Understanding College and University Financial Statements

By

Rudy Fichtenbaum
Professor of Economics
Department of Economics
Wright State University
Dayton, OH 45435

(937) 775-3085

rfichtenbaum@sbcglobal.net
Introduction

Most businesses have a goal of earning profit for stockholders. Thus, the financial statements of most businesses are designed to allow stockholders and others concerned with profitability a means to monitor the performance of the business in question.

Universities, colleges and other non-profit organizations ostensibly have an entirely different purpose. Universities and colleges, in particular, are institutions of higher learning established primarily to create and disseminate knowledge. Universities and colleges receive a significant portion of their funding from donors and governmental entities. These funds are often given with certain restrictions and conditions. Consequently universities use a system of fund accounting. The primary purpose of fund accounting is to provide trustees, who are legally responsible for running universities, the information to monitor the funds that come into the institution and make sure that they are expended for their intended purpose.

Since the primary purpose of fund accounting systems is to ensure that funds provided by donors and government are expended in the manner they were intended, it has been difficult for faculty to look at a university or college’s financial statements and get a true picture of the university’s financial health. In the past, financial statements for universities were broken down into various fund groups. In effect, each fund group had its own financial statements and universities could move money between funds making it difficult to understand whether universities had revenues in excess of expenses or whether expenses exceeded revenues. The Governmental Account Standards Board (GASB) governs the reporting of financial data for public universities and colleges. In 2002, public universities and colleges changed their financial statements so that they more closely resemble those in for profit businesses (GASB 34). The Financial Accounting Standards Board (FASB) governs private universities and colleges financial statements. FASB changed the way that private universities and colleges report financial data before 2002. The effect of the changes of GASB and FASB on the way universities and colleges report their financial data was to put it in a format that much more closely aligned with for profit businesses. In fact, one might argue that this new reporting format is a reflection of the growing corporatization of universities, which are increasingly being run more and more like for profit enterprises. However, one of the benefits of the new reporting format is that it is now easier for faculty to understand the financial status of their institutions.

Historically, most universities and colleges have had some sort of a faculty budget oversight committee as part of faculty governance institutions. Many of the functions of these budget oversight committees have been taken over by collective bargaining agents at institutions where faculty members have opted to engage in collective bargaining. However, whether an institution has collective bargaining or a traditional budget oversight committee, faculty at most institutions focus on the annual budget of the institution.
Often, looking only at a university or college’s budget misleads faculty members. Budgets are normally based only on the current fund, and since universities have the ability to transfer money from one fund to another, looking at the current fund does not give a true picture of a university’s finances. The figure below shows the structure of university and college funds.

In addition, a budget is just a financial plan. However, institutions have no legal obligation to spend money in accordance with their budget. For example, a budget may show that money has been allocated for a certain number of faculty positions. However, in any given year a certain number of faculty members leave institutions, either to take jobs elsewhere or to retire. Consequently in any given year a certain number of positions that are budgeted are vacant. Therefore what a university or college budgets for faculty salaries and benefits is not necessarily what they actually spend on salaries and benefits. Consequently, some percentage of budgeted positions either gets spent elsewhere or accumulates and becomes part of the university or college’s net assets (reserves).

Budgets also depend on making projections regarding enrollment, and assumptions about raises and the general rate of inflation. Changing any of these assumptions can drastically alter a budget. Finally, almost all budgets are balanced, and this creates the impression that universities spend every dollar of revenue that they take in. This is far from true for most universities. In general, most universities and colleges will have balanced budgets and yet in most years they will have revenues that are substantially in excess of expenses.
To get a true picture of a university’s finances, one must look at the actual financial statements, which represent the actual revenues and expenses of a university. Evaluating a university’s finances by looking at its budget would be the equivalent of evaluating the performance of a for-profit company by looking at its business plan.

