

UPDATE TO
THE 7TH EDITION OF
STRATEGIC FINANCIAL ANALYSIS
IN HIGHER EDUCATION
SUMMER 2016



PRAGER & Co., LLC
INVESTMENT BANKERS



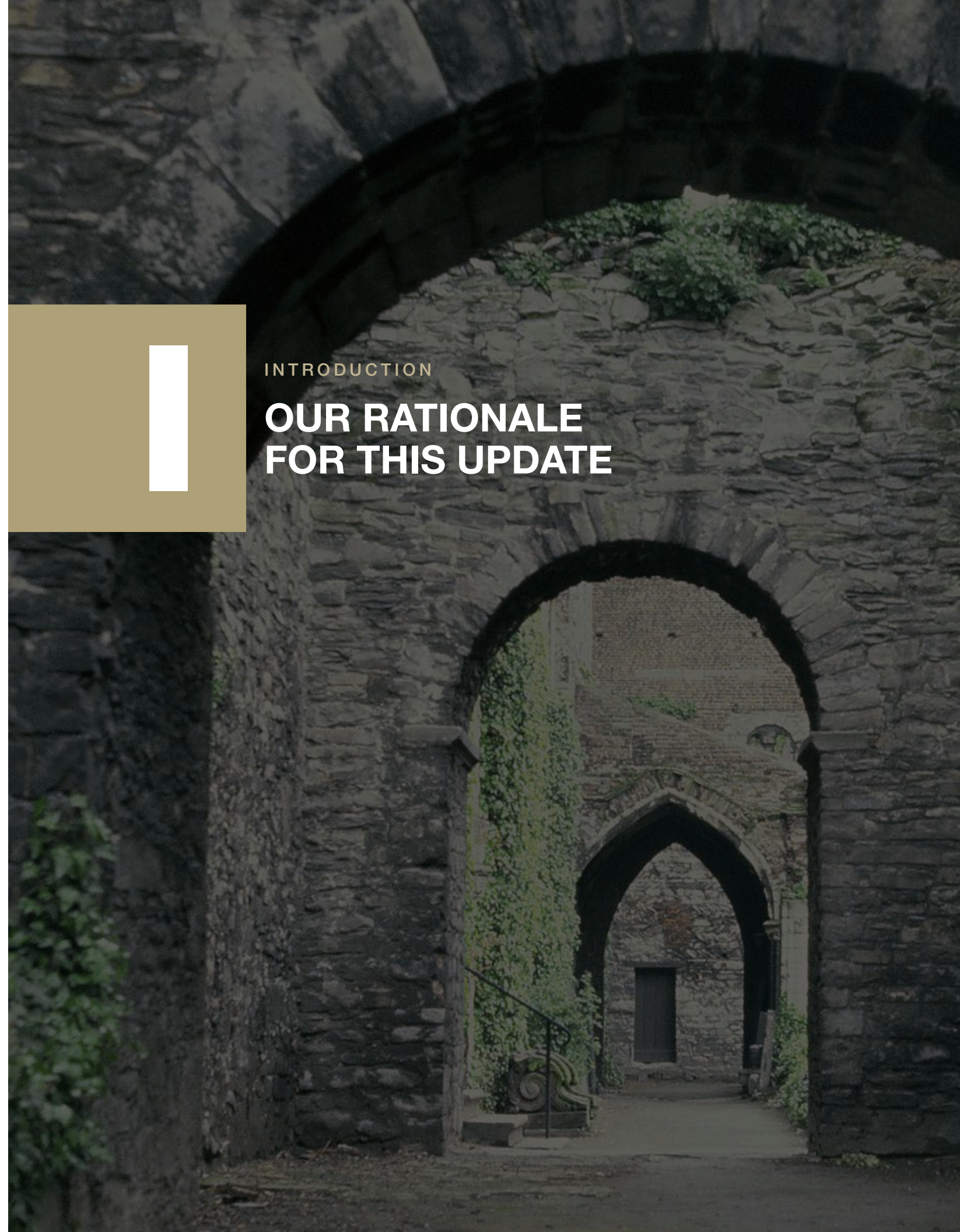
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INTRODUCTION

**OUR RATIONALE
FOR THIS UPDATE**



INTRODUCTION

The first of seven editions of *Strategic Financial Analysis for Higher Education* was published in 1980 as *Ratio Analysis in Higher Education*. The importance of the concepts and tools defined in these publications has been acknowledged by higher education leaders and has been used extensively by trustees and senior managers as well as financial and credit analysts.

Our Rationale for this Update

The Seventh Edition in the series, *Identifying, Measuring & Reporting Financial Risks (SFA 7)*, was published in 2010 and reflected our observations that a paradigm shift occurred after the 2008 financial crisis with respect to financial management of higher education institutions. We concluded that historical methods of monitoring institutional financial health, mitigating risks, and reporting on those risks needed updating.

