of each calendar year. Such debt policy review will include a rereading of the fiscal mission statement, a reassessment of the objectives, the calculation and evaluation of the financial measures set forth above, and a review of the acceptable financing structures.

Though the regularity with which a museum revisits its policy is an internal matter, whatever is decided, all museum stakeholders' benefit as having a policy forces the regular examination of financial targets, thresholds, and philosophy.

## Chapter V

### Summary and Conclusion

In summary, this Thesis analyzes the business of finance in museums by (1) defining a format for fiscal mission statements and discussing the need for an AAM accreditation standard, (2) critically analyzing the unique aspects of museum equity, debt, and resultant capital structure, and (3) developing an template for debt policy in museums that incorporates lessons learned from the first two sections. Importantly, this analysis conveys the formulation of museological fiscal philosophy and analytics in a usable, practical way, such that museum finance professionals have a new way to evaluate capital acquisition and resource allocation. The ability to fully exercise maximum control of the financial side of the museum business has numerous ramifications.

“Those organizations with strong fiscal management systems...and with the ability to project financial performance with some degree of accuracy earn the respect of the entire community. This respect is an important asset, helping the organization attract new Board members, additional contributors, larger contributions from current donors and the assistance of vendors, donors, Board and staff during periods of crisis and in support of special campaigns. In short, those organizations that display a high level of fiscal responsibility are also the ones that will have the resources they need to achieve their missions well into the future” (Kaiser 121-122).

As a final point, research related to museum finance is virtually non-existent. This Thesis adds to a field of museology that is sorely under-studied, but absolutely critical to forwarding the missions of the institutions appointed as stewards of human knowledge.

## Appendix A

### **Reinventing the Museum**

By Gail Anderson

Excerpt from:

*Museum Mission Statements: Building a Distinct Identity* (2000)

Gail Anderson, Editor

Roxana Adams, Editor

American Association of Museums

Washington, DC 20005

As the social, political, and economic environment continues to evolve, museums will be changing the way they go about their work. The museum of the next century will look dramatically different from the traditional American museum. External trends such as the developing state of technology, shifting trends in funding, changing demographics, increasing pressure on the nation's schools, a shrinking global community, diminishing natural resources, declining state of the family, eroding inner cities, and more, shape a world that requires museums to participate in caring for the well-being of our nation and our planet. This shifting environment requires a different type of museum. As museums change their working styles, their mission statements should change to reflect the new paradigm.

The parallel terms provided below capture the essence of this paradigm shift. The reinvented museum will modify some traditions and abandon those that are outmoded. Each museum must determine which aspects to retain and which new strategies to adopt. Review the list, add some characteristics of your own, consider where your museum stands today, and imagine what it might look like tomorrow. Consider how your institution's mission statement might shift to reflect this new model. Refer to "Characteristics of an Effective Mission Statement" for more tips on mission statement language.

<b>Reinventing the Museum *</b>	
<b><u>Traditional Museum</u></b>	<b><u>Reinvented Museum</u></b>
<b>Governance</b>	
keeper of the mission	mission-driven
elitism	equity
exclusivity	inclusive
reactive	proactive
power base	empowerment
monocultural	multicultural
internal focus	external focus
individual values	shared values
singular vision	shared vision
single visionary leader	shared leadership
top-down management	bottom-up management
assumed value	earned value
good intentions	public accountability
oversight	social responsibility
paternal	mutual respect
managing	governing

Appendix A (continued)