In a for-profit business, revenues come into the business through the sale of goods and services. In the process of producing goods and services, firms incur costs. The difference between revenues and costs represents the firm’s profit or loss. This profit or loss is one of the primary indicators of how the firm is performing. Non-profit organizations, such as universities and colleges, take in revenue in the form of tuition dollars, donations and governmental support. In the process of carrying out the mission of their institution, universities incur expenses. The difference between the revenues that come into a university or college and its expenses is known as a change in net assets. If a university takes in more revenue than it expends, there is a positive increase in net assets (i.e. net income). Conversely, if the expenses exceed the revenues there is a decrease in net assets (i.e., a net loss). Increases or decreases in net assets are one of the prime indicators of how a university or college is performing financially.

Financial data is reported either as a stock or flow. A stock means measurement takes place in dollars without respect to time. For example, the amount of money in your savings account is a stock. Flows are measurements that have a time dimension. For example, income is a flow because it is measured as a certain number of dollars per year.

The names of the financial statements differ slightly between public and private institutions but essentially universities and colleges all have three main financial statements. First there is a balance sheet. Most public universities or colleges refer to their balance sheet as the statement of net assets. Private universities and colleges refer to their balance sheet as a statement of financial position. The second financial statement is an income statement. Most public universities and colleges refer to their income statement as a statement of revenues, expenses and changes in net assets. Private colleges and universities refer to their income statement as a statement of activities. The third major financial statement is the statement of cash flows.

**The Balance Sheet**

A balance sheet (statement of financial position or statement of net assets) is a snapshot of the university or college’s financial position on the last day of the fiscal year. Generally fiscal years begin on July 1 and end on June 30 and when a fiscal year is referred to the number refers to the calendar year in which a particular fiscal year ends. A balance sheet has two sides and represents a balance between assets on the left side and liabilities and changes in net assets on the right side. The equation that summarizes a balance sheet is Assets = Liabilities + Net Assets. The basic structure of the balance sheet is illustrated in Figure 1 below.
Assets

An asset is something that an institution owns that is expected to provide a benefit in the future. Assets can be divided into two classes: real assets such as classrooms, laboratories, computers, library books and journals etc., and financial assets such as cash that can be used to make student loans and finance current operations, and investments in financial instruments such as endowments which can be used to generate income to defray certain expenses or be liquidated during a period of a financial crisis. Assets increase as resources are obtained and decrease as assets are disposed of or used up.

A university or college’s assets can be divided into current and non-current assets. Current assets consist of assets that will be converted to cash or used up during the course of a year. The major items that comprise current assets are cash and cash equivalents, short-term investments, accounts receivable, notes receivable and inventories.

Cash and cash equivalents consist of physical cash, checking accounts and short-term investments such as certificates of deposit, government securities and money market mutual funds. Accounts receivable represent are amounts that are owed to a college or university for services provided (e.g. tuition, room and board) and are generally reported net of allowances for doubtful accounts, which are amounts the college or university expects that it is unlikely to collect. Notes receivable are amounts owed by other entities such as grants or loans receivable i.e., money that is owed to the university or college by granting agencies or for loans. Inventories at colleges and universities generally consist of publications and general merchandise.

Figure 1.
Non-current assets consist of accounts receivable, notes receivable, long-term investments, endowment investments and capital assets, all assets that will not be converted to cash or used up during the current year. Capital assets are recorded at historical cost (the amount you paid for the item, or the amount it cost to build the capital asset), measured net of accumulated depreciation. Depreciation is a way of allocating the cost of fixed assets over the useful life of those assets. It is an expense and therefore it reduces the net assets of a university. Whether this diminution of net assets represents a real decline in the wealth of an institution is questionable. For private companies, depreciation represents the allocation of the cost of purchasing plant and equipment. However, at universities and colleges, a significant portion of buildings and equipment are paid for by governmental appropriations or private gifts. Thus, universities and colleges have a source of funding for purchasing fixed assets that is not available to for profit businesses. Depreciation is an expense that will show up on the income statement, but unlike other expenses it does not represent an outflow of cash from the college or university.