There have been significant changes moreover, since 2010, in financial reporting and management by both private and public institutions of higher education. We have received numerous similar requests and inquiries from both such institutions about the calculation of certain ratios given specific conditions, transactions or events. We continue to believe, however, that the ratios presented in SFA 7 are key components to measure institutional financial health, but we learned from these inquiries that certain ratio calculations or terms needed clarification. Credit rating agencies have also updated their methodologies to reflect changes in credit markets as well as financial reporting and management.

The Authors believe that a brief update is needed at this time. A new edition is not warranted since there are significant pending changes to financial reporting standards for private institutions, and public institutions are still implementing and disclosing changes to recording and reporting obligations for pensions and other post-employment benefits. We will continue to monitor these developments and assess their impact on financial analytical tools and benchmarks.

This document should be considered in the context of SFA 7, where the concepts discussed therein are developed more fully.

This update will address the following topics:

- Conceptual Framework of the Ratios and Expendable Net Assets/Net Position
- Calculating Expendable Net Assets and Net Position
- Using the Ratios in Trend and Peer Group Analyses
- Ratio Flexibility, Clarifications and Other Errors
- Evolving Credit Rating Agencies' Methodologies
- Public Institutions and Post-Employment Obligations
- Upcoming and Potential Changes for Private and Public Institutions

The inquiries have shown a common point of confusion centers on the conceptual framework for the financial analysis tools and ratios, how they were developed, and their rationale.

The Composite Financial Index (“CFI”) and two cornerstone ratios – the Primary Reserve Ratio and Viability Ratio – are calculated and use expendable net assets (net position for public institutions). We added clarity to the definition using of expendable net assets and discuss the importance of using the institution’s external financial statements as the key document in performing any financial analysis because they have been subjected to a validation and certification process. Accordingly, understanding expendable net assets, what it represents and how it is calculated is critical to understanding our conceptual framework of financial analysis. The Authors have noted numerous errors in the calculation of expendable net assets and those ratios dependent on such number used by private institutions. As a result, we will provide additional information on the calculation of expendable net assets and its use in this update.

We have also received numerous questions about the calculation of ratios in addition to the Viability Ratio and Primary Reserve Ratio. We will address these questions and clarify the calculation and intent of other such ratios as well.

Our Financial Analysis Tools were developed for user flexibility since no two institutions are identical. Peer analysis is useful to some extent but institutional longitudinal analysis is much more meaningful since an institution can better understand the drivers behind their numbers and ratios. Reviewing an institution’s ratios over time can address nuances, leading to more informed results than mere peer analysis. Peer analysis without a deep understanding of the financial information and condition of such peers may result in inaccurate or even misleading analysis and conclusions. If peer analysis is to be used, we believe there should be a sufficiently large pool of peers to help average out the outliers, which may influence the comparison.

Since SFA 7 was published in 2010, Moody’s and Standard & Poor’s rating agencies modified their approach to analyzing financial information for all industries, including higher education. We will summarize these changes and address the potential impact on higher education institutions.

For public institutions, the Governmental Accounting Standards Board (“GASB”) issued Statement No. 68, *Accounting and Reporting for Pensions – an Amendment of GASB Statement No. 27*, and Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. These Statements significantly affect the amount of pension and other post-employment liabilities reported in the financial statements of public institutions and, accordingly, financial statement ratios.

GASB Statement No. 68 became effective for fiscal years beginning after June 15, 2014 (i.e., fiscal years ended June 30, 2015). GASB Statement No. 68 changes the way pension obligations are measured and reported, requiring the use of one actuarial method, selection of discount rates, and timing of valuations. It also addresses accounting for different types of defined benefit plans, including cost-sharing plans. GASB also issued Statement No. 75 for Other Post-Employment Benefits (“OPEB”) in June 2015. The OPEB approach and provisions in GASB Statement No. 75 follow the approach of GASB Statement No. 68 for pensions. GASB Statement No. 75 is effective for fiscal years beginning after June 15, 2017 (i.e., fiscal years ending June 30, 2018). We will review the provision of GASB Statement No. 68 and assess their impact on our financial analysis tools and benchmarks in this Update.

For private institutions, the Financial Accounting Standards Board (“FASB”) has proposed significant changes to the financial reporting model originally promulgated in *Accounting Standards Section 958.205, Not-for-Profit Entities, Presentation of Financial Statements* (formerly Statement of Financial Accounting Standards No. 117, *Financial Statements of Not-for-Profit Organizations*, published in 1993). A final Accounting Standards Update (ASU) is expected in August 2016. While these deliberations are continuing, the changes that are being considered may have a significant effect on the financial statements of private institutions. These proposed changes have been highlighted sufficiently by industry finance personnel so we will not comment on them here. However, some changes may render certain elements used in our financial analysis tools more difficult or impossible to obtain. We will monitor these developments closely to determine what effect such proposed changes may have to our financial analysis tools.

