KPMG Peat Marwick LLP

Financial Ratio Analysis Project

Final Report

August 1, 1996

Prepared on behalf of:

U.S. Department of Education

1. Executive Summary

Objectives

The U.S. Department of Education (ED) is responsible for determining whether schools that participate in federal student aid programs comply with financial responsibility standards. Current regulations have proven to be cumbersome to work with because they do not take into account the various accounting models of different business sectors and require the same level of ED's effort for both financially healthy and financially troubled institutions.

ED engaged us, KPMG Peat Marwick LLP (KPMG), to assist them in developing an improved methodology, using financial ratios, that could be used both as an initial screening device to identify financially troubled institutions and as a mechanism for efficiently exercising its financial oversight responsibility. For such a methodology to be effective, it would have to measure institutions' total financial condition, accommodate their different organizational structures and missions, and reflect the different accounting and reporting requirements to which they are subject. We convened a task force of experienced individuals throughout the higher education community and obtained their feedback at various stages of the project.

Characteristics of Institutions Participating in Title IV Programs

Institutions participating in Title IV programs fall into one of four business segments:

1. public colleges and universities;
2. private colleges and universities;
3. proprietary institutions; or
4. hospitals.

These institutions differ in varying degrees as to their ownership structure, governance, reliance on governmental support, and overall mission. Accounting and reporting requirements reflect those differences so the financial statement format varies greatly between institutions in different business segments. Any recommended approach for ascertaining financial responsibility must accommodate these differences yet treat all institutions equitably.

KPMG's Suggested Approach

To accomplish these objectives, we identified the five fundamental elements of financial health. Those elements are viability, profitability, liquidity, ability to borrow, and capital resources. Our recommended methodology holds that an initial assessment of any institution's overall financial condition, regardless of the business segment to which it belongs, can be made by measuring the same fundamental elements of financial health. In other words, the same fundamental elements of financial health exist for all business segments but the manner in which those elements are measured may differ between business segments.

Therefore, our recommended methodology uses the same ratios across all business segments but the individual numerators and denominators are defined in such a way that they can be easily drawn from financial statements of institutions in different business segments. For example, the numerator of the *Viability Ratio* is defined as expendable fund balances for public institutions and adjusted equity for proprietary institutions. Both represent the net equity or fund balances that an institution can access in short order and spend to satisfy its obligations. However, one would not find "fund balances" on a proprietary institution's balance sheet nor "equity" on that of a public institution's.

KPMG's Final Recommendations

Our final recommendation includes three ratios, *Viability Ratio, Primary Reserve Ratio,* and *Net Income Ratio*. In addition, we recommend the use of a five-step process to determine any institution's total financial health. The five steps are:

1. compute all three ratios;
2. assign a threshold factor to each ratio result;
3. multiply each threshold factor by the appropriate weighting percentage;
4. sum all the resulting products; and
5. assign the institution to a final category of financial health based on its resulting composite score.

By applying this five step process, all institutions-regardless of business segment-are ultimately placed into one of four categories:

- I Exemplary financial health;
- II Financially sound;
- III Potential problem; or
- IV Immediate problem.

This recommended methodology is illustrated graphically on the following page for a hypothetical private non-profit university which has not yet adopted Statements of Accounting Standards (SFAS) No. 116, Accounting for Contributions Received and

Contributions Made, and SFAS No. 117, Financial Statements of Not-For-Profit Organizations:

Step 1 Ratio Calculation				***Step 2*** Threshold		***Step 3*** Weighting Percentage		***Step 4*** Product
Viability Ratio	Expendable Fund Bal. / Plant Debt	=	1.53	3	X	35%	=	1.05
Primary Reserve Ratio	Expendable Fund Bal. / Total Exp. & Mand. Tfrs	=	.69	4	X	55%	=	2.20
Net Income Ratio	Net Total Revenues / Total Revenues	=	.07	5	X	10%	=	.50
							Total	**3.75**

Step 5 **3.75 on Grading Scale = II**

II = Financially Sound

Like the ratios, certain components of the weighting mechanism were customized for particular business segments to reflect their different missions, external economic forces and organizational structures.

The recommended ratios and weighting mechanism are intended to be used by ED to make an initial assessment of schools' total financial health. This methodology and all the components thereof are described in greater detail throughout the remainder of this report. We use accounting concepts and terms throughout this document. Where terms and concepts are not specifically explained, they should be interpreted in accordance with Generally Accepted Accounting Principles (GAAP).

Organization of this Report

This report is divided as follows:

- **Background -** In this section, we discuss the current regulations and higher education environment.
- **Project Chronology -** Here we describe the steps we took in arriving at the final recommendations. This section includes a discussion of the basic concepts upon which the methodology is founded.

- **Final Recommendations -** This section is devoted to describing our final recommendations and includes some of the reasoning supplementing those conclusions.
- **Appendices -** A matrix of accounting requirements, certain publications, and empirical testing results have been included in the appendices.

2. Background

In accordance with the requirements of the 1992 Higher Education Reauthorization Act, the U.S. Department of Education (ED) must develop regulations to determine the financial responsibility of an institution participating in Title IV, Higher Education Act (HEA) programs. That statute mandates certain standards ED must use in making a determination of financial responsibility. As a result, ED has the on-going responsibility for ensuring that each of approximately 7,000 educational institutions participating in student aid programs are financially responsible. Under this direction, ED established standards for financial responsibility in 34 CFR 668.15 in April of 1994 and later amended in November of 1994.

Elements of the current financial responsibility standards have existed in statute and regulation since the 1970's. However, as a result of the 1992 HEA, Title IV participants are required to file an annual financial statement with ED for the first time. The annual financial statement submission must be prepared in accordance with Generally Accepted Accounting Principles (GAAP) and audited by an independent accounting firm. This annual filing provides ED with a basis for determining that each participating institution has the financial resources necessary to provide the educational services for which the students contract and meet all of its financial obligations.

ED's task is complicated by the fact that four different types of institutions participate in Title IV programs. They have different organizational structures and accounting requirements. This section describes the different types of institutions, current financial responsibility oversight, and concludes with a brief description of this ratio analysis project.

Different Business Segments

The current regulations recognize that institutions participating in Title IV programs fall into one of four groups; 1) public colleges and universities, 2) private colleges and universities, 3) proprietary institutions, or 4) hospitals. These institutions differ in varying degrees as to their ownership structure, governance, reliance on governmental support, and overall mission. Specific characteristics of each business segment follow.

Public Colleges and Universities

This business segment is comprised of two and four year institutions offering associate's bachelor's, and/or post-graduate degrees. Schools in this business segment are owned by, or are an agency of, a governmental entity and their primary mission is generally instruction, research, and public service. Institutions within this business segment receive significant financial support from state or city appropriations. They generally prepare their financial statements in accordance with Statement No. 15 of the Governmental Accounting Standards Board (GASB).

Private Colleges and Universities

Schools in this business segment offer similar degrees as the public colleges and universities and also generally have a primary mission of instruction, research, and public service. These are private not-for-profit institutions incorporated under various state laws and are exempt from federal taxes under Internal Revenue Code (IRC) section 501(c)3.

Historically, institutions in this business segment have prepared their financial statements consistent with the 1973 AICPA Audit Guide for Colleges and Universities. Those financial statements were similar, in most respects, to those prepared by public colleges and universities. However, in 1993 the Financial Accounting Standards Board (FASB) issued two statements, Statement of Financial Accounting Standards (SFAS) No. 116, *Accounting for Contributions Received and Contributions Made*, and SFAS No. 117, *Financial Statements of Not-for-Profit Organizations*, that significantly redefined financial accounting and reporting for institutions in this business segment. As a result, these institutions are currently in a state of transition complying with these new standards. Most private non-profit institutions are required to adopt these new standards during their 1996 fiscal year.

Proprietary Institutions

This business segment is comprised of vocational, technical, or career colleges/schools which are investor-owned commercial (for-profit) entities. Their mission is generally to provide career training to students for gainful employment in a recognized occupation or vocation. In doing so, these institutions seek to generate an economic return for their owner(s). These schools may be corporations, partnerships, or sole proprietorships. Their financial statements are prepared in accordance with accounting standards promulgated by the FASB and the American Institute of Certified Public Accountants (AICPA).

Hospitals

This business segment is comprised of independent hospitals or medically related institutions that provide educational programs (e.g. nursing programs) and are not affiliated with a college or university. Financial statements for these institutions generally follow guidelines set forth by the AICPA Audit Guide, Providers of Health Care Services. Similar to private colleges and universities, many hospitals will also be subject to FASB Statements 116 and 117 but the financial statements of institutions in this business segment will not be as dramatically affected. This segment has the smallest number of participating institutions.

Business Segment GAAP Differences

Higher education institutions have followed different accounting and reporting models for many years. For-profit institutions prepare their financial statements in accordance with GAAP applicable to commercial entities promulgated by FASB. Non-profit entities and public entities have generally used fund accounting models promulgated by industry groups and the AICPA. There have been obvious differences over the years such as non-profits and publics not recording depreciation nor being required to present a cash flow statement like their for-profit counterparts. To date, the financial statements of both public and private colleges and universities have remained similar in most respects; however, recent actions by the FASB and GASB primarily the issuance of FASB Statements 116 and 117 have substantially increased the differences in accounting and financial reporting between public and private institutions.

Form and Content of Financial Statements

Private not-for-profit institutions will adopt the reporting model mandated by FASB Statements 116 and 117 no later than fiscal 1996. Under that model, three basic financial statements - a statement of financial position, statement of activities and cash flow statement - are required. These statement are prepared on an accrual basis and measure economic resources and changes therein. Prepared on a highly aggregated basis, the statements include certain required minimum information. Generally, matters of format are left to the discretion of the institution. Public institutions, on the other hand, will for the foreseeable future prepare the statements called for by the 1973 AICPA guide - a statement of financial position, statement of changes in fund balances, and a statement of current funds revenue, expenditures, and other changes. (Note: A limited number of institutions may also report financial results using the government reporting model; an option allowed under GASB Statement 15). These statements are prepared on a highly disaggregated basis and follow the traditional managed funds structure. Moreover, they generally focus on measuring changes in total financial resources. As such, they include changes in fund balances arising from expenditures and disposals of fixed assets rather than any capital usage charge such as historical cost depreciation. The format of each statement must generally conform to the example financial statements in the AICPA guide, which are considered by GASB Statement 15 to be prescriptive rather than illustrative.

With each statement FASB and GASB issue, the differences between the accounting and financial reporting requirements for higher education institutions are growing. To date, substantial differences have arisen in the following areas:

- Consolidation / reporting entity
- Recording of contributions
- Accounting for pension and postretirement benefits
- Recording of depreciation

A detailed matrix of the differences among the sectors and reporting models has been provided in Appendix A.

Current Financial Responsibility Oversight

HEA 1992 requires ED to measure financial responsibility on the basis of relevant measures evaluating operating losses, net worth, assets to liabilities and operating fund deficits using the annually filed financial statements. In addition, Technical Amendments of 1993 required ED to take into account an institution's total financial circumstances and any differences in GAAP applicable to for-profit and non-profit institutions in making a determination of financial responsibility. In April 1994, ED incorporated specific ratio tests in regulation measuring liquidity (e.g. acid test), net worth (e.g. positive equity, fund balance or net assets) and profitability to be applied uniformly across the universe of participating proprietary institutions, private colleges and universities, public colleges and universities, and hospitals. Participating institutions must meet the minimum standards to be considered financially responsible; otherwise, they may be required to post a letter of credit for one half of their previous year's Title IV funds.