**Liabilities**

Liabilities are claims on an institution’s resources (alternatively, liabilities are present obligations to sacrifice resources or future resources that an institution cannot get out of). Liabilities can also be divided in current and non-current liabilities. Current liabilities consist of liabilities that are due within a year. The non-current liabilities consist primarily of capitalized lease obligations and long-term debt obligations that are due in more than one year. Examples of current liabilities are accounts payable, deferred revenue and the current portion of long-term liabilities. Accounts payable represent claims of other businesses or institutions for goods and services. Deferred revenue is revenue, which has been received for services that will be supplied at a future date i.e., in the next fiscal year (such as collective tuition revenue before the term starts). The current portion of long-term debt is the amount an institution expects to pay during the current year. Examples of non-current liabilities long-term debt, which consists of bonds, notes and capital leases as well as compensated absences and post-retirement health benefits. Compensated absences are liabilities for vacation and sick leave.

**Net Assets**

In for profit businesses, the difference between assets and liabilities is referred to as owner’s equity or stockholder’s equity. In theory, if a business were to sell off all of its assets and pay off all claims against the business, the amount remaining would be the owner’s claims on the business’s resources. In a non-profit organization, the difference between assets and liabilities are referred to as net assets. Since net assets are the difference between assets and liabilities, they represent the wealth of an institution. Therefore, net assets are an important indicator of the financial health. In the past, these net assets were referred to as fund balances.

There are three general categories of net assets:

1. Net Assets Invested in Capital Assets
2. Restricted Net Assets (these are often broken down into expendable and non-expendable net assets; see below for a discussion).
3. Unrestricted Net Assets

Net assets represent the net accumulation of a university’s assets over a period of time. Large portions of these net assets consist of the value of land, buildings, books and journals and equipment owned by the university or college. Universities and colleges are required to show accumulated depreciation on their balance sheets for certain real assets such as buildings and some equipment. An increase in net assets means that a university has increased its wealth and conversely a decrease in net assets implies that a university’s wealth has decreased.

Wealth can be divided into two categories: financial net assets or tangible net assets. Financial assets are pieces of paper that represent ownership or claims on tangible assets outside of the university. Examples of Tangible assets are the land, buildings, equipment and library books own by a university or college. A university or college’s wealth can increase either because it has more real assets or because it has more financial assets. In many cases the purchase of tangible assets is financed partially by state capital appropriations or by gifts. An increase in state capital appropriations or gifts for capital increases the wealth of an institution. However, the capital funds universities and colleges receive from the state or private donors are generally restricted and cannot be used for operations i.e., paying salaries and benefits.

In addition, to these tangible assets, universities and colleges also own financial assets such as stocks and bonds, CDs and mutual funds. Finally, universities also generally hold small amounts of cash and money in checking and savings accounts.

If an increase in total net assets is exclusively due to increases in the value of land, buildings and equipment, the increase in wealth while real, does not give a university or college added flexibility with respect to operations. Once a university or college invests money in its physical plant it is unusual for it to sell that asset. If a university or college changes its priorities and accordingly wishes to change its asset allocation it would most likely reallocate its non-plant assets. Thus, liquid net assets also are an indication of how well a university or college can react to unforeseen financial emergencies. The term liquid refers to the ease with which an asset can be converted into cash.

**Restricted and Unrestricted Net Assets**

Universities and colleges also divide their net assets into restricted and unrestricted net assets. Restricted net assets are assets net of related liabilities held by a university or college that are designated for specific purposes by external entities, either government agencies or private donors. Unrestricted net assets are assets net of related liabilities that can be spent at the discretion of the institution.
Private colleges and universities have unrestricted net assets, temporarily restricted net assets and permanently restricted net assets. Some private universities and colleges also list investment in capital assets (net of accumulated depreciation and net of debt) along with unrestricted, temporarily restricted and permanently restricted net assets. However, many private universities and colleges include investment in capital assets as part of their unrestricted net assets.

Temporarily restricted net assets are net assets that are subject to donor restrictions that will be met by actions taken by the institution or by the passage of time. Permanently restricted net assets must be maintained permanently and are subject to donor-imposed restrictions. However, the income or capital gains from these assets may be used for general or specific purposes. In most cases, the endowments comprise the main portion of permanently restricted net assets. Most colleges and universities have investment policies that govern how these funds will be invested and how they will be spent. Typically, colleges or universities will spend between 4% and 5% of the value of average value of their endowments, where the average is taken over a three-year rolling period. The rationale for this type of policy is that if the endowment earns 8% in the long run and inflation is in the range of 3% to 4% then the real value (the value adjusted for inflation) of the corpus will be maintained.