<b>Reinventing the Museum (continued) *</b>	
<b><u>Traditional Museum</u></b>	<b><u>Reinvented Museum</u></b>
<b>Institutional Priorities</b>	
management	leadership
assorted activities	mission-related activities
collection-driven	education-driven
limited representation	broad representation
limited community involvement	expanded community involvement
internally based	community based
visitor-friendly	customer service
business as usual	institutional self-study
voice of authority	multiple viewpoints
focused on past	forward-looking
retropective	relevant and current
present information	interactive exchange
<b>Management Strategies</b>	
inwardly driven	audience-focused
isolated and insular	participant in marketplace
selling	marketing
assumptions about audience	knowledge of audience
hierarchical structure	learning organization
unilateral decision making	shared decision making
compartmentalized goals	holistic, shared goals
individually driven	cooperative/collaborative
cautious	opportunistic, risk-taker
fund-development	entrepreneurial
individual strategies	partnerships
individual work	teamwork
site-specific	diverse sites (gallery/Web)
static role	strategic positioning
<b>Communication Style</b>	
closed communication	open communication
privileged information	shared information
suppressed differences	welcomed differences
singular voice	multiple perspectives
debate/discussion	dialogue
one-way communication	two-way communication
keeper of knowledge	exchange of knowledge
cautious and protective	welcoming and trusting

\* This chart is derived from an exercise developed by the editor at John F. Kennedy University and adapted for use for the 1996 Director's Roundtable, a forum for museum directors co-led by the editor and Will Phillips.

## Appendix B

*Strategic Financial Analysis for Higher Education (2005)*  
KPMG, Prager, Sealy & Co. LLC, and BearingPoint, Inc.

### **Summarized Excerpt from Chapter 4: Strategic Debt Management, Pages 40-42**

#### *Considerations in Developing Nonprofit Debt Policy*

*Nonprofit debt policy will need to:*

- understand firm history, the decision making process, and its culture;
- overcome skepticism;
- determine the appropriate amount of board involvement;
- ensure the consistency with investment policy;
- determine how to incorporate prior financial decisions;
- be mindful of the organization's risk tolerance; and
- be communicable to the stakeholders.

*Additional considerations for nonprofit debt policy include:*

- articulating the institution's philosophy about overall debt commitment;
- selecting key metrics and establishing targets or limits for those metrics;
- creating policy or procedures for project selection;
- creating policy or procedures for debt structures and derivative products;
- interacting appropriately with rating agencies;
- creating methodology to support the metrics in the policy;
- creating policy with regard to debt repayment;
- establishing management reports; and,
- establishing procedural guidelines for executing the policy.

## Appendix C

### Healthcare Financial Management Association

Evaluation Criteria. When considering which traditional and nontraditional financing vehicles are appropriate for an organization's circumstances and credit position, healthcare leaders should consider 12 factors:

- *All-in borrowing rate.* This is the total cost of capital, including interest and ongoing fees involved with maintain the financing.
- *Costs of issuance.* Tax-exempt bonds typically have higher costs of issuance than do taxable bonds, but in either case, organizations should carefully evaluate these costs.
- *When the money is needed.* The timing of when the hospital needs to spend the money may affect its choice of vehicle. Direct lending from banks and private placements usually can be secured the most quickly.
- *Use of proceeds.* The tax status of the financing option depends on the tax status of the entity for which the financing is being sought.
- *Credit position.* The credit available to an organization largely determines which vehicles it can access.
- *Document structure and underlying security requirements.* The weaker the credit, the more security required. The underlying security required by some financing vehicles can limit an organization's ability to issue future debt.
- *Covenants.* There are two basic categories of covenants – maintenance and incurrence. *Maintenance* covenants are routine requirements that the borrower must meet on an annual or quarterly basis; e.g., the liquidity covenant of day's cash on hand. *Incurrence* covenants are special requirements that must be met in order to undertake a particular action; e.g., sale or disposition of property. Organizations should always seek the least restrictive covenants possible.
- *Principal amortization.* The amortization schedule for the financing vehicle is critical to cash flow and maintenance covenants.
- *Interest-rate risk.* The best course is to achieve a mix of fixed- and variable-rate debt that minimizes interest rate risk.
- *Average useful life versus average maturity.* Tax-exempt financing rules require that projects eligible for tax exemption be specifically delineated.
- *Disclosure requirements.* Tax-exempt vehicles require organizations to provide prompt, accurate, complete and continuing disclosure of certain financial and utilization information.
- *Prepayment penalties and unwind provisions.* Different financing vehicles have differing premiums or prepayment penalties associate with an early redemption date.