Synopsis of Current Regulations

The current regulations measure and establish minimum acceptable standards for liquidity, net worth and profitability. Each is measured separately and the results are considered without regard to the others. Consider the standards for a for-profit institution. For liquidity, the acid test is prescribed and the minimum acceptable result is 1:1. If the acid test (or any of the other ratio tests) is not met, the institution may not be considered financially responsible. In such situations, the institution may need to demonstrate financial responsibility by posting a letter of credit or establishing to ED's satisfaction that it has sufficient resources to 1) ensure against its precipitous closure and 2) meet all of its financial obligations. If an institution is rated at or above the second highest rating level of credit quality given by a nationally recognized statistical rating organization, they will otherwise meet the prescribed standards.

Current regulations provide, in part, for different tests for the various business segments. For example, public institutions may uniquely satisfy the standards by demonstrating, among other things, that they are backed by the full faith and credit of their respective state. The ratio tests and basic thresholds for not-for-profit and for-profit institutions, however, are common and do not completely take into account the accounting and reporting differences among the sectors.

One example is the use of the same acid test requirement of 1:1 for not-for-profit and for-profit institutions. GAAP does not require not-for-profit institutions to prepare financial statements which classify assets and liabilities as current and noncurrent. Therefore, calculation of the acid test cannot be accurately performed without additional information. Moreover, differing cash management and investment strategies (investing excess cash in other than short-term instruments) may result in an institution failing the acid test requirement when sufficient expendable resources are available in unrestricted investments to support operations for more than one year without any additional revenue.

ED’s Current Experience

ED’s experience has shown that application of the current ratios and tests among proprietary schools, private colleges and universities and hospitals does not always yield consistently reliable information about an institution’s financial health. In these circumstances, additional analysis must be performed to determine financial responsibility. Furthermore, ED’s experience indicates that performing a detailed review of additional information in the event an institution does not meet one of the minimum standards can be time consuming and an inefficient use of its resources. Currently, each of approximately 7,000 annual financial statements received by ED must be reviewed and each of the required ratios must be calculated. Then, in many situations, financial statements must be reviewed in detail and additional information must be requested and reviewed before ED can satisfy its oversight responsibility. An objective at the Department is to implement tools and methodologies which help to better focus its limited resources on fiscally problematic institutions.

KPMG Ratio Analysis Project

Given the objective of improving the efficiency and quality of its oversight function, ED engaged us to assist in reviewing the current ratios and regulations and in developing financial ratios. The goal of the of the project would be to develop a gatekeeping methodology that allows ED to identify problem institutions, while using its limited resources efficiently and effectively. Such a gatekeeping methodology would involve a review using a composite ratio approach to measure common elements of financial health in all institutions participating in Title IV programs.

Similar to the current regulations, our proposed methodology focuses on liquidity, profitability and viability and takes into account the differences among the business segments participating in Title IV programs. Our proposed methodology however, makes improvements to the current regulations in three ways. First, the methodology considers all ratio results together, not exclusive of each other. The final composite score enables ED to form a conclusion about an institution's total financial condition instead of three separate conclusions concerning liquidity, profitability and net worth. Secondly, our methodology establishes a range of results for each ratio in contrast to the one minimum standard dictated by the current regulations. This range will assist ED in allocating limited resources initially toward financially higher risk institutions. Finally, we concluded that the accounting and reporting requirements of each business segment were so diverse that different ratios and thresholds for the same element of financial health (e.g. viability) should be established for each segment. The developed ratios are calculated using information which can be derived directly from the audited GAAP financial statements required to be filed with ED annually.

Ratio Application

The use of financial ratios has been a proven technique for analyzing institutions in all business segments receiving Title IV funds. KPMG introduced its first edition of *Ratio Analysis in Higher Education* in the 1970s (now in its third edition) to use as a tool to better understand and interpret an institution's financial results. From working with our clients over more than 25 years, we concluded that financial ratio analysis provides a ready means of focusing on a few key elements that indicate how well the institution is performing. Today, many industries, rating agencies and investors, and accrediting bodies use key ratios from the GAAP financial statements to compare similar institutions' basic financial performance. ED also recognizes the value of ratio analysis and desires to use these same techniques within in its oversight function.

The conceptual basis for using financial ratios is discussed in detail in the following two publications, copies of which are included as appendices to this report:

- KPMG Peat Marwick; L.F. Rothschild Unterberg, Towbin, <u>Ratio Analysis in Higher Education, Second Edition</u> (Appendix B); and

- KPMG Peat Marwick, LLP; Prager, McCarthy, & Sealy, Ratio Analysis in Higher Education, Third Edition (Appendix C).

Other information consulted throughout the project which was useful as a basis for applying ratio analysis to the proprietary and hospital sectors were:

- Accrediting Council for Independent Colleges and Schools publication entitled Guidelines for Filing Financial Reports; and
- The 1995 Almanac of Hospital Financial & Operating Indicators distributed by the Center for Healthcare Industry Performance Studies (CHIPS); and
- Ratio medians and publications from Moody's, Standard and Poors and Robert Morris & Assoc.

3. Project Chronology

In planning the engagement, we divided the project into two distinct phases; conceptual development and empirical testing. The purpose of the conceptual phase was to develop an overall approach for using ratios as a gate keeping mechanism and develop specific financial ratios for each business segment. In the empirical testing phase, the ratios were to be tested using actual financial statement data from a sample of institutions. It is important to note that the results of the empirical testing phase were not to be used as a basis for amending the recommended methodology. Rather, the distribution of ratio results would validate, or provide assurance that the recommended ratios and methodology were reasonable.

Input from a task force of higher education industry representatives would be sought at the conclusion of each phase of the project. In forming the task force, we attempted to include individuals from all business segments and they were requested to comment on the proposed ratios and methodology at various points throughout the project.

Basic Concepts

There are two basic ideas that form the foundation upon which the proposed methodology was developed. The first simply states that financial ratios can be used as a gate keeping mechanism to make an initial assessment of an institution's financial condition. The initial assessment would be used to place institutions into various categories of financial health to facilitate further analysis by ED. The second concept states that the financial condition of institutions can be assessed by measuring the same fundamental elements of financial health regardless of differences in accounting and reporting requirements or organizational differences. Because of such differences, the specific means (ratios) for measurement may vary **but the same fundamental elements should be always be measured.**

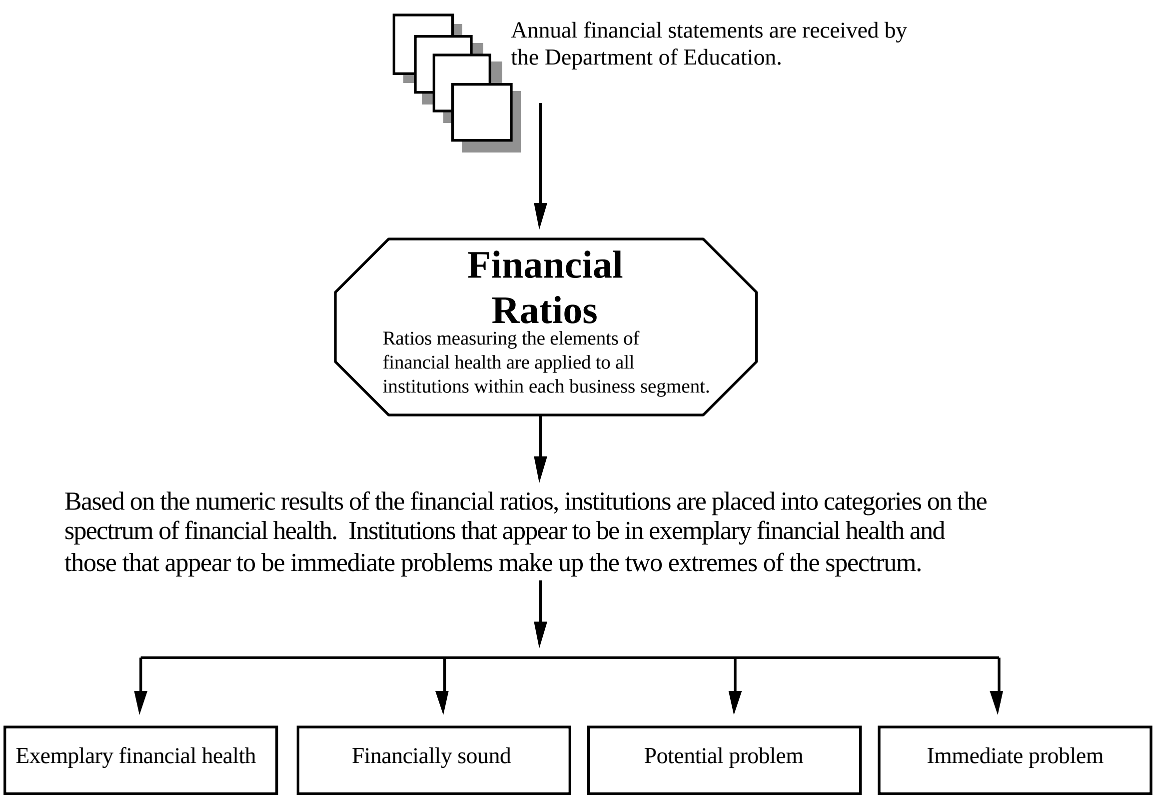
First Basic Concept

Financial Ratios as Gate Keeping Mechanism

Financial ratios can be used to make an initial assessment of an institution's financial health. By applying the financial ratios using information in the audited financial statements received by ED, categories of institutions could be developed to facilitate ED's analysis, and to assist ED in allocating its scarce resources more efficiently. Categories include:

- Exemplary financial health;
- Financially sound;
- Potential problem; and
- Immediate problem.

This concept is shown graphically below:



Second Basic Concept

Fundamental Elements of Financial Health

The second basic concept states that an initial assessment of any institution's financial condition, regardless of the business segment to which it belongs, can be made by measuring five fundamental elements of financial health. The business segments from which institutions participating in federal student aid programs are drawn include:

- **Public Colleges and Universities**
- **Private Colleges and Universities**
- **Proprietary Institutions**
- **Hospitals**

The organizational differences between institutions in these business segments were discussed in the *Background* section of this report.

The financial health of an institution within any business segment can be assessed by measuring the same fundamental elements:

- **Viability**
- **Profitability**
- **Liquidity**
- **Ability to Borrow**
- **Capital Resources**

These same fundamental elements of financial health exist for all business segments. However, the means to measure those elements, namely the ratios, may differ primarily due to differences in accounting and reporting requirements and, to a lesser extent, certain environmental differences (e.g. equity structures, missions). The fundamental elements are inter-related, that is conditions that affect one element will probably directly or indirectly affect other elements as well.

Financial Viability

DEFINITION: The ability of an institution to continue to achieve its operating objectives and fulfill its mission over the long term

Financial viability is a very important element of financial health. For some, viability alone could be taken as an indicator of an institution's overall financial health.