Often times buried in endowment funds are so called quasi-endowments. Quasi-endowments consist of funds that have been set aside by the university or college’s trustees to function as an endowment. However, quasi-endowments are unrestricted and can be spent in any lawful manner in accordance with the wishes of the trustees.

Clearly, unrestricted net assets give universities and colleges more flexibility than restricted net assets. However, one should not assume that just because an asset is restricted that it cannot be used for reallocation. For example, a university or college may be spending a significant amount of unrestricted funds on scholarships and then replace that funding with endowed scholarships. In such a case, there would be no change in unrestricted funds but there would be an increase in restricted funds. However, the unrestricted funds that were being used for scholarships have are available for reallocation.

An institution can use unrestricted net assets for any lawful purpose. Many universities and colleges claim that the Board of Trustees or management has designated all or most unrestricted net assets for specific purposes. Some of these designations may result from funds being collected by special fees. This type of statement is misleading in the sense that all of the designated fees are the result of board or management policy and that policy can be changed. Few institutions have funds that are undesignated. The point that faculty need to understand is that current policies with respect to unrestricted net assets reflect the priorities of the governing board and/or management and may not reflect the priorities of faculty. While faculty cannot collectively bargain over the specific designation of unrestricted net assets, collective bargaining can cause the governing board or management to change its priorities resulting in the reallocation of these funds.
Expendable and Non-Expendable Net Assets:

At public institutions, in addition to dividing net assets between restricted and unrestricted, net assets can also be categorized as expendable, non-expendable and invested in capital assets. Expendable net assets consist of assets that legally could be used for operations or plant expenditures. Again these expendable funds are a measure of liquidity i.e., the ability to deal with unforeseen financial emergencies. Non-expendable net assets are funds that would not be spent for operations, for example the corpus of the endowment fund.

The Income Statement

The second major financial statement is the statement of revenues, expenses and changes in net assets or the statement of activities. This financial statement shows how the a college or university’s finances are changing over a period of time, namely a fiscal year that normally runs from July 1 to June 30 of the following year. Again, fiscal years are always associated with the calendar year in which the fiscal year ends. So for example, from July 1, 2007 to June 30, 2008 is known as fiscal year 2008. This statement deals with flows and measures how the college or university’s revenues and expenses are changing over time. Figure 2 shows the basic structure of the statement of revenues, expenses and changes in net assets.

Figure 2.

There are two ways of keeping track of revenues and expenses. The cash method is the one most of use are familiar with. When my paycheck is deposited in my checking account on January 1, 2009 I considered it income for 2009. Similarly when I purchased a good or service and paid for it December 2009 but the good or service was delivered on
January 5, 2010 I considered it an expense incurred in 2009. Most businesses, including colleges and universities account for revenues and expenses, using the accrual method of accounting. This means they book revenues and expenses in the year the good or service is delivered not the year when the cash is received. For example, your paycheck you received in January was for work you did in the previous year therefore with accrual accounting it would be revenue for 2008. Similarly, the expense you paid for in 2009 would be counted in 2010 because that is when the good or service was delivered. Accrual accounting is used because it provides a more accurate picture of a university’s financial situation.

There is also a relationship between stocks and flows or between the balance sheet and the income statement. For example, if revenues are greater than expenses, then there will be an increase in net assets. This means that if you take the net assets at the beginning of a year on the balance sheet and add the change in net assets from the statement of revenues, expenses and changes in net assets, you will get the net assets at the end of the year, which is shown on the balance sheet. So an increase in accounts receivable on a balance sheet shows up as revenue on an income statement even though no cash was received. Similarly, an increase in accounts payable shows up as an expense on the income statement even though no cash has been expended. The following equation shows the relationship between the balance sheet and the income statement.