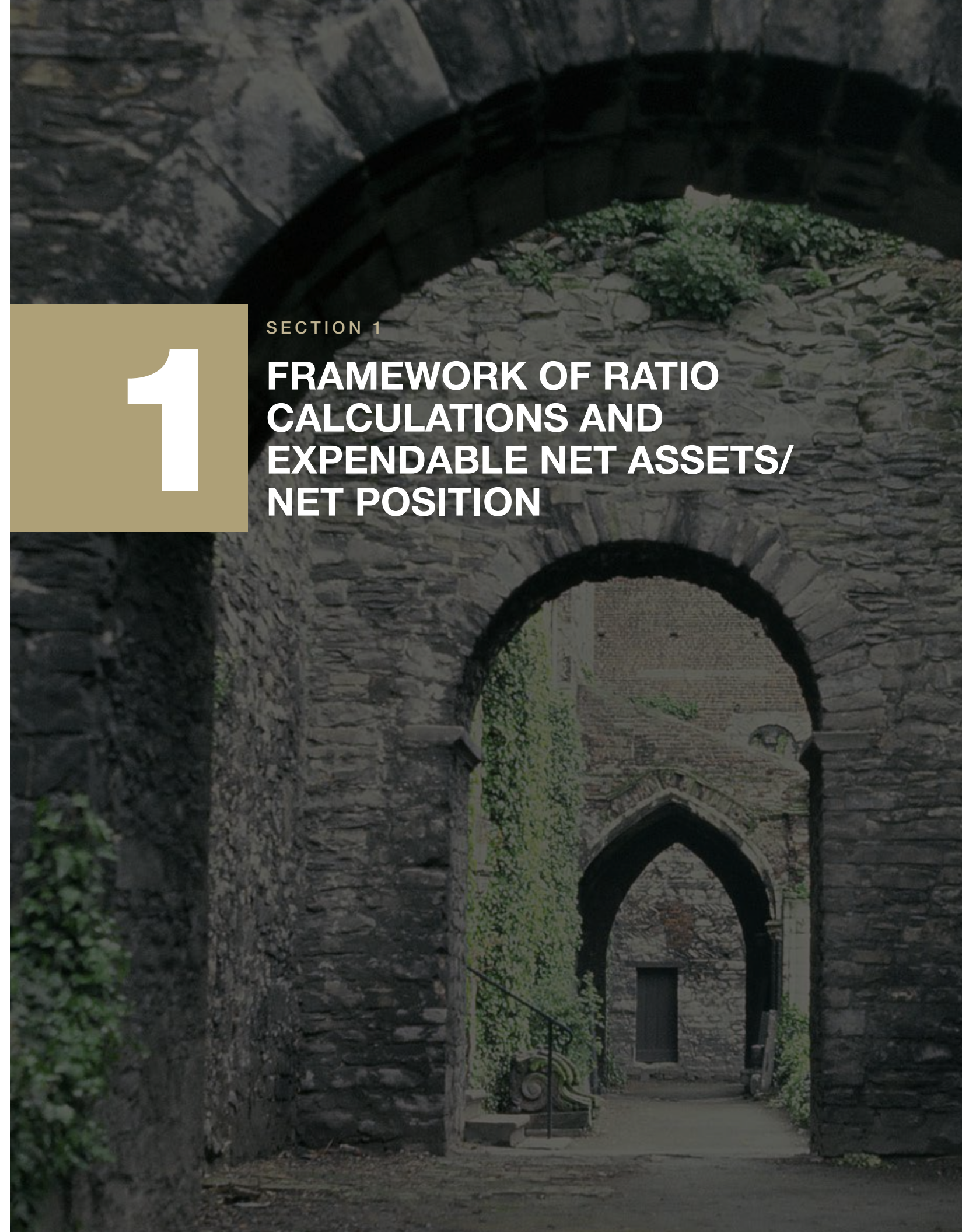
While substantial modifications to the reporting model for private institutions are in progress, there are other financial and reporting changes since SFA 7 that impact the computation of the ratio, which we will comment on in this update.

Evaluating the recent GASB changes and the recent and upcoming FASB changes will take some time. These changes may affect both the way we calculate the ratios as well as the benchmarks used, including the scoring scale and weighting factors used in the CFI. We will continue to monitor these developments and intend to publish an Eighth Edition at an appropriate time.