Profitability

DEFINITION: The determination of whether an institution receives more or less than it spends in an operating cycle

The term profitability may not seem appropriate in the not-for-profit environment but profitability as defined here, is a fundamental element of any institution's financial health. Any for-profit or not-for-profit institution that consistently spends more than it receives will eventually cease to exist.

Liquidity

DEFINITION: The ability of an institution to satisfy its short term obligations with existing assets

In contrast to viability, liquidity is a short-term element of financial health. The fact that an institution has substantial resources to operate over the long term (viability) could be irrelevant if it doesn't have the cash or other resources easily convertible to cash to pay its bills in the coming twelve months.

Ability to Borrow

DEFINITION: The ability of an institution to assume additional debt

The ability of an institution to obtain additional operating funds or capital through borrowing is of vital importance to its long term operations.

Capital Resources

DEFINITION: An institution's financial and physical capital base that supports its operations

An institution uses its financial and physical capital resource base in the short term and long term to achieve its mission. By definition, assets are economic benefits that have not yet been realized. So although some institutions may be more dependent than others on capital resources due to the nature of the services they provide, an adequate capital base (financial and physical capital) is advantageous, even imperative, for all institutions.

First Report to Task Force: Nine Proposed Ratios

On December 15, 1995, we issued a report to the task force members and requested their feedback. In that report, we recommended that nine ratios be used to measure the five fundamental elements of financial health.

In developing the recommended ratios, we attempted to build on generally accepted industry practices so many of the ratios were taken directly from existing publications. In some cases, we developed ratios that mimic ratios that are accepted in other business segments. Generally, ratios for public colleges and universities, and private colleges and universities whose financial statements do not yet comply with FASB Statements 116 and 117 were taken from KPMG's publication Ratio Analysis in Higher Education - Second Edition (Appendix B). These ratios have been used by ourselves and others for over twenty years to measure the financial health of colleges and universities. For private colleges and universities who have complied with FASB Statements 116 and 117, KPMG's recently published Ratio Analysis in Higher Education - Third Edition (Appendix C) was used. These ratios take into account certain significant changes in presentation required by the new FASB standards in assessing financial health. For an overview of these changes, see pages 43-48 of that Third Edition. For proprietary institutions, we interviewed representatives from the Accrediting Council for Independent Colleges and Schools (ACICS) and the Accrediting Commission of Career Schools and Colleges of Technology (ACCSCT) to understand how ratios are used in the accreditation process of such institutions. Ratio and industry median publications from Robert Morris & Associates, Standard & Poors, and Moody's were also reviewed in developing ratios for the proprietary business segment. Finally, for hospital ratios, The 1995 Almanac of Hospital Financial & Operating Indicators (CHIPS) was referred to extensively.

The following paragraphs present those ratios in summary format since including all supporting definitions, rationale, and explanations here would produce an overly voluminous report.

Ratios to Measure Financial Viability

In the first report to the task force, we proposed using two ratios, the **Viability Ratio** and the **Primary Reserve Ratio,** to measure financial viability. The numerator of these ratios represents the expendable net assets or fund balances that the institution can access in short order and spend to satisfy its obligations including long-term debt. Consequently, the Viability Ratio measures one of the most basic determinants of clear financial health; availability of resources to cover debt should the institution need to settle its obligations as of the balance sheet date. On the other hand, the Primary Reserve Ratio demonstrates how long the institution could operate without relying on additional revenue from operations.

Ratio to Measure Profitability

We proposed using the **Net Income Ratio** to measure profitability. That ratio generally measures the amount of an institution's excess revenue over expenses or expenditures in proportion to its total revenue. It answers the basic question - did the institution operate within its means during the year? It may provide an explanation for behavior of other ratios like the Viability Ratio since a large surplus or deficit has a direct impact on the amount of expendable resources available to an institution.

In the proprietary business segment we use income before taxes in lieu of net revenue in order to provide a more consistent measure between business segments.

Ratio to Measure Liquidity

We initially proposed using the **Liquidity Ratio** to measure liquidity. For proprietary institutions and hospitals, this ratio is the Current Ratio. It provides a measure of an institution's current assets in proportion to its current liabilities. The ratio provides an indication of whether the institution has sufficient cash or other easily convertible assets to cover its obligations due in the next twelve months.

Since current assets and current liabilities generally cannot easily be retrieved from the financial statements prepared for colleges or universities, we developed liquidity ratios for those business segments that mimic the current ratio for proprietary institutions and hospitals. For colleges and universities, the numerator is computed by subtracting plant assets, long term investments, notes receivable, and certain other non-current assets from total assets. Likewise, the denominator is comprised of total liabilities less plant related debt, pension and post-retirement benefits obligations, and certain other non-current liabilities. As discussed more fully in the appendix to this report, there are also certain other differences in this ratio between institutions that follow the AICPA Audit Guide and those that follow FASB Statements No. 116/117.

Ratios to Measure Ability to Borrow

We proposed using three ratios, the **Leverage Ratio, Debt Burden Ratio,** and the **Debt Coverage Ratio** to measure an institution's ability to borrow. All three ratios when viewed together provide an indication of how much more debt an institution could assume.

The **Leverage Ratio** measures the amount of assets, net of any related liabilities, that an institution could use to secure additional debt in relation to its existing debt. Intangible assets have been excluded from the ratio since banks will generally not consider such assets as collateral.

The **Debt Burden Ratio** measures the amount of resources that the institution devoted to interest and principal payments during the last year in relation to its overall operating size represented by total expenses. Depreciation is excluded from total expenses because it represents a significant non-cash expense.

The **Debt Coverage Ratio** gives an indication of an institution's excess revenues over expenses in relation to its principal and interest payments. This ratio provides insight into the behavior of other ratios like the Net Income Ratio since excessive interest and principal payments can quickly consume any excess revenues.

Ratios to Measure Capital Resources

We used two ratios, the **Secondary Reserve Ratio** and the **Plant Equity Ratio** to measure an institution's capital resource base. The two ratios measure an institution's capital resource base in relation to its operating size, represented by total expenses or total expenditures and mandatory transfers. The Secondary Reserve Ratio measures financial capital while the Plant Equity Ratio measures physical capital.

Taken together, the two ratios give an indication of an institution's total capital resources-financial and physical that can be used to support future operations.

Task Force Response to Initial Report

The initial report was delivered to the task force members in December of 1995 and a number of helpful responses were received. In addition, a group of CPAs that specialize in providing audit services to institutions in the proprietary business segment provided unsolicited verbal and written responses. Task force members generally focused on those issues highlighted in the report. The CPA group focused on those issues, but in addition, addressed certain accounting and operational issues they felt were unique to schools in the proprietary business segment. The responses generally divided into two separate and distinct types; answers to specific issues raised in the report and other comments.

First Issue - Overall Approach

The report requested the task force members to comment on the overall methodology.

All respondents believed the overall approach that we recommended to be generally acceptable. Some respondents felt however, that the total number of ratios might be excessive for an initial gate keeping methodology, and that some of the ratios might more appropriately be used in a second tier of analysis. A number of task force members felt the ratios to measure the capital resources and ability to borrow elements were of secondary importance to the other ratios. One person took this view a step further and questioned whether the ability of an institution to take on additional debt is even a positive indicator. More than one respondent also felt that other factors like trend analysis should be considered in assessing financial health

Second Issue - Ratios to Measure Viability

The second specific issue posed in the report asked whether it was appropriate to exclude the value of plant assets from the amounts considered to be resources available to the institution when measuring financial viability. Task force members were asked to comment on two aspects of this issue; first as it relates to the college and university business segments and second, for the proprietary and hospital business segments.

A clear majority of task force members generally agreed that the value of plant assets should be excluded when measuring viability regardless of business segment. However, two out of the three task force members that represent the proprietary business segment felt that the assets should be included when computing viability in the proprietary and hospital business segments.

Third Issue - Liquidity

The third issue for which a response was specifically requested dealt with quasi-endowment funds and cash or investments in plant funds of private and public non-profit colleges, universities, and hospitals. Task force members were asked whether the value of such assets should be included in the ratio to measure liquidity.

The task force members were almost evenly divided on this issue. Four of the nine who responded felt that quasi-endowments should be considered short-term assets when computing the *Liquidity Ratio*. An equal number felt that cash and investments in the plant fund should be included. One response indicated that only unrestricted amounts should be considered.

Other Comments

Certain task force members raised questions regarding the random sampling approach suggested for the empirical testing phase of the project. More than one task force member suggested that we exercise judgment in selecting the sample and review specific examples of institutions that have recently failed.

The CPA Group Responses

A group of independent certified public accountants serving the schools in the proprietary business segment (the CPA group) prepared an unsolicited written response to the task force document. In addition, we met with them via conference call at the Career College Association (CCA) offices in Washington DC. Their comments were limited to issues involving proprietary institutions. The CPA group generally supported the overall methodology of using financial ratios as a gate keeping mechanism.

The majority of this group's written and oral comments focused on the calculation of liquidity and the acid-test in the current regulations. They pointed out certain issues affecting schools in their business segment; specifically, inconsistent accounting treatment for deferred tuition. Different opinions concerning when the revenue should be recognized and whether the deferred portion results in a current or non-current liability have traditionally created difficulty for ED in applying the current regulations' acid-test. We noted these differences during the empirical testing described later in this report. The CPA group emphasized the importance of specificity when defining the elements that comprise each ratio numerator and denominator. We agree that uniform accounting for similar transactions is a necessary condition for successful use of ratios or any other form of financial analysis. ED should bring these issues to the attention of the accounting profession (i.e. the FASB or appropriate AICPA committee) for resolution.

The CPA group conceded that profitable operations are generally an indicator of financial viability and stability. However, they felt that occasionally prudent business planning dictates that an institution operate in an unprofitable mode for some time. The CPA group noted that an owner's commitment to keep an institution alive through capital infusions may, in certain circumstances, be more important than profitability.

Lastly, in measuring funds available to the institution for the *Viability* and *Primary Reserve* ratios, the group felt that consideration should be given to subordinated debt and intangible assets. They felt subordinated debt is de facto no different than equity and that intangible assets reflect commitment and belief by purchasing investors in an institution's financial viability.

Change in Approach

The conceptual phase of the project resulted in the development of nine ratios which measured the five fundamental elements of financial health. Responses from the higher education task force and experience gained during the empirical testing phase of our project lead the project team to reconsider this approach. The task force responses clearly indicated that the overall number of ratios to perform initial screening of an institution should be reduced. That view was confirmed during empirical testing because it became clear that certain ratios only provided supplemental information to support other ratios.

Reducing the Overall Number of Ratios

As a starting point, the project team revisited the fundamental elements of financial health. In re-examining those elements, we determined that viability, profitability and liquidity were more important than the others. Industry task force responses to our second report agreed that ability to borrow and capital resources were of less importance and should be eliminated from the initial gate keeping methodology. Ultimately, liquidity was eliminated from the analysis because of difficulties encountered in extracting necessary information from the financial statements and because this element is indirectly measured by the *Viability* and *Primary Reserve* ratios. A more detailed discussion of the relative importance of ratios that measure the five elements of financial health follows.