The change in net assets = revenue – expenses = change in assets – change in liabilities.

Revenue

Revenue is the inflow of resources to a university for the services it provides. Revenues at public universities and colleges is divided into “operating revenues” and “non-operating” revenues. Operating revenues come primarily from student tuition and fees. Other sources of operating revenues are grants and contracts, sales, and auxiliaries. Sales occur when a university provides some sort of a service to the community and charges for offering that service. Auxiliaries are operations that generate revenue that are unrelated to the core mission of a university such as parking, intercollegiate athletics, running a student union, food service or running a bookstore. Non-operating revenues include state appropriations, gifts and investment income. Recently, GASB has started counting Pell Grants as non-operating revenue, so at a number of institutions it looks as if there has been a large decline in Federal grants listed under operating revenue. However, this reclassification has no effect on a college or university’s bottom line.

When looking at investment income great care must be taken. Investment income included interest and dividends but it also included capital gains and losses. Investments are valued at “fair market” value, which means when the stock market or bond prices go up the value of an institution’s investments go up and when the stock market or bond prices go down the value of an institution’s investments go down. In most cases, large swings in the value of investments are due to unrealized gains or losses, meaning that they are paper gains or losses. For that reason when calculating “net income” for universities or colleges many bond rating services subtract the value of investment
income and add 4% of the value of investments taken over a three-year rolling period. These paper gains or losses are often quite large, but they do not give us any insight into the financial operations of an institution.

**Expenses**

Expenses for the most part represent an outflow of resources from a university (costs incurred). There are operating and non-operating expenses. Operating expenses include instructional expenses, expenses for public service, administrative services such as academic support and institutional support, plant operations and maintenance, scholarships and fellowships, expenses for auxiliary operations and depreciation. Operating expenses can be listed by functional categories such as those discussed above or they can be listed as natural categories such as wages and benefits or purchases of goods and services. It is often the case that the “natural classification,” which contains personnel costs, are not reported in the main financial statements, but are reported in the notes to the financial statements. Non-operating expenses consist primarily of interest paid on debt.

**Operating Losses**

The difference between operating revenues and operating expenses is known as the operating loss. In publicly funded or assisted universities the difference between operating revenues and operating expenses will always be negative. This is because public institutions of higher education rely heavily on state appropriations (some more than others; in Midwestern states, these appropriations are less than 1/3rd of total revenues; in California, they are more than 1/2), which are not counted as part of operating revenue. This is simply an accounting quirk. If an administrator claims that a university is running an operating loss, faculty members should be aware of the fact that all public institutions run operating losses and these losses in and of themselves are meaningless.

**Income (Loss) before Other Revenues**

The difference between non-operating revenues and non-operating expenses is known as net non-operating revenues. The sum of operating losses and net non-operating revenues is known as income (loss) before other revenue and can be referred to as “net income.” Net income can be an important indicator of how well a university or college is performing financially.

**Changes in Net Assets**

However, there are three other major sources of revenue for colleges and universities. These are capital appropriations, capital grants and gifts and additions to permanent endowments. These sources of revenue are restricted and either the corpus (principal) cannot be spent or the funds are earmarked specifically for capital projects and as such cannot be used to support salary and benefits directly. Nevertheless, when
universities receive capital appropriations and gifts, it frees up funds generated through operations which otherwise would have to be used to support capital projects. Therefore, funding for capital projects, whether by state appropriation or by gift, is an important source of revenue. Unfortunately, capital appropriations and gifts tend to be lumpy (high in some years, very small in others) and so it may be difficult to count on them as part of a regular revenue stream. However, most colleges and universities have a fairly good idea of a certain minimum level of increases in their permanent endowment as well as capital appropriations and gifts and can factor these revenues into their spending plans.

The sum of Income (losses) before other revenue (“net income”) along with capital appropriations and gifts and increases to permanent endowment is equal to the increase or decrease in net assets. The change in net assets is in effect the bottom line for a university in a given year. If there is an increase in net assets the flow of revenue into the university has been greater than expenses and if there is a decrease in net assets the university has experienced a loss.