“All capital decisions should support an organization's strategic plan, provide as much flexibility as possible given existing and pending laws or restrictions, involve the lowest overall cost for the risk of the asset and liability portfolios, and allow for future financing needs.”

## Appendix D

### Glossary

**501(c)(3) Organizations:**

entities defined by section 501(c)(3) of U.S. tax code, namely charitable organizations, religious organizations, scientific organizations, literary organizations, amateur athletic organizations, private foundations and public charities.

**Accreditation:**

the act of granting credit or recognition, especially with regard to maintaining suitable standards (Merriam-Webster Online Dictionary).

**American Association of Museums:**

the primary organization responsible for accreditation in the museum sector.

**Asset:**

property of a person, association, corporation, or estate applicable or subject to the payment of debts standards (Merriam-Webster Online Dictionary).

**Borrowing Cost:**

the amount of an obligation to pay for receiving something of value, usually at a greater value at a particular time in the future (Business Dictionary.com).

**Capital Markets:**

financial markets that work as a conduit for demand and supply of debt and equity capital (Business Dictionary.com).

**Capital Structure, Capitalization:**

the framework of different types of financing employed by a firm to acquire resources necessary for its operations and growth (Business Dictionary.com).

**Cash Flow:**

incomings and outgoings of cash, representing the trading (operating) activities of a firm (Business Dictionary.com).

**Class of Equity or Debt:**

not all equity is equal, nor is all debt; each have stratified claims on the assets of the organization; each strata is considered a class.

**Debt:**

duty or obligation to pay money, deliver goods, or render service under an express or implied agreement (Business Dictionary.com).

**Discount Rate, Capitalization Rate, Hurdle Rate:**

multiplier that converts anticipated returns from an investment project to their current value (Business Dictionary.com).

**Donation:**

a gift, especially to a charity or public institution (Merriam-Webster Online Dictionary).

**Earned Income:**

that which is derived from goods sold, services rendered, and/or work performed (Business Dictionary.com).

**Endowment:**

an institutional fund or part thereof that, under the terms of a gift instrument, is not wholly expendable by the institution on a current basis. The term does not include assets that an institution designates as an endowment fund for its own use (Uniform Prudent Management of Institutional Funds Act).

**Form 990:**

the form that nonprofit organizations must file annually with the IRS; the forms request assets, receipts, expenditures and compensation of officers.

**Google:**

an internet search engine used for locating a number of sources.

**Income Tax Shield:**

deduction such as amortization, charitable contribution, depletion, depreciation, medical expenses, mortgage interest, and un-reimbursed expense, that reduce a taxpayer's income tax liability (Business Dictionary.com).

**Leverage:**

ability to influence a system, or an environment, in a way that multiplies the outcome of one's efforts without a corresponding increase in the consumption of resources; an advantageous-condition of having a relatively small amount of cost yield a relatively high level of returns (Business Dictionary.com).

**Market Value:**

the highest estimated price that a buyer would pay and a seller would accept for an item in an open and competitive market (Business Dictionary.com).

**Mission Statement:**

a declaration of an organization's purpose that serves as a guidepost for institutional planning, development, and positioning for the future (Anderson(a)).

**Nondistribution Constraint:**

term coined by Henry Hansmann, Professor of Law at Yale Law School, to describe the difference between nonprofit organizational structure and for-profit organizational structure (Hansmann 838).

**Portfolio:**

a pool of investments; or group of complementary or supplementary products marketed together (Business Dictionary.com).

**Present Value:**

estimated current value of a future amount to be received or paid out, discounted at an appropriate rate (Business Dictionary.com).

**Return:**

yield generated by an investment, expressed usually as a percentage of the amount invested (Business Dictionary.com).

**Risk:**

probability or threat of a damage, injury, liability, loss, or other negative occurrence, caused by external or internal vulnerabilities, and which may be neutralized through pre-mediated action (Business Dictionary.com).