Viability

DEFINITION: The ability of an institution to continue to achieve its operating objectives and fulfill its mission over the long term

The *Viability* ratio measures the ability of the institution to liquidate debt from its expendable resources. If the ratio is greater than 1 to 1, existing debt could be repaid from expendable resources available today.

The *Primary Reserve* ratio measures the ability to support current operations from expendable resources. A ratio of 1 to 1 or greater would indicate that an institution could operate for one year without any additional revenue being generated.

Clearly, the results of the two viability ratios are important indicators of financial health and address the question - *Is an institution financially healthy at a reporting date?* On one extreme, one could pose the question - *If an institution has sufficient expendable resources to satisfy current operations for one year and we assume that those resources will be used accordingly, what else matters?* In the short-term, substantial amounts of expendable capital can counter the effects of poor profitability, liquidity, or an inability to borrow. Likewise, insufficient expendable capital is a clear warning sign of poor financial health.

We concluded that the *Viability* and *Primary Reserve* ratios should be used in the recommended methodology.

Profitability

DEFINITION: The determination of whether an institution receives more or less than it spends in an operating cycle

The *Net Income* ratio measures the ability of an institution to live within its means in a given operating cycle. A positive ratio indicates a surplus or profit for the year. Generally, speaking, the larger the surplus or profit, the stronger the institution's financial position as a result of the year's operations. A negative ratio indicates a deficit or loss for the year. Small deficits may not be significant if the institution has large expendable capital. Continued or large deficits or losses however are usually a warning signal that major program or operational adjustments should be made. Because of its direct effect on viability, the *Net Income Ratio* is one of the primary indicators of the underlying causes of a change in an institution's financial condition.

Non-profit entities, such as private and public colleges, must generally break-even or be profitable over time in order to remain financially viable. Any excess of revenue (including contributions) over expense is retained by the non-profit and not distributed to any resource provider. For-profit entities, on the other hand, generate profits to return to their owner(s) and do not rely on donor contributions to support programs. Significant amounts of expendable capital may not be retained by proprietary institutions-a fact which makes profit generation even more important for these types of institutions. Hospitals include for-profit and non-profit institutions. Containing costs and generating revenues in excess of expenses is important to this business segment as well.

We concluded that the *Net Income* ratio should be used in the recommended methodology.

Liquidity

DEFINITION: The ability of an institution to satisfy its short-term obligations with existing assets

The *Liquidity* ratio provides a measure of whether an institution has sufficient cash or other easily convertible assets to cover its obligations due in the next twelve months. At first glance, this ratio and element of financial health appears to be a vital indicator. However, it only measures assets (resources) available in the short-term to satisfy current obligations and does not fully measure expendable assets available to support operations or satisfy debt.

Moreover, we encountered difficulties extracting information from the financial statements of non-profit institutions to compute the proposed *Liquidity* ratio and the "acid" ratio currently prescribed in regulation. Classification of assets and liabilities between current and non-current is not required under current reporting models. In addition, the task force responses were evenly divided on the issue of whether to include or exclude quasi-endowment investments in the liquidity calculation. There are currently different methods of accounting for deferred revenues and marketing costs in the proprietary sector which affect the classification of current assets and liabilities.

The *Viability* and *Primary Reserve* ratios exclude non-expendable assets such as plant, intangibles and permanent endowment and therefore serve as an indirect measure of liquidity. In addition, many of the accounting, reporting and classification issues which directly impact the calculation of a liquidity ratio have no effect on these two ratios.

We concluded that the *Liquidity* ratio should be eliminated from the recommended methodology.

Ability to Borrow

DEFINITION: The ability of an institution to assume additional debt

The *Leverage, Debt Burden* and *Debt Coverage* ratios when viewed together provide an indication of how much more debt an institution could assume. Presumably, the ability to take on additional borrowings would provide additional resources for the institution to build facilities or, if necessary, fund operations. However, as one task force member noted, the institution's financing policy has a direct relationship on these ratios. These ratios are related to the *Viability Ratio* (which measures expendable equity to debt) and provide secondary evidence about debt capacity in the future.

We concluded that the *Leverage*, *Debt Burden,* and *Debt Coverage* ratios should be eliminated from the recommended methodology.

Capital Resources

DEFINITION: An institution's financial and physical capital base that supports its operations

The *Secondary Reserve* and *Plant Equity* ratios measure permanent endowment and physical plant in relation to operating size. While important factors in assessing institutional health, the two ratios assist more in longer term assessments rather than the two to four year window important to ED. For example, permanent endowment provides return annually to support operations through scholarships, research and other activities and plant assets may also provide collateral for future borrowings. However, these assets are not expendable and therefore not readily available to support the institution. As some of the task force members indicated, these ratios by themselves may not be good short to medium term indicators of financial health. They should be reviewed in connection with other ratios.

We concluded that the *Secondary Reserve* and *Plant Equity* ratios should be eliminated from the recommended methodology.

Results - Three Remaining Ratios

Based on the above analysis, we concluded that three ratios should be used to make an initial assessment of institutions' overall financial health. They are the *Viability, Primary Reserve,* and *Net Income* ratios. In order to accommodate the differences in accounting and reporting requirements between business segments, the ratios are calculated differently for each segment.

Empirical Testing / Sampling Approach

The objective of the empirical testing was to provide information concerning the entire population of institutions and how the proposed ratios applied to them. Initially, ED and KPMG planned to apply all nine ratios to a statistically valid sample of institutions. However, in response to the first task force document, numerous task force members felt that we should be careful to include institutions that have recently failed in its sample. As the project team reviewed these responses, we concluded that eliminating the randomized sample in favor of insuring that various types of institutions are represented would improve the results of the study. Drawing from different sources, we constructed a judgmental sample that included selected examples of various types of institutions.

The final sample included 205 institutions divided among the four business segments. Based on the number of institutions in each business segment and other factors, KPMG and ED agreed to the following allocation of the sample across the business segments:

- Twenty-five (25) public institutions using the fund accounting model;
- Sixty-five (65) private colleges and universities using fund accounting model;
- Fifteen (15) private colleges and universities which have adopted FASB Statements 116 and 117;
- Seventy-five (75) proprietary institutions; and
- Twenty-five (25) hospitals.

For institutions in the public business segment, we still used a purely random sample. For private non-profit institutions using the fund accounting model, we included large research institutions, large and small liberal arts schools, institutions with going concern opinions on their most recently audited financial statements, and some other randomly selected institutions. We used fifteen randomly selected institutions for the private non-profit institutions that have adopted FASB Statements 116 and 117. For proprietary schools, we selected institutions that passed and institutions that failed the standards set forth by the Accrediting Commission of Career Schools and Colleges of Technology (ACCSCT). We also selected proprietary institutions that that were on ED's list of schools subject to surety requirements. The proprietary sample was rounded out with randomly selected institutions. For the hospital business segment, we used randomly selected institutions.

Calculating the Ratios

We calculated nine ratios for each institution. Distribution reports for each ratio were produced and analyzed by the project team. Distribution reports for the three ratios that we recommend and results from the proposed weighting mechanism are included in Appendix D of this document.

Our analysis confirmed the task force response that nine ratios are too many as an initial gatekeeping methodology. Compiling the data, calculating the ratios and performing quality control required significant time and effort. We concluded that such an effort on an on-going basis may not be the best use of ED's limited resources. Second, data analysis revealed the interaction among the nine ratios and demonstrated that some are more important than others.

Second Report to Task Force

A second report was delivered to the task force members on May 9, 1996. That report described the results of the empirical testing, the modified approach and the proposed weighting mechanism. A meeting was convened in Washington DC on May 22 that gave the task force members the opportunity to discuss the second report and provide feedback directly to the KPMG and ED project teams.

Feedback Concerning the Modified Approach

The task force members were unanimous in their support for the overall approach. They generally applauded the fact that the number of ratios had been reduced to three from nine. There was general consensus that our proposed methodology constituted a definite improvement over the financial standards dictated by the current regulations.

In response to the question of whether the value of plant assets and intangibles should be included as adjusted equity in the *Viability* and *Primary Reserve* ratios for the proprietary business segment, there was general consensus that those assets should NOT be included. However, one task force member felt very strongly that they should be included, that excluding them violated generally accepted accounting principles. The final methodology excludes the value of such assets because they do not represent assets that are expendable.

Feedback Concerning the Proposed Weighting Mechanism

Numerous task force members commented on the fact that the thresholds and weighting percentages (a subject discussed more fully in section four of this report) were based, in part, on our professional judgment. They also noted that economic conditions and accounting standards may change over time. So they felt it would be appropriate to review them annually. We explained that, in addition to our professional judgment, other sources were referred to such as bond rating agencies and accrediting agencies. We agree that threshold levels should be reviewed in the future and have recommended a follow up study in the final section of this report.

There was general support for the concept of considering other factors like being backed by the full faith and credit of a government in the public business segment. In general, the task force members felt that public institutions posed a reduced risk to ED. In this regard, many raised the possibility of lowering the thresholds for public institutions. We performed additional analysis and concluded that some thresholds should be lowered for public institutions and that other such factors should be considered.

One task force member felt it inappropriate that the final grading scale for proprietary institutions required a composite score of 4.5 to be categorized as “Exemplary financial health” while 4.0 was the standard for all other business segments. This concern, along with the fact that related party receivables are now excluded from adjusted equity lead us to amend the final grading scale for proprietary institutions. The final scale is now uniform across all business segments.

Additional Feedback From the Proprietary Business Segment

Subsequent to the task force meeting, we received a written response from a task force member representing the proprietary business segment and we received comments from various other persons in that business segment. They expressed a number of concerns about the recommended methodology but there seemed to be three recurring themes in their responses: tax issues, threshold levels, and a threshold adjustment for the *Viability* ratio. Each of these is addressed in the following paragraphs.

Tax Issues

Some of those that responded felt that the threshold levels for the *Net Income* ratio would encourage institutions to change to a non-profit status or change their corporate tax status from C to S or visa versa.

The proposed methodology is intended to measure the fundamental elements of financial health of for-profit and non-profit institutions. Responsibility for effective tax strategies lies with each individual institution.

Proprietary Threshold Levels

A number of people felt that the threshold levels are excessively high for the proprietary business segment. Specific comments pointed to levels necessary to earn a threshold factor of “four” or “five” for the *Net Income* ratio.

The *Net Income* ratio for proprietary institutions measures income before the effect of income taxes so the thresholds are not, in fact, materially higher than the thresholds for other business segments. Proprietary institutions, by definition, attempt to provide an economic benefit to their owner(s). Accordingly, owners are generally able to easily make capital withdrawals in the form of dividends, partnership distributions, salaries, or fees paid to affiliated companies. These characteristics make proprietary schools inherently more at risk financially to ED. Therefore threshold factors for the *Net Income* ratio of the proprietary segment are incrementally higher than other segments.

Threshold Adjustment

If a proprietary institution earns a threshold factor of <u>two</u> or <u>one</u> for its *Primary Reserve* ratio, the result for the *Viability* ratio cannot be greater than the result for the *Primary Reserve Ratio.* The purpose of this adjustment is to prevent insignificant amounts of debt from significantly affecting the categorization of an institution. A group representing the proprietary business segment questioned why the same adjustment wasn't made for all business segments.