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SECTION 1

FRAMEWORK OF RATIO CALCULATIONS AND EXPENDABLE NET ASSETS/ NET POSITION



SECTION 1

FRAMEWORK OF RATIO CALCULATIONS AND EXPENDABLE NET ASSETS/ NET POSITION

SECTION SUMMARY

We discuss in this section the conceptual framework and purpose of our financial measurement system, as well as its evolution, and reintroduce the background for our beliefs of the best use of the information for institutions. This addendum is most closely correlated with SFA 7, chapters 3, 10, and 12.

REINTRODUCTION OF THE CONCEPTUAL FRAMEWORK

The conceptual framework for financial analysis of higher education institutions started with the First Edition of Ratio Analysis in Higher Education published in 1980. The goal of that publication was to effectively communicate financial information to stakeholders, primarily boards of trustees and senior management. These stakeholders generally had a limited background in financial analysis and understanding of college and university financial concepts and reports. Analytical thinking has evolved, driven both by changing reporting models for private and public institutions and the increasing sophistication of an institution's understanding of its financial risks, condition and needs. We believe the fundamental concept of assessing financial risks through a limited number of financial metrics has improved the understanding of the financial health of colleges and universities.

Several underlying principles have guided all editions of *Strategic Financial Analysis for Higher Education*. We reexamine these principles continuously to assess their utility and adjust them periodically to reflect the shifting financial environment facing higher education. These principles are:

- Use ratios and metrics to assist in identifying financial risks related to the institution's mission and strategic plan
- Focus on summary information to address key questions raised by stakeholders
- Present a few key ratios and metrics to answer these questions
- Focus on institutional trends of ratios and metrics

Our approach to using financial ratios and metrics as a communication tool was adopted when the financial statements of higher education institutions were prepared using fund accounting principles promulgated by the *AICPA Audit Guide for Colleges and Universities* ("Guide") published in the 1970's. Both private and public institutions followed that Guide. Private institutions also followed the pronouncements of the FASB and public institutions those of the GASB. Due to the use of fund groups and general lack of institution-wide totals, it was difficult to understand the financial position and operations of an institution. Subsequent changes by FASB and GASB have improved the financial statement display and narrowed reporting differences between public and private institutions. However, many users still do not adequately understand the concepts of non-reciprocal transactions (contributions) and restrictions on funds received.

Prior editions introduced several financial ratios that would effectively communicate financial information and answer several basic questions:

- Is the institution financially healthy or not at the reporting date?
- Is the institution better off than it was in the prior year?
- Did the institution live within its means during the year?
- What financial resources does the institution have to fulfill its mission?

These primary questions address whether there is sufficient equity to meet debt obligations and cover annual operating expenditures. We developed two ratios as a response: the Viability Ratio addressed debt obligations and the Primary Reserve Ratio addressed operating commitments. These ratios analyze and use only the amount of equity (i.e., fund balances, net assets or net position) that may be expended for operating purposes and debt obligations, rather than all equity, including those funds that have to be maintained in perpetuity or used for capital asset purposes. In order to calculate the ratios, we segregate total equity into its various components, namely those that could be expended for future operating purposes and debt obligations (expendable funds) and those that could not (non-expendable funds). Non-expendable funds generally reside in bricks and mortar as plant assets or in perpetuity for the benefit of the institution (e.g., true endowment funds). Further, restricted funds held for capital acquisition purposes are classified as non-expendable.

The Viability Ratio represents expendable equity to debt and is similar to that ratio used by for-profit entities. The Primary Reserve Ratio is an important measure of financial health since expendable equity should grow at least in proportion to operating size, determined as total expenses. It also serves as a check on the Viability Ratio since an institution may have limited expendable net assets or debt.

Over time, the accounting concepts evolved from fund groups within the financial statements to the institution as a whole with individual fund groups no longer presented in the financial statements. For private institutions, net assets represent equity and generally have a one-to-one relationship to fund balances. Some fund balances, like agency funds and refundable student loan funds from the U.S. Government, are considered liabilities. For public institutions, the fund groups are also combined into institution-wide totals with fund balances reported as net position. These net positions consist of amounts invested in plant, expendable net position, and non-expendable net position.

Our approach has remained consistent with changes in accounting concepts: namely, how much expendable equity is there to cover debt and operating expenses. The concepts are the same for both public and private institutions although the nomenclature differs.

Our financial analysis tools evolved to respond to higher education financial environment issues and needs. The 2008-2009 liquidity crisis demonstrated that colleges and universities underestimated the issue of liquidity in terms of availability or cost. As a result, there still remains a focus on liquid at all institutions. Although the emphasis on liquidity will vary, every institution should have an analytical and managerial framework to treat liquidity effectively. The impact of