**Swap:**

exchange of one type of asset, cash flow, investment, liability, or payment for another (Business Dictionary.com).

**Tax Exemption:**

taxable expenditure, income, or investment on which no tax is levied to serve a specific purpose, such as to encourage a certain activity (Business Dictionary.com).

**Undistributed Profit:**

the surplus amount of revenues after all expenses are paid for a given period.

## Bibliography

- American Association of Museums. *Ethics of Deaccessioning*. Washington, D.C.: , 2000. Web. 24 Feb 2011. <[www.aam-us.org](http://www.aam-us.org)>.
- Amir, Eli, and Joshua Livnat. "Market Reactions to Quarterly Earnings Surprises: The Impact of Financial Statements' Data Disclosed with Earnings." NYU Stern | Stern Home. New York University. Web. 19 Apr 2011.
- Anderson(a), Gail. *Museum Mission Statements: Building a Distinct Identity*. 2nd Ed. Washington D.C.: American Association of Museums, 2000. 12-21. Print.
- Anderson(b), Gail. *Reinventing the Museum: Historical and Contemporary Perspectives on the Paradigm Shift*. 1st Ed. Walnut Creek, CA: AltaMira Press, 2004. Print.
- Anderson, Maxwell. "Metrics of Success in Art Museums." Claremont Graduate University. The Getty Leadership Institute, 2004. Web. 10 Jun 2010. <<http://www.cgu.edu/pdf/files/gli/metrics.pdf>>.
- Association of Art Museum Directors. *AAMD Policy on Deaccessioning*. Washington, D.C.: , 2010. Web. 24 Feb 2011. <[www.aamd.org](http://www.aamd.org)>.
- Bauerlein, Mark, and Ellen Grantham. *National Endowment for the Arts: A History 1965-2008*. 1st. Washington, D.C.: Library of Congress, 2009. 1. Print.
- Bowman(a), Woods. "The Uniqueness of Nonprofit Finance and the Decision to Borrow." *Nonprofit Management & Leadership*. 12.3 (2002): 293-311. Print.
- Bowman(b), Woods. "Managing Endowment and Other Assets." *Financing Nonprofits: Putting Theory Into Practice*. Ed. Dennis Young. Lanham, MA: AltaMira Press, 2007. Print.
- Brealey, Richard, and Stewart Meyers. *Principles of Corporate Finance*. 4th Ed. New York, NY: McGraw-Hill, Inc., 1991. 397-398. Print.
- "Business Dictionary.com." BusinessDictionary.com, 2010. Web. <[www.businessdictionary.com](http://www.businessdictionary.com)>.
- "Capital Structure." *Encyclopedia Britannica*. Chicago, IL: 2010. Web. <<http://www.britannica.com/>>.
- Chabotar, Kent John. "Financial Ratio Analysis Comes to Nonprofits." *Journal of Higher Education*. 60.2 (1989): 188-208. Print.