We did not make this adjustment for the other business segments for two basic reasons. First, governance and ownership structures of non-profit institutions generally impose various administrative controls that make it more difficult for the institution to take on debt for the purpose of circumventing ED's gate keeping methodology. Secondly, the weighting percentages were compiled in such a way that the overall composite scores of institutions in other business segments would not be as greatly affected by insignificant amounts of debt.

4. Final Recommendations

This section represents our final recommendations. The conceptual bases used to develop the methodology are included here as well as throughout the previous sections of the report.

KPMG recommends that ED adopt the gate keeping methodology described in the *Project Chronology* section to assist in exercising its statutory responsibility to assess the financial responsibility of institutions participating in Title IV programs. Such a methodology would provide ED with an efficient initial assessment and would focus ED's limited resources on "problem" institutions. The final recommended methodology uses three ratios in conjunction with a five-step weighting process to make the assessment. The recommended ratios are intended to measure the financial condition of educational institutions participating in student aid programs. The recommended ratios, weighting process, thresholds, weighting percentages, and final categories are presented in this section.

There are two basic ideas that form the foundation upon which this methodology was developed that should be briefly revisited. The first concept is that the financial condition of institutions can be assessed by measuring the same fundamental elements of financial health (using ratios) regardless of differences in accounting and reporting requirements or organizational differences. The second simply states that these financial ratios can be used as a gate keeping methodology to make the initial assessment of an institution's financial condition.

The primary purpose of this initial assessment would be to place institutions into various categories of financial health to facilitate further analysis by ED. The categories range from "exemplary financial health" to "immediate problem". Based upon such an initial screening, ED will appropriately allocate its limited resources to more financially at risk institutions.

Final Recommendations
Three Ratios

KPMG recommends that ED use three ratios for its gate keeping methodology: the *Viability Ratio, Primary Reserve Ratio,* and *Net Income Ratio.* They are described below separately for each business segment to accommodate for the different accounting and reporting requirements.

Ratios for Public Institutions

Public institutions generally prepare their financial statements in accordance with Statement No. 15 of the Governmental Accounting Standards Board (GASB). Under GASB Statement 15, most public colleges are required to follow the accounting and financial reporting standards set forth in the 1973 AICPA Audit Guide for Colleges and Universities. Based on that accounting model, the ratios for this business segment are calculated as follows:

1. **Viability Ratio**

$$\frac{\text{Expendable Fund Balances}}{\text{Plant Debt}}$$

2. **Primary Reserve Ratio**

$$\frac{\text{Expendable Fund Balances}}{\text{Total Expenditures \& Mandatory Transfers}}$$

3. **Net Income Ratio**

$$\frac{\text{Net Total Revenues}}{\text{Total Revenues}}$$

For a more detailed description of these ratios and their components, see KPMG Peat Marwick; L.F. Rothschild Unterberg, Towbin, Ratio Analysis in Higher Education, Second Edition, Appendix B.

Ratios for Private Non-Profit Institutions

The financial statements of private non-profit institutions are in a state of transition. Ratios for those who prepare their financial statements in accordance with the AICPA Audit Guide for Colleges and Universities are identical to those for public institutions. The following ratios recognize the new accounting and financial reporting requirements of FASB Statements 116 and 117. Most private non-profit institutions are required to adopt these standards during their 1996 fiscal year. The ratios for this business segment are calculated as follows:

1. **Viability Ratio** $\dfrac{\text{Expendable Net Assets}}{\text{Long-Term Debt}}$

2. **Primary Reserve Ratio** $\dfrac{\text{Expendable Net Assets}}{\text{Total Expenses}}$

3. **Net Income Ratio** $\dfrac{\text{Change in Unrestricted Net Assets}}{\text{Total Unrestricted Income}}$

For a more detailed description of these ratios and their components, see KPMG Peat Marwick LLP; Prager, McCarthy, & Sealy, <u>Ratio Analysis in Higher Education, Third Edition</u>, Appendix C.

Ratios for Proprietary Institutions

Proprietary institutions prepare their financial statements consistent with generally accepted accounting principles (GAAP) applicable to commercial entities promulgated by the FASB and the American Institute of Certified Public Accountants (AICPA). As a result, the ratios for this business segment are calculated as follows:

1. **Viability Ratio** $\dfrac{\text{Adjusted Equity*}}{\text{Total Long-Term Debt**}}$

2. **Primary Reserve Ratio** $\dfrac{\text{Adjusted Equity*}}{\text{Total Expenses}}$

3. **Net Income Ratio** $\dfrac{\text{Income Before Taxes***}}{\text{Total Revenues}}$

* Adjusted Equity is comprised of the following:

	Total Owner(s) / Shareholders' Equity
less (-):	intangible assets
less (-):	unsecured related party receivables
less (-):	property, plant and equipment (net of accumulated depreciation)
plus (+):	total long-term debt**
equals (=):	**Adjusted Equity**

NOTE: If total long-term debt (defined below) exceeds the value of net property, plant and equipment, then the asset is not subtracted from equity nor is the liability added back.

** Total long-term debt is comprised of all debt obtained for long-term purposes. The short-term portion of any long-term debt is included.

*** Income before taxes excludes the effect of extraordinary gains or losses, cumulative effect of accounting principles, and correction of prior years' errors.

Ratios for Hospitals

Hospitals generally prepare their financial statements in accordance with standards set forth by the AICPA Audit Guide, Providers of Health Care Services Audit Guide. Although many of the hospitals will be subject to the new FASB Statements 116 and 117, their financial statements have historically been presented in a manner that was already materially consistent with those standards. Based on those standards, ratios for this business segment are calculated as follows:

1. **Viability Ratio**

$$\frac{\text{Expendable Fund Balances*}}{\text{Long-term Debt**}}$$

2. **Primary Reserve Ratio**

$$\frac{\text{Expendable Fund Balances*}}{\text{Total Expenses***}}$$

3. **Net Income Ratio**

$$\frac{\text{Revenue \& Gains in Excess of Expenses \& Losses (Net Total Revenues)}}{\text{Total Revenues}}$$

* General, specific purpose, and quasi-endowment fund balances less (-) plant equity. True endowments are specifically excluded from the numerator.

** Notes payable, bonds payable, leases payable and other long-term debt.

*** Retrieved from the Statement of Revenue and Expenses of General Funds and is comprised of all expenses (used as an indicator of overall operating size).

Final Recommendations
Overall Weighting Process

KPMG recommends that ED use a five-step process to be used in conjunction with the three ratios described previously to evaluate institutions' overall financial health.

The recommended methodology involves five distinct steps regardless of the business segment of the institution to which it is being applied:

Step 1 Calculate the three ratios.

Step 2 Assign a threshold factor to each ratio.

Step 3 Multiply the assigned threshold factors by the appropriate weighting percentage for each ratio.

Step 4 Sum the resulting products of all three ratios.

Step 5 Use the total from step 4 to assign a final grade from the grading scale.

This methodology is illustrated graphically below for a hypothetical private non-profit university whose financial statements do NOT yet comply with SFAS 116/117:

Step 1				***Step 2***		***Step 3***		***Step 4***
Ratio Calculation				**Threshold**		**Weighting Percentage**		**Product**
Viability Ratio	Expendable Fund Bal. / Plant Debt	=	1.53	3	X	35%	=	1.05
Primary Reserve Ratio	Expendable Fund Bal. / Total Exp. & Mand. Tfrs	=	.69	4	X	55%	=	2.20
Net Income Ratio	Net Total Revenues / Total Revenues	=	.07	5	X	10%	=	.50
							Total	**3.75**

Step 5 **3.75 on Grading Scale = II**

II = Financially Sound

Final Recommendations Thresholds

KPMG created a five-fold division to discriminate between very poor, poor, acceptable, good and very good ratio results for each of the three ratios. Accordingly, any ratio result corresponds with a threshold factor of one through five (one represents a weak rating and five represents an exemplary financial rating). The thresholds themselves were established using a combination of professional judgment, empirical results and information gathered from rating institutions.

Establishing Thresholds

As a basis for establishing the threshold ranges, KPMG posed the question; What is the minimum result for each ratio that would indicate acceptable financial health? The answer to that question established the lower end of the neutral or mid range for which a threshold factor of **three** (3) would be assigned. For example, KPMG's experience and bond rating practices for private colleges and universities indicate that a *Primary Reserve Ratio* result of less than .30 indicates a less than healthy financial position. Hence, in order for an institution to receive a 3 factor for its *Primary Reserve Ratio*, the result must be at least .30.

To establish the upper threshold of five, the risk associated with ED's overall objective had to be considered. Assigning the highest threshold factor to a ratio correlates to a very good or exemplary financial condition. Oversight of such institutions (with regard to financial responsibility) might be lessened as a result of such rating. If the financial condition of such an institution were to subsequently be adversely affected, ED and students could suffer unanticipated financial losses. Accordingly, the range for such a rating should be high enough to minimize that risk. The nature of each ratio and what it represents also had to be considered. A *Primary Reserve Ratio* result of 1.00 or more indicates that the institution can continue to operate at its present level for at least one year without any additional revenue. If analysis were limited to the *Primary Reserve Ratio*, one would have to conclude that such an institution is in a strong financial position.

Finally, the minimum thresholds were established that clearly reflect financial problems. A negative *Net Income Ratio* result for a college or university demonstrates that during its fiscal year, the school spent more than it received. Such activity will eventually create a financial problem. Accordingly, a negative net income ratio would be assigned a factor of one (1).

KPMG used the distribution of ratio results from the empirical testing phase of the project to validate its conclusions about threshold levels. Although the distributions did not correspond exactly to the threshold ranges, they do support KPMG's conclusions. Individual financial statements from that distribution were also supportive. Reviewing ratio results of institutions that KPMG knew to be clearly strong or weak (as a result of the judgmental sample), provided additional information about where threshold levels should be set.

The recommended thresholds described below have been customized for each sector. For example, public institution's *Primary Reserve Ratio* thresholds are approximately 30% lower than private institutions because certain expendable assets tend not to be reflected in their financial statements. On the other hand, because unrealized and realized endowment gains will now be reflected as expendable net assets under FASB Statements 116 and 117 (under the AICPA Audit Guide fund accounting reporting model, they are reported as nonexpendable), thresholds for ratios calculated from financial statements prepared under these standards are 30 - 50% higher than financial statements prepared under the fund accounting model. Finally, the *Net Income Ratio* thresholds for proprietary institutions are higher than their non-profit counterparts because they have been adjusted for the effect of measuring pre-tax income. Detailed rationale for each of the thresholds of each business segment has been included in our basis for conclusions at the end of this section.

Thresholds for Public Institutions

	Threshold Factors				
	1	**2**	**3**	**4**	**5**
Viability Ratio	<.50	.50 - .99	1.0 - 1.99	2.0 - 3.99	$\geq$4.0
Primary Reserve Ratio	<.10	.10 - .19	.20 - .44	.45 - .69	$\geq$.70
Net Income Ratio	<0	0 - .009	.01 - .029	.03 - .049	$\geq$.05

Additional Threshold Adjustment: If a public institution has a negative (less than zero) *Primary Reserve Ratio* result, that institution automatically is categorized as an "immediate problem" regardless of the other ratio results.