A final issue that demands our attention in trying to understand revenues and expenses is the treatment of depreciation. Historically (pre GASB-34), colleges and universities did not account for depreciation of fixed assets. Therefore, at the end of a fiscal year if revenues and other additions exceeded expenditures colleges and universities experienced an increase in “fund balances.” An increase in fund balances was the equivalent to an increase in net assets except that net assets also account for depreciation.

Depreciation is an expense but it is a non-cash expense. Depreciation is a way of allocating the cost of fixed capital over the useful life of an asset. In theory, the cost related to the use of a fixed asset in a given year depends on the wear and tear on fixed assets. It is important for any business to take into account the cost of producing a good or service so that it can charge a price for the good or service that at a minimum covers the cost of production. However, unlike other expenses, depreciation does not involve making cash payments to some entity external to a college. When a college has an expense for wages or utilities it has to write a check to cover that expense which reduces a university’s cash holdings. When a college claims depreciation as an expense, it reduces its net income or the change in net assets on paper but there is no actual outflow of cash.

One question that should be raised is whether depreciation in colleges and universities is a legitimate cost. Unlike private for profit businesses universities receive capital appropriations and gifts to fund renewal and replacement of assets. If the cost of a building is covered entirely by capital appropriations and gifts then there is no cost incurred by the university and so there is nothing to allocate. In contrast, for profit business, at least in theory, are supposed to fund renewal and replacement of assets without the assistance of government or private donors. Therefore in looking at the net income of universities one should probably discount depreciation as an expense.
The Cash Flow Statement

The third financial statement is the statement of cash flows. Universities and colleges use a system of accrual accounting, which means they book revenues when they earn them and book expenses when they are incurred. However, recognizing revenue is not always the same as collecting cash. For example a university may send a bill to a student for tuition but not immediately collect the money that is owed. This shows up on the university’s balance sheets as an increase in accounts receivable and is booked on the statement of revenues, expenses and changes in net assets as revenue. While the university shows an increase in revenue it does not actually have more cash. Hence the role of the cash flow statement is to show the inflows and outflows of cash. Looking at the Statement of Cash Flows one can see another picture of the flows of resources into and out of a university or college. The basic outline of the statement of cash flows is found in Figure 3.

![Diagram of Cash Flow Statement]

Figure 3.

The Statement of Cash Flows at public colleges and universities has four major components. First, cash flows from operations, which includes inflows in the form of tuition and fees, grants and contracts, sales and services and outflows in the form of payments to employees, suppliers and students. The second major component is cash flows from non-capital financing activities. The most important item in this category is state appropriations. Also now shown in this category are Federal direct lending receipts and Federal direct lending disbursements as well as gift and grants for non-capital purposes. Third are cash flows from capital and related financing activities which include inflows in the form of capital appropriations and capital grants and outflows in the form of purchases of capital assets as well as outflows for principal and interest.
payments. Finally, there are cash flows from investing activities such as the purchase and sale of investments and interest received on investments. Private colleges and universities do not have a category for non-capital financing activities; hence their cash flow statements have only three categories. The sum of each of the categories of cash flow results in an increase or decrease in cash held by the college or university.

The net cash from operations can be reconciled with the university or college’s operating loss. The operating loss minus depreciation and losses on the disposal of capital assets (another non-cash expense) plus change in assets and liabilities equals the net cash used for operating activities. It is often the case that private universities and colleges do not list depreciation as a separate expense. Rather in the statement of activities they allocate this expense in some way to each of the functional expense categories or included in expenses for operations and maintenance.

The cash flow from operations shows the actual inflow and outflow of resources used to fund the operation of a college or university. At public institutions operating cash flow is the sum of cash flows from operations plus cash flows from non-capital financing activities. At private colleges and universities one can just look at cash flows from operations. One of the major differences between operating cash flows and income (loss) before other revenue (net income) is that net income includes depreciation as an expense. However, since depreciation is a non-cash expense it does not represent an outflow of cash i.e., it is an expense only on paper. Thus, operating cash flow is one of the most important indicators of how a college or university is doing from a financial perspective.