- Chaganti, Radha, and Raj Chaganti. "Pathways to Failure of New Ventures: A Study of Failed and Non-Failed Internet Ventures." *Small Business Institute National Proceedings*. Stephanie Bardwell: Newport News, VA, Christopher Newport University. 2009. 206-219. Print.
- "Charitable Statistics." Internal Revenue Service. June 2, 2010. <[www.irs.gov/taxstats/charitablestats](http://www.irs.gov/taxstats/charitablestats)>.
- Damodaran, Aswath. *Investment Valuation*. 2nd ed. New York, NY: John Wiley & Sons, Inc., 2002. 548-571. Print.
- Dees, J. Gregory. "Enterprising Nonprofits." *Harvard Business Review*. 76.1 (1998): 55-67. Print.
- DePamphilis, Donald. *Mergers, Acquisitions, and Other Restructuring Activities*. 5th Ed. London, England: Elsevier, 2009. 293-294. Print.
- Drozdzowski, Harry. "Using UPMIFA to Release and Modify Restrictions on Charitable Funds." *Lexology*. (2011):1-3. Web. 28 Feb 2011. <[www.lexology.com](http://www.lexology.com)>.
- Fama, Eugene, and Michael Jensen. "Organizational Forms and Investment Decisions." *Journal of Financial Economics*. 14. (1985): 101-119. Print.
- Gary, Susan. "Charities, Endowments, and Donor Intent: The Uniform Prudent Management of Institutional Funds Act." *Georgia Law Review*. 41.1 (2006): 1277-1334. Print.
- Genoways, Hugh H., and Lynne M. Ireland. *Museum Administration: An Introduction*. 1st Ed. Walnut Creek, CA: AltaMira Press, 2003. 39-74. Print.
- Hansmann(a), Henry. "The Role of Nonprofit Enterprise." *Yale Law Journal*. 89.5 (1980): 835-901. Print.
- Hansmann(b), Henry B. "Economic Theories of Nonprofit Organization." *The Nonprofit Sector: A Research Handbook*. 'Ed'. Walter W. Powell. New Haven: Yale University, 1987. Print.
- Harris, Neil. "The Divided House of the American Art Museum." *Daedalus*. 128.3 (1999): 33-56. Print.
- Healthcare Financial Management Association. *Financing the Future II, Report 2: Strategies for Effective Capital Structure Management*. 2005. Print.
- Herzlinger, Regina, and H. David Sherman. "Advantages of fund accounting in nonprofits." *Harvard Business Review*. 58.3 (1980): 94-105. Print.

- Jones, Patricia, and Larry Kahaner. *Say It & Live It, 50 Corporate Mission Statements That Hit the Mark*. 1st ed. New York, NY: Bantam Doubleday Dell Publishing Corp, 1995. ix-xiii. Print.
- Kaiser, Michael. *Strategic Planning in the Arts: A Practical Guide*. Delaware: ArtsManager.com, 1995. 110-125. Web. 30 May 2009. <<http://www.artsmanager.org>>.
- Keating, Elizabeth, and Peter Frumkin. "Reengineering Nonprofit Financial Accountability: Toward a More Reliable Foundation for Regulation." *Public Administration Review*. 63.1 (2003): 3-15. Print.
- Khodjamirian, Yuri. "Capital Structure of Nonprofit Organisations: A Dynamic Framework." *The Third Sector and Sustainable Social Change: New Frontiers for Research*. Taylor, Rupert: Baltimore, MD, International Society for Third-Sector Research. 2008. Print.
- Kominski, Gerald. "Techniques for Determining the Value of Health Care Organizations Converting to For-Profit Status." *Valuation of Non-Profit Conversions*. (2001): 1-4. Print.
- KPMG, Prager, Sealy, & Co., LLC, and BearingPoint, Inc. *Strategic Financial Analysis for Higher Education*. Sixth Ed. 2005. Print.
- Lord(a), Gail, and Barry Lord. *The Manual of Museum Management*. 1st ed. Lanham, MD: Altamira Press, 1997. 25-43, 158-190. Print.
- Lord(b), Gail Dexter, and Barry Lord. *The Manuel of Museum Planning*. 2nd Ed. Lanham, MD: Altamira Press, 2001. 47-51. Print.
- McFate, Patricia. "The Effects of Inflation on the Arts." *Annals of the American Academy of Political and Social Science*. 456. (19981): 70-87. Print.
- McMahon, Theresa. "Fair Value? The Conversion of Nonprofit HMOs." *University of San Francisco Law Review*. 30.2 (1996): 355-394. Print.
- Miller, Clara. "Hidden in Plain Sight: Understanding Nonprofit Capital Structure." *Nonprofit Quarterly*. Spring 2003: 1-8. Print.
- "Merriam-Webster Online Dictionary." Merriam-Webster, 2010. Web. <[www.merriam-webster.com](http://www.merriam-webster.com)>.
- Modigliani, Franco, and Merton Miller. "The Cost of Capital, Corporate Finance and the Theory of Investment." *American Economic Review*. 48.3 (June 1958): 261-297. Print.