Thresholds for Private Non-Profit Institutions That Have NOT Adopted FASB Statements 116 and 117

Private non-profit institutions that have not yet adopted FASB Statements 116 and 117 generally prepare their financial statements in accordance with standards set forth in the 1973 AICPA Audit Guide for Colleges and Universities.

	Threshold Factors				
	1	**2**	**3**	**4**	**5**
Viability Ratio	<.50	.50 - .99	1.0 - 1.99	2.0 - 3.99	≥4.0
Primary Reserve Ratio	<.10	.10 - .29	.30 - .64	.65 - .99	≥1.00
Net Income Ratio	<0	0 - .009	.01 - .029	.03 - .049	≥.05

Additional Threshold Adjustment: If a private non-profit institution has a negative (less than zero) *Primary Reserve Ratio* result, that institution automatically is categorized as an "immediate problem" regardless of the other ratio results.

Thresholds for Private Non-Profit Institutions that Have Adopted FASB Statements 116 and 117

Financial statements of private non-profit institutions that have adopted FASB Statements 116 and 117 are different from those prepared using the AICPA fund accounting model. As indicated above, those differences substantially impact the ratios for this business segment.

	Threshold Factors				
	1	**2**	**3**	**4**	**5**
Viability Ratio	<.75	.75 - 1.74	1.75 - 2.74	2.75 - 4.74	≥4.75
Primary Reserve Ratio	<.30	.30 - .49	.50 - .99	1.00 - 1.49	≥1.50
Net Income Ratio	<0	0 - .019	.02 - .049	.05 - .079	≥.08

Additional Threshold Adjustment: If a private non-profit institution has a negative (less than zero) *Primary Reserve Ratio* result, that institution automatically is categorized as an “immediate problem” regardless of the other ratio results.

Thresholds for Proprietary Institutions

	Threshold Factors				
	1	**2**	**3**	**4**	**5**
Viability Ratio	<.50	.50 - .99	1.0 - 1.99	2.0 - 3.99	≥4.0
Primary Reserve Ratio	<.10	.10 - .29	.30 - .49	.50 - .69	≥.70
Net Income Ratio	<.02	.02 - .049	.05 - .079	.08 - .119	≥.12

Additional Threshold Adjustment: If a proprietary institution earns a threshold factor of <u>two</u> or <u>one</u> for its *Primary Reserve Ratio*, the threshold factor for the *Viability Ratio* will be no greater than the result for the *Primary Reserve Ratio*. The purpose of this adjustment is to prevent insignificant amounts of debt from significantly affecting the categorization of an institution.

Thresholds for Hospitals

	Threshold Factors				
	1	**2**	**3**	**4**	**5**
Viability Ratio	<.50	.50 - .99	1.0 - 1.99	2.0 - 3.99	≥4.0
Primary Reserve Ratio	<.10	.10 - .29	.30 - .64	.65 - .99	≥1.0
Net Income Ratio	<.0	.0 - .009	.01 - .029	.03 - .049	≥.05

Basis for Conclusions

Viability Ratio

A ratio of 1:1 or greater indicates that, as of the balance sheet date, an institution is *clearly* financially healthy because it has sufficient expendable resources to satisfy debt obligations. Conversely, a ratio of less than 1:1 would mean that an institution does not have sufficient expendable resources to satisfy all debt obligations as of the balance sheet date.

For those ratios under 1:1, there is no absolute threshold at which all institutions can be judged to be no longer financially viable. Individual facts and circumstances will impact that judgment. Most debt relating to plant is long term and does not have to be paid off all at once. Payments of other liabilities may similarly be delayed. Certain institutions, such as colleges and universities, can be surprisingly resilient even when the viability ratio indicates that there are little or no expendable resources remaining to satisfy debt obligations. Frequently, this means living with no margin for error and meeting severe cash flow needs by obtaining short-term loans.

Ultimately, a weak financial condition such as just described will impair the ability of an institution to fulfill its mission and meet its service obligations to students. Such an institution will be driven by financial decisions rather than programmatic decisions and will have a need to generate sufficient surplus net revenues (net income) to rebuild positive expendable reserves.

KPMG, therefore, used as the lower end of its middle category (3) a ratio of 1:1. The lowest category (1) was established at .5:1 and below. The highest categories (4 and 5) were established as greater than 2:1 and 4:1, respectively. Empirical data included in the distributions and published rating medians for colleges and universities indicate stronger and weaker institutions viability ratios correlate with these thresholds.

KPMG recommends that the same threshold be used for all business segments except for private universities which have adopted the new accounting standards FASB Statements 116 and 117. A comparison of data from private institutions under the fund accounting model and those under the FASB Statements 116 and 117 model indicate that these thresholds should be approximately 30% - 50% higher because under the FASB model realized and unrealized endowment gains are generally classified as expendable funds.

Primary Reserve Ratio

This ratio measures the financial strength of an institution by comparing expendable resources to total expenditures or expenses (operating size). It provides a snapshot of financial strength and flexibility by indicating how long the institution could operate without relying on additional revenues being generated from operations.

It is reasonable to expect expendable resources to increase at least in proportion to the rate of growth of operating size. If they do not, the same dollar amount of expendable resources will provide a smaller margin of protection against adversity as the institution grows. This ratio serves another purpose. It supplements the *Viability* ratio. An institution may have insignificant expendable resources and little or no debt and therefore produce an acceptable value for the *Viability* ratio. But low expendable resources in relation to operating size signals a weak financial condition. This situation is reflected in our weighting percentages discussed in a later section.

No absolute lower end value for this ratio exists. However, experience with the higher education investment community and the results of our empirical testing suggests that .3 or better would indicate a financially healthy institution.

KPMG, therefore, used as the lower end of its middle category (3) a ratio of .3. The lowest category (1) was established at .1 and below because less than one month or negative expendable reserves clearly indicates a financially risky institution. The highest category (5) was established as greater than or equal to 1 because of the institution's ability to operate one year on existing reserves without an additional dollar of revenue, posing little financial risk to ED. Because of operating and institutional differences these basic thresholds were modified for some of the business segments.

None of the public institutions reviewed in the empirical testing phase of the project had a *Primary Reserve Ratio* of greater than 1, while ten of the private institutions were greater than 1 for the same ratio. Under the GASB reporting model, certain related entities and assets are not required to be reflected in the general purpose financial statements. In addition, many states will not allow significant unrestricted expendable reserves to build up in a public institution. We also noted that published bond rating averages for public institutions rated Aa and A were 30 - 50% lower than private institutions rated Aa and A. Based on this research and input from industry task force members, KPMG lowered the thresholds for public institutions categories 2 through 5 by approximately 30%. The category 1 threshold for public institutions remains at .1 because certain minimum reserves are necessary and .1 would still indicate an institution that is financially at risk.

Proprietary institution owners have invested capital with the ultimate goal of returning that capital at a profit. Non-profit organizations on the other hand, are generally precluded from distributing capital to resource providers (e.g. contributors). It follows therefore that less capital will generally be left in proprietary institutions than in their non-profit counterparts. Accordingly, the project team relaxed the *Primary Reserve Ratio* threshold ranges for proprietary institutions. The lower end threshold factors 1 and 2 remain unchanged. However, the lower end of category 4 is .5 and .7 or greater will correspond to category 5. Furthermore, if a non-profit institution's *Primary Reserve Ratio* result is less than zero, that institution automatically is categorized as an "immediate problem" regardless of all other factors. **Not making** this adjustment for proprietary institutions recognizes the fact that prudent business decisions may require an institution to have a negative expendable capital balance for brief periods of time.

Finally, the threshold factors for the private institutions adopting FASB Statements 116 and 117 have been increased by a factor of approximately 66% over the private colleges and universities using the fund accounting model. Empirical data suggests that the inclusion of realized and unrealized gains on investments held as endowments in unrestricted and temporarily restricted net assets for the FASB model should lead to higher thresholds for the *Primary Reserve* ratio than those used to evaluate institutions following the AICPA Audit Guide financial reporting model where such gains are treated as nonexpendable.

Net Income Ratio

In the non-profit business segments (including public and private institutions and hospitals), this ratio measures whether institutions operate within their means. In the public sector, schools are not necessarily encouraged to be profitable. In fact, legislation may prohibit them from operating at anything other than a break-even level. However, profitability is a much more important indicator of financial health for a proprietary institution.

Private and public non-profit institutions which maintain operating margins of 3% on revenue are able to add to their expendable resources over time. Clearly, deficits overtime will erode these same expendable resources. The project team therefore established as the lower end of the middle category (3) a net income ratio of 3%. The lowest category (1) was established at zero and below (operating deficits). The highest category (5) was established as greater than 5%. Threshold levels for private institutions that have adopted FASB statements 116 and 117 have been increased by approximatley 66% because of unrealized and realized investment gains being included in the change in unrestricted net assets.

It is also important to note that the *Net Income Ratio* for proprietaries measures **pre-tax** income in comparison to total revenue. Therefore, the *Net Income Ratio* thresholds for the proprietary institutions have been increased accordingly by an estimated tax effect.

Final Recommendations Weighting Percentages

By applying different weighting percentages to each sector, certain ratios and the elements they measure are accorded greater importance than others. As with the ratios and thresholds, the weighting percentages are customized to accommodate structural and accounting differences found in each of the business segments. Non-profit institutions retain expendable resources and a strong balance sheet generally correlates to strong financial health. For-profit institutions, on the other hand, do not necessarily retain expendable funds in the institution. Accordingly, higher weighting percentages have been allocated to the viability ratios for non-profit institutions compared to proprietary institutions. The thinking behind the final weighting percentages set forth below is further described in the basis for conclusions later in this section.

Weighting Percentages for Public Institutions

Ratio	Weighting Percentage
Viability	35%
Primary Reserve	55%
Net Income	10%

Additional Weighting Adjustment: If an institution has no debt, making it arithmetically impossible to compute the *Viability Ratio*, only the *Primary Reserve* and *Net Income* ratios are used, weighted 90% / 10% respectively.

Weighting Percentages for Private Non-Profit Institutions

When considering weighting percentages, no distinction is necessary between institutions that have adopted FASB Statements 116 and 117 and those that have not.

Ratio	Weighting Percentage
Viability	35%
Primary Reserve	55%
Net Income	10%

Additional Weighting Adjustment: If an institution has no debt, making it arithmetically impossible to compute the *Viability Ratio*, only the *Primary Reserve* and *Net Income* ratios are used, weighted 90% / 10% respectively.

Weighting Percentages for Proprietary Institutions

Ratio	Weighting Percentage
Viability	30%
Primary Reserve	20%
Net Income	50%

Additional Weighting Adjustment: If an institution has no debt, making it arithmetically impossible to compute the *Viability Ratio*, only the *Primary Reserve* and *Net Income* ratios are used, weighted 50% each.

Weighting Percentages for Hospitals

Ratio	Weighting Percentage
Viability	40%
Primary Reserve	20%
Net Income	40%

Additional Weighting Adjustment: If an institution has no debt, making it arithmetically impossible to compute the *Viability Ratio,* only the *Primary Reserve* and *Net Income* ratios are used, weighted 60% / 40% respectively.