Analyzing the Data

In providing an analysis of each of these financial statements it is important to look at changes from year to year in various categories in the balance sheet, income statement or cash flow statement. For example, increases in debt or increase or decrease in net assets. The financial statements, the balance sheet, the income statement and the cash flow statement are similar to a report card for an institution. However, it is important to look at more than one report card and hence to understand how a university or college is doing it is important to look at least 5 years of financial statements. One of the best ways to look at financial statement over time is through the use of ratio analysis.

Ratio Analysis

There are a number of different types of ratios that can be used to evaluate the performance of colleges and universities. There are revenue and expense ratios, liquidity ratios, solvency ratios, activity ratios and margin ratios.

Revenue ratios take each individual source of revenue and divide by the total revenue. This allows us to see how diversified the sources of revenue are for an institution and look at how the sources of revenue have changed over time. Expense ratios take each of the functional expense categories except for depreciation and divide
by total operating expenses minus depreciation. This allows us to see how the institution is allocating resources and how those allocations change over time.

Liquidity ratios look at the ability of an institution to cover its current obligations without additional borrowing. One of the most common liquidity ratios is the current ratio, which measures the ratio of current assets to current liabilities. It includes cash, short-term investments and marketable securities, inventories and prepaid expenses relative to accounts payable to vendors and employees as well as payments on debt that will come due in the current year. This ratio should be greater than 1 and generally runs between 1 and 2. It indicates the ability of the institution to meet its current liabilities as they come due.

Solvency ratios measure the ability of institutions to meet their long-term debt. One common solvency ratio is the ratio of total assets to total liabilities. If total liabilities are greater than total assets then an institution is insolvent. Another common solvency ratio is the viability ratio, which measures the ratio of expendable net assets to debt. Yet another solvency ratio is the ratio of long-term debt to fixed assets.

Activity ratios look at operations. One common activity ratio is the primary reserve ratio, which is the ratio of expendable net assets to operating expenses. This ratio can be used to calculate the number of months an institution can continue operating using its reserves. Another common activity ratio is the ratio of interest payments to total revenue.

Margin ratios look at various rates of return on revenue. In for profit businesses the net profit margin is the ratio of net income to total revenue. For colleges and universities a common margin ratio is the ratio of income before other revenue to operating revenue. Probably the most common and widely used margin ratio is the net asset ratio, which is the change in net assets divided by total revenue.

These ratios can be used to look at the historical performance of the institution. In addition, these ratios can also be used to compare one institution to another institution, or to certain standards that have been established in the field of higher education. However, caution should be exercised when comparing one institution to another because of differences in reporting.

**Summary Indices**

If the financial statements are like report cards, summary indices are like a GPA. These indices can be used to summarize the overall financial status of the institution. One popular summary index is the composite index developed by Moody’s. The Ohio Board of Regents (OBR) has adapted a version of this composite index. The composite index used by OBR assign scores to three ratios and then use a weighted average of those scores to create a composite index indicating the financial health of an institution ([http://www.regents.state.oh.us/financial/sb6.html#Methodology](http://www.regents.state.oh.us/financial/sb6.html#Methodology)).
The first is the ratio known as the viability ratio, which is the ratio of expendable net assets to long-term debt. The second ratio is the primary reserve ratio, which measures the ratio of expendable net assets to operating expenses. The net asset ratio is the change in net assets divided by total revenues (operating and non-operating).

Scores for each of the three ratios are whole numbers from 0 to 5 with 5 being the highest score. The table below shows how scores are assigned to each ratio. A weighted average of these scores is then used to calculate a composite index that reflects the overall financial health of the institution. The weights used by OBR are 50% for the primary reserve score, 30% for the viability score and 20% for the net asset score. Assigning the smallest weight to the net asset score is recognition of the fact that there is significant variability in the change in net assets for many institutions largely due to fluctuations in the value of investments and fluctuations in capital appropriations.

Under Ohio law an institution with a composite index of 1.75 or less for two consecutive years will be placed on fiscal watch. This allows the governor to replace trustees and in effect put an institution in receivership.

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