- “National Center for Charitable Statistics.” Urban Institute, Center on Nonprofits and Philanthropy. June 2, 2010. <nccs.urban.org>.
- Parker III, Harry, Thomas Krens, William Luers, and Neil Rudenstine. "Museum Finances." *The Economics of Art Museums*. Feldstein, Martin: University of Chicago Press. 1991. 61-90. Print.
- "Perpetuity." Def. 4. Merriam-Webster. An Encyclopaedia Britannica Company. Web. 15 Feb. 2011. <www.merriam-webster.com>.
- Pladson, Terence. "Why develop a debt policy? Consider the risks and rewards of variable rate interest and options for financing debt." *Physician Executive*. Jan-Feb 2005: 1-5. Web. 9 Mar 2011.
- Rentschler, Ruth, and Anne-Marie Hede. *Museum Marketing: Competing in the Global Marketplace*. 1st Ed. Oxford, U.K.: Elsevier, 2007. 151-158. Print.
- "Standards and Best Practices." AAM Home| About Museums| Standards. American Association of Museums, 01 Jan 2005. Web. 10 Jun 2010. <http://www.aamus.org/>.
- "Statement of Financial Accounting No. 116." Accounting for Contributions Received and Contributions Made. Norwalk, CT: Financial Accounting Standards Board, 1993. Print.
- Stearn, James, and Shaheen Borna. "Mission Statements in Business Higher Education: Issues and Evidence." *Higher Education Management*. 10.1 (March 1998): 89-104. Print.
- Swoboda, Dale, and Georgalu Swoboda. *Managing Nonprofit Financial and Fiscal Operations*. 1st ed. Vienna, VA: Management Concepts Inc, 2008. 294-295. Print.
- “Taxpayer Relief Act of 1997.” *United States Government. Public Law 105-34, Subtitle C-Other Education Initiatives, Sections 222-223*. Washington D.C., 1997. Print.
- Toepler, Stefan. "Caveat Venditor? Museum Merchandising, Nonprofit Commercialization, and the Case of the Metropolitan Museum of Art." *Voluntas*. 17. (2006): 99-113. Print.
- "Uniform Prudent Management of Institutional Funds Act." National Conference of Commissioners on Uniform State Laws: Chicago, Uniform Law Commission. 2006. Print.
- Vogt, Jean. "Demystifying the Mission Statement." *Nonprofit World*. 12.1 (1994): 29-32. Print.

- Wedig(a), Gerald. "Risk, Leverage, Donations and Dividends-in-Kind: A Theory of Nonprofit Financial Behavior." *International Review of Economics and Finance*. 3.3 (1994): 257-278. Print.
- Wedig(b), Gerard J., Mahmud Hassan, and Michael A. Morrissey. "Tax-Exempt Debt and the Capital Structure of Nonprofit Organizations: An Application to Hospitals." *Journal of Finance*. 51.4 (1996): 1247-1283. Print.
- Weil, Stephen. *Making Museums Matter*. 1st ed. Washington and London: Smithsonian Institution Press, 2002. 55-74. Print.
- Yetman, Robert. "Borrowing and Debt." *Financing Nonprofits: Putting Theory Into Practice*. Ed. Dennis Young. Lanham, MA: AltaMira Press, 2007. Print.
- Young(a), Dennis. "Why Study Nonprofit Finance?" *Financing Nonprofits: Putting Theory Into Practice*. Ed. Dennis Young. Lanham, MA: AltaMira Press, 2007. Print.
- Young(b), Dennis. "How Nonprofit Organizations Manage Risk." *Presented to the bi-annual conference of the International Society for Third Sector Research, Bangkok, Thailand, July 2006*. Print.
- Zietlow, John, Jo Ann Hankin, and Alan G. Seidner. *Financial Management for Nonprofit Organizations: Policies and Practices*. 1st. ed. Hoboken, New Jersey: John Wiley & Sons., Inc., 2007. 22-45, 356-389. Print.