Basis for Conclusions

KPMG developed weighting percentages for each of the three ratios in each business segment based upon the ratio's relative importance. The weighting percentages were designed to recognize the structural and environmental differences between institutions in different business segments:

Private and Public Non-Profits

For private and public non-profit institutions, balance sheet strength, as evidenced by expendable fund balances or net assets, correlates directly with strong financial position. Review of our empirical testing clearly indicated that institutions with large expendable fund balances compared to operating size were among the strongest financially (refer to Appendix D for distribution reports). A review of the rating agency medians by category also demonstrated strong correlation between financial health and large expendable fund balances.

In addition, our empirical testing indicated a less direct correlation between the ability of an institution to spend within its means and financial strength, particularly where only one year is being analyzed. However, over time profitability must be maintained so as to not adversely impact the other ratios.

The industry task force agreed with our conclusions that more emphasis should be placed on the viability ratios versus net income for these business segments. Therefore, the *Primary Reserve Ratio* and the *Viability Ratio* have been allocated weighting percentages of 55% and 35%, respectively. The *Net Income Ratio* has been allocated a weighting percentage of 10%.

Proprietaries

By their nature, proprietary institutions are expected to generate a return for their investors. Unlike their non-profit counterpart, much of the return may not be retained within the business. Certain amounts of expendable resources are necessary to fund ongoing operations, however, many financing alternatives exist. Reasonable return (profitability) is therefore more important for proprietary institutions. Long term and consistent returns are a primary indicator of a strong institution. Consequently, the *Net Income Ratio* has been allocated a percentage of 50%. The remaining allocation is 30% and 20% to the *Viability and Primary Reserve Ratios*, respectively.

Hospitals

While most hospitals do rely on profitability, most also have some endowments or other similar source of income so the *Net Income Ratio* weighting is less than that of a proprietary but more than that of a college or university. Additionally, since hospitals have significant physical capital relative to operating size and generally use debt to finance capital additions, the *Viability Ratio* receives greater weight than the *Primary Reserve Ratio*.

Final Recommendations
Final Categories

Once a composite score has been computed using the recommended ratios, thresholds, and weighting percentages, KPMG recommends that each institution be assigned to one of the four following categories:

Category	**A composite score of...**	**indicates...**
I.	4.00 - 5.00	Exemplary financial health
II.	2.50 - 3.99	Financially sound
III.	1.75 - 2.49	Potential problem
IV.	1.00 - 1.74	Immediate problem

The boundaries of each category are the same for all business segments. In the second report to the task force, KPMG recommended assigning a letter grade of A, B, C, or D to institutions in each category. However, numerous task force members felt that letter grades were inappropriate and could easily be misunderstood, especially by the public and press. Accordingly, KPMG eliminated letter grades from the recommended methodology.

Basis for Conclusions

Certain types of institutions were analyzed during the empirical testing phase of the project. In order to validate the four categories, the final composite score and categorization of certain institutions were compared with other data. For example:

- **ED Surety List** - Five institutions who are on the surety list at ED were tested. Four of these institutions had composite scores which placed them in category IV. The fifth institution's composite score placed them in category III because of improved operating results since being placed on the surety list.
- **Accrediting Organization List** - Several institutions were identified as not meeting the financial standards of an accrediting organization either because of poor financial performance or because of not passing the current financial

responsibility regulations. Of the eleven institutions identified, nine had composite scores which placed them in category IV in the empirical testing phase. No conclusions could be made with respect to the remaining two institutions because the accrediting organization did not provide detailed explanations for their selection criteria.

Several large research universities were also included in the sample. At least two of these have debt obligations rated by the investment community as Aa or better. These institutions had composite scores in the empirical testing phase placing them in category II or better (which would correlate to very good or exemplary financial health). Given this additional evidence, KPMG concluded that the above four categories could be effectively used by ED as its gate keeping methodology.

Final Recommendations
Other Recommendations

As part of the overall recommended methodology, KPMG makes certain other recommendations concerning the methodology below.

Non-Compliance with Financial Responsibility Standards

KPMG's recommendations were developed to serve as an initial gate keeping methodology and to categorize institutions along the spectrum of financial health. Accordingly, we have not established a minimum composite score for continued participation in student financial aid programs. However, if ED chooses to create a "bright line" or minimum standard, KPMG recommends that the standard should be set within category IV (composite score of 1.00 - 1.74). Furthermore, KPMG recommends that ED review institutions falling below the "bright line" minimum for other mitigating circumstances before forming a conclusion about their compliance with financial responsibility standards. The industry task force members and KPMG believe that one example of such a mitigating circumstance would be the fact that some public institutions' liabilities are backed by the full faith and credit of a state or local government.

Reporting Entity

As part of this project, ED requested KPMG to make recommendations concerning the appropriate entity to which the recommended methodology should be applied. The need for this recommendation was confirmed during the empirical testing phase.

The current regulations, 34 CFR Section 668.15 (e)(1), require financial responsibility to be demonstrated for each unique program. ED in turn assigns a unique Office of Post-secondary Education Identification (OPE ID) number to each program. Different organizational structures and ownership relationships raise the question of which entity and more specifically, which entity's financial statement should be used when determining financial responsibility. ED's challenge in this area has generally been limited to three business segments; proprietaries, public non-profits, and hospitals.

Public Non-Profit Institutions

The financial statements of many public non-profit institutions exclude the assets, liabilities, revenues, and expenditures of related foundations even though they may be under common control or otherwise closely affiliated. Those foundations often hold a substantial portion of the financial resources available to support institutional activities.

Proprietary Institutions

Many institutions operate multiple programs and in some cases, separate financial statements are filed for each program that is in turn operated by a separate company. However, in other cases, the financial viability of a participating institution may be substantially dependent upon the financial health of its parent or other related companies. ED may not have access to such related parties' financial statements and more importantly, may not have legal recourse against them to protect its own interests. Finally, the current regulations require institutions to submit consolidating schedules in those cases where a financial statement is intended to cover more than one participating program. If the individual programs are not being operated by a separate legal entity, the consolidating schedules may not be meaningful since all appropriate items (revenues, expenses, assets and liabilities) may not be allocated "down" to the subsidiary or operating level.

Hospitals

Often, ED signs a participation agreement with a department or operating division of a hospital. In those cases, the hospital's financial statements represent an entity against which ED has no legal recourse since it is not the entity with which they contracted. Financial statements of the appropriate entity (the department or division) may be meaningless since it doesn't legally own any assets, or liabilities. In addition, any revenue or expenses reported for such an entity are merely the result of an allocation of the hospital's revenue and expenses.

Recommendation

KPMG recommends that the proposed ratios and weighting mechanism be applied to separate legal entities capable of bearing financial responsibility and legally capable of contracting with ED. Each institution that participates in federal programs signs a program participation agreement (PPA) with ED. It follows therefore, that financial responsibility standards (ratios and weighting mechanism) should be applied to the entity that has entered into the PPA. ED's economic risk is directly linked to the institution that signs the PPA.

In this regard, one economic entity may be financially responsible for more than one educational program represented by numerous OPE ID numbers (e.g. parent / subsidiary relationship). If the PPA is signed by such a parent entity, the results of the ratios and weighting mechanism may very well cover multiple institutions or locations. Likewise, entities that are unable to prepare stand-alone financial statements that earn unqualified audit opinions from an independent CPA will be unable to demonstrate financial responsibility.

The recommended methodology takes the entity issue into consideration in developing ratios for proprietary institutions. Therein, related party receivables are excluded from the numerators of the *Viability* and *Primary Reserve* ratios. However, for a comprehensive solution, KPMG recommends that ED perform a comprehensive review of its PPAs currently in place to ascertain whether they have contracted with the appropriate legal entity. In addition, KPMG recommends that ED review its contracting process so that the correct legal entities are contracted with in the future. If financial information used in the recommended methodology is drawn from financial statements of inappropriate legal entities, the results will provide no value. Furthermore, ED's adoption of this recommendation would eliminate the necessity for institutions to file consolidating schedules currently required by regulations.

Trend Analysis

Although sufficient data is not currently available for ED to perform trend analysis, KPMG recommends that ED begin to compile ratio results for such a future use. Incorporating the results for a minimum of three fiscal years would allow ED to review each institution's trends. Extreme fluctuations in the final score or any particular ratio result may also be an indication of significant events that materially impact an institution's financial health. Finally, overall positive or negative trends may provide insight as to an institution's financial health.

Periodic Review

The thresholds that KPMG developed are based on our experience in evaluating the financial conditions of colleges and universities, empirical data derived from a judgmental sample, task force feed back, bond rating standards, and professional judgment. Furthermore, accounting standards are continually changing and the economic environment in which schools operate is impossible to predict with certainty. For example, there was a limited number of financial statements available for the institutions which have adopted FASB statements 116 and 117. Therefore, KPMG recommends a follow up study be performed for those institutions next year to supplement the results from this ratio analysis project. In addition, we suggest that ED periodically monitor the statistics collected over the next few years in each segment to determine whether any adjustments are necessary.

Appendix A

	Private Non-Profit Institutions (FASB 116/117)	Private Non-Profit Institutions (1973 AICPA Audit Guide)	Public Institutions (GASB)	Proprietary Institutions	Hospitals
Form and Content of Financial Statements:					
Basic Financial Statements	- Statement of Financial Position - Statement of Activities - Statement of Cash Flows - Prepared on a highly aggregated basis - Format is left to the discretion of the institution Source: EIU 95-5 (NACUBO's Financial Accounting and Reporting Manual Emerging Issues Update) Guidance: FASB 117	- Statement of Financial Position - Statement of Changes in Fund Balances - Statement of Current Funds Revenue, Expenditures, and Other Changes - Prepared on a highly disaggregated basis - Format must generally conform to example set forth in the AICPA guide Source: EIU 95-5	- Statement of Financial Position - Statement of Changes in Fund Balances - Statement of Current Funds Revenue, Expenditures, and Other Changes - Prepared on a highly disaggregated basis - Format must generally conform to example set forth in the AICPA guide Source: EIU 95-5	- Balance Sheet - Statement of Income and Retained Earnings - Statement of Cash Flows Source: AICPA Guide	- Balance Sheet - Statement of Revenue and Expenses of General Funds - Statement of Changes in Fund Balances - Statement of Cash Flows of General Funds - Prepared on an aggregated or disaggregated basis - Many hospitals after 1995 will adopt FASB 116 and 117. The results herein will not be significantly effected. Source: AICPA Guide

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.

Consolidation	- Consolidate all majority owned for-profit subsidiaries and use the equity method to account for investments of less than 50 percent - Consolidate or make extensive footnote disclosure concerning not-for-profits in which they have an economic interest depending on the vehicle of exercise of control - Present consolidated entities in totally aggregated single column "consolidated" Source: EIU 95-5 Guidance: SOP 94-3	- Significant flexibility whether to consolidate, disclose in footnotes or to prepare separate financial statements - May consolidate all majority owned for-profit subsidiaries and use the equity method to account for investments of less than 50 percent - Significant flexibility with regard to selecting into which fund group to consolidate the subsidiaries	- Consolidate other entities (either for-profit or not-for-profit) when there is a fiscal dependency, or it appoints a voting majority of the board and has the ability to impose its will or a financial benefit/burden relationship - GASB undecided as to whether to consolidate separately incorporated fundraising foundations whose boards are not controlled by the public institution - Generally, present consolidated entities in a discrete columnar format Source: EIU 95-5 Guidance: GASB 14	- Consolidation of all majority-owned subsidiaries unless control is temporary or does not rest with the majority owner - Use the equity method of accounting for investments of less than 50 percent Guidance: FASB 94	- Consolidation of all majority-owned subsidiaries unless control is temporary or does not rest with the majority owner - Use the equity method of accounting for investments of less than 50 percent Guidance: FASB 94

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.

Recognition and Classification of Revenue:					
Contributions	- Required recognition of unconditional promise to give as contributions when received (discounted to net present value) - "Restricted" funds include only contributions subject to a donor stipulation. - Government grants are generally treated as exchanges rather than as contributions - Required reclassification of restricted funds to recognize the lifting of a restriction when the first expenditure for the restricted purpose is made, even if unrestricted funds are available to fund the expenditure	- Contributions recognized on a cash basis - Amount of any pledges disclosed in a footnote - "Restricted" funds include contributions subject to a donor stipulation as to use or to some other legal restriction on use (e.g., sinking funds) - Government grants are generally treated as contributions - Where both unrestricted and restricted funds are available to fund an expenditure the entity can designate the source of funding for accounting purposes - Pass-through amounts (e.g., Pell Grants and research awards to sub-recipients) are generally recognized as revenue and	- Contributions recognized on a cash basis - Amount of any pledges disclosed in a footnote - "Restricted" funds include contributions subject to a donor stipulation as to use or to some other legal restriction on use (e.g., sinking funds) - Government grants are generally treated as contributions - Where both unrestricted and restricted funds are available to fund an expenditure the entity can designate the source of funding for accounting purposes - Pass-through amounts (e.g., Pell Grants and research awards to sub-recipients) are required to be recognized as grants in current	- Generally do not receive contributions from outside donors	- Classified as gains when they are peripheral or incidental to the activities of the hospital - Classified as revenues when deemed to be ongoing major central activities by which the hospital attempts to fulfill its basic function of providing health care services - "Restricted" funds include contributions subject to donor or legal stipulation as to use.

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.

	Source: EIU 95-5 Guidance: FASB 116	expenditures in current restricted funds rather than as agency funds Source: EIU 95-5 Guidance: CUBA	restricted funds rather than as agency funds - Grants passed through to other entities are recognized as both revenue and expenditure when any type of administrative responsibility exists for the grant Source: EIU 95-5 Guidance: CUBA, GASB 15, 19, 24		Source: AICPA Guide
Government Grants and Contracts	- Generally treated as an exchange rather than as a contribution - Unrestricted revenue if treated as exchange Source: EIU 95-5 Guidance: FASB 116	- Included in current restricted funds - No distinction in accounting from private contributions Source: EIU 95-5	- Included in current restricted funds - No distinction in accounting from contributions Source: EIU 95-5	- Financial aid to students would reduce receivable from students - Other grants and contracts treated as operating revenue	- Included in the general fund

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Realized and Unrealized Gains on Investments	- Unless restricted by donor stipulation or law, accounted for as an increase in unrestricted net assets Guidance: FASB 117, FASB 124	- Accounted for in the fund group owning the investment Source: AICPA Guide	- Accounted for in the fund group owning the investment Source: AICPA Guide	- Accounted for as investment income (revenue)	- Accounted for as unrestricted non-operating income or in the fund group owning the investment Source: AICPA Guide
Recognition of Expense:					
Pensions	- Bases the asset/liability and expense recognized on actuarial determinations of the cost of benefits earned by employees through service provided to date - A single actuarial method is required for determining the amounts to be recognized in the financial statements Source: EIU 95-5 Guidance: FASB 87	- Bases the asset/liability and expense recognized on actuarial determinations of the cost of benefits earned by employees through service provided to date - A single actuarial method is required for determining the amounts to be recognized in the financial statements Source: EIU 95-5 Guidance: FASB 87	- Bases the asset/liability and expense/expenditure recognized on the institution's funding policy and uses the same actuarial method adopted for funding purposes Source: EIU 95-5 Guidance: GASB 27	- Bases the asset/liability and expense recognized on actuarial determinations of the cost of benefits earned by employees through service provided to date - A single actuarial method is required for determining the amounts to be recognized in the financial statements Source: EIU 95-5 Guidance: FASB 87	- Bases the asset/liability and expense recognized on actuarial determinations of the cost of benefits earned by employees through service provided to date - A single actuarial method is required for determining the amounts to be recognized in the financial statements Source: EIU 95-5 Guidance: FASB 87

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.

Postretirement Benefits	- Required to recognize an expense and corresponding liability for providing non-pension benefits (e.g., health and life insurance) to retirees Source: EIU 95-5 Guidance: FASB 106	- Required to recognize an expense and corresponding liability for providing non-pension benefits (e.g., health and life insurance) to retirees Source: EIU 95-5 Guidance: FASB 106	- Required to make disclosures regarding the provision of these benefits - No prescribed method of accounting; therefore typically accounted for on a pay-as-you-go basis Source: EIU 95-5	- Required to recognize an expense and corresponding liability for providing non-pension benefits (e.g., health and life insurance) to retirees Source: EIU 95-5 Guidance: FASB 106	- Required to recognize an expense and corresponding liability for providing non-pension benefits (e.g., health and life insurance) to retirees Source: EIU 95-5 Guidance: FASB 106
Postemployment Benefits	- Required to recognize the obligation to provide benefits after employment but before retirement Source: EIU 95-5 Guidance: FASB 112	- Required to recognize the obligation to provide benefits after employment but before retirement Source: EIU 95-5 Guidance: FASB 112	- No prescribed method of accounting; therefore typically accounted for on a pay-as-you go basis Source: EIU 95-5	- Required to recognize the obligation to provide benefits after employment but before retirement Source: EIU 95-5 Guidance: FASB 112	- Required to recognize the obligation to provide benefits after employment but before retirement Source: EIU 95-5 Guidance: FASB 112
Compensated Absences	- Accrue a liability for compensated absences related to past services - Method of calculation is left to the discretion of the institution Source: EIU 95-5	- Accrue a liability for compensated absences related to past services - Method of calculation is left to the discretion of the institution Source: EIU 95-5	- Accrue a liability for compensated absences related to past service - Method of calculation should include salary related payments such as FICA and pension contributions Source: EIU 95-5	- Accrue a liability for compensated absences related to past services - Method of calculation is left to the discretion of the institution Source: EIU 95-5	- Accrue a liability for compensated absences related to past services - Method of calculation is left to the discretion of the institution Source: EIU 95-5

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.

Depreciation	- Required to record depreciation on physical assets - Recorded as a change in unrestricted net assets Source: EIU 95-5 Guidance: FASB 93	- Required to record depreciation on physical assets - Recorded in net investment in plant fund section of the statement of changes in fund balances Source: EIU 95-5 Guidance: FASB 93	- Permitted to record depreciation on physical assets but it is not required Source: EIU 95-5 Guidance: GASB 8	- Required to record depreciation on physical assets Source: EIU 95-5	- Required to record depreciation on physical assets Source: EIU 95-5 Guidance: FASB 93
Required Disclosures:					
Financial Instruments	- Required to make fair value disclosures for both on and off balance sheet instruments - Specific disclosures are prescribed for derivative financial instruments - Required disclosure of concentrations of credit risk Source: EIU 95-5 Guidance: FASB 105, 107, 119	- Required to make fair value disclosures for both on and off balance sheet instruments - Specific disclosures are prescribed for derivative financial instruments - Required disclosure of concentrations of credit risk Source: EIU 95-5 Guidance: FASB 105, 107, 119	- Required disclosure about deposits with financial institutions, investments, and reverse purchase agreements including carrying amounts, market values of investments, and level of credit risk associated with deposits and investments - Required disclosure of certain risks associated with derivatives Guidance: GASB 3	- Required to make fair value disclosures for both on and off balance sheet instruments - Specific disclosures are prescribed for derivative financial instruments - Required disclosure of concentrations of credit risk Source: EIU 95-5 Guidance: FASB 105, 107, 119	- Required to make fair value disclosures for both on and off balance sheet instruments - Specific disclosures are prescribed for derivative financial instruments - Required disclosure of concentrations of credit risk Source: EIU 95-5 Guidance: FASB 105, 107, 119

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.

Other Special Areas:					
Impairment of Long Lived Assets and Certain Identifiable Intangibles	- Those assets to be held and used by an entity must be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable; If the sum of the expected future cash flows is less than the carrying amount of the asset, an impairment loss is recognized - Those assets to be disposed of must be reported at the lower of carrying amount or fair value less cost to sell, except those assets covered by APB Opinion 30 Source: EIU 95-5 Guidance: FASB 121	- Those assets to be held and used by an entity must be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable; If the sum of the expected future cash flows is less than the carrying amount of the asset, an impairment loss is recognized - Those assets to be disposed of must be reported at the lower of carrying amount or fair value less cost to sell, except those assets covered by APB Opinion 30 Source: EIU 95-5 Guidance: FASB 121	- No equivalent requirement Source: EIU 95-5	- Those assets to be held and used by an entity must be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable; If the sum of the expected future cash flows is less than the carrying amount of the asset, an impairment loss is recognized - Those assets to be disposed of must be reported at the lower of carrying amount or fair value less cost to sell, except those assets covered by APB Opinion 30 Source: EIU 95-5 Guidance: FASB 121	- Those assets to be held and used by an entity must be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable; If the sum of the expected future cash flows is less than the carrying amount of the asset, an impairment loss is recognized - Those assets to be disposed of must be reported at the lower of carrying amount or fair value less cost to sell, except those assets covered by APB Opinion 30 Source: EIU 95-5 Guidance: FASB 121

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.

Troubled Debt Restructurings	- Measure gain/loss on debt restructurings based on measurement at fair value once an impairment is determined to be probable Source: EIU 95-5	- Measure gain/loss on debt restructurings based on measurement at fair value once an impairment is determined to be probable Source: EIU 95-5	- Measure gain/loss on debt restructurings based on whether the carrying value will ultimately be recovered Source: EIU 95-5 Guidance: FASB 15	- Measure gain/loss on debt restructurings based on measurement at fair value once an impairment is determined to be probable Source: EIU 95-5	- Measure gain/loss on debt restructurings based on measurement at fair value once an impairment is determined to be probable Source: EIU 95-5
Accounting for Investments	- Investments in debt and readily marketable equity securities are carried at fair value - Does not apply to securities accounted for under equity method or investments in consolidated subsidiaries Guidance: FASB 124	- Investments may be carried at either cost or market value - Most institutions have chosen to carry investments at cost Source: AICPA Guide	- Investments may be carried at either cost or market value - Most institutions have chosen to carry investments at cost Source: AICPA Guide	- Investments in equity securities with readily determinable fair values and investments in debt securities should be carried at fair value (in some cases amortized value) with changes in such fair value recognized as changes in equity Guidance: FASB 115	- Investments in debt and equity securities are carried at fair value - Does not apply to securities accounted for under equity method or investments in consolidated subsidiaries Guidance: FASB 124

For ilustrative purposes only, may not represent every accounting and reporting difference among these business segments.