

Analyzing Financial Information Using Ratios

Nonprofit leaders seeking to understand their organization's financial situation usually start by reviewing the financial reports. Understanding the financial information is the building block of any financial discussion. Beyond understanding the reports, much can be learned from analysis of the information and interpretation of what it is telling you. The basic analysis includes comparing financial reports to a benchmark such as the budget or the financial report from the previous year. One essential question is: does this information match our expectations?

For a more technical financial analysis, ratios can be used to deepen understanding and interpretation. Financial ratios are an established tool for businesses and nonprofits. While there are dozens of ratios that can be calculated, most nonprofits can use a handful of them to learn more about their financial condition. This document provides a description and calculation of fourteen ratios, including a mix of income statement and balance sheet ratios. Individual nonprofits must decide for themselves which calculations are valuable.

NONPROFIT FINANCIAL RATIOS

Financial ratios are useful if they are:

- Calculated using reliable, accurate financial reports (such as an annual audit or final report)
- Calculated consistently from period to period
- Used in comparison to benchmarks or goals
- Viewed both at a single point in time and as a trend over time
- Interpreted in the context of both internal and external factors

Restricted Funds

When calculating ratios from the balance sheet, be aware of temporarily or permanently restricted funds and how they might affect the ratios. Calculate the ratios using only unrestricted assets to yield the most useful results.

Worksheet

A spreadsheet with these calculations is available to download at www.nonprofitsassistancefund.org.

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INCOME RATIOS		WHAT THEY TELL US
Reliance ratio	$\frac{\text{Largest type of income}}{\text{Total income}}$	Reliance on a type of income. Awareness of the risk of a major reduction in income if this type is reduced or stopped. May be helpful for more than one type of income, including special events.
Reliance on government funding	$\frac{\text{Total govt grants/contracts}}{\text{Total income}}$	Awareness of risk in both reliance and autonomy. Government funding is often closely tied to specific contracts and budgets with limited cost allocations and flexibility.
Earned income ratio	$\frac{\text{Total earned income}}{\text{Total income}}$	Earned income as a percentage of total income. Organizations with earned income have more autonomy and flexibility.
Self-sufficiency ratio	$\frac{\text{Total earned income}}{\text{Total expense}}$	The proportion of operating expenses that are covered by earned income.

EXPENSE AND MANAGEMENT RATIOS		WHAT THEY TELL US
Personnel costs ratio	$\frac{\text{Total wages, taxes, and benefit expenses}}{\text{Total expenses}}$	Since staff cost is usually the largest part of the budget, any changes in the percentage of budget used for staff is notable.
Benefit cost ratio	$\frac{\text{Total taxes, insurance, and fringe benefits}}{\text{Total salary and wages}}$	Benefit costs are driven by many external factors and can increase at a different pace than other costs.
Admin cost ratio	$\frac{\text{Total fundraising, general and admin expense}}{\text{Total expenses}}$	Since this is a ratio that is frequently calculated by others, including donors and nonprofit watchdogs, nonprofits should be aware of their ratio and any changes over time.
Fundraising efficiency	$\frac{\text{Contributed income}}{\text{Fundraising expense}}$	The average dollar amount of contributions raised from each dollar spent on fundraising.
Cost per "unit" of service	$\frac{\text{Program expense}}{\text{Units of service}}$	If the nonprofit uses program-based recordkeeping and has an identifiable "unit" of service, this ratio is very helpful in evaluating financial efficiency and identifying any changes over time.

BALANCE SHEET RATIOS		WHAT THEY TELL US
Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	An indication of the organization's ability to pay obligations in a timely way (within 12 months). A useful indicator of cash flow in the near future.
Days cash on hand	<p>Step 1:</p> $\frac{\begin{array}{l} \text{Annual expense budget} \\ - \text{depreciation} \\ - \text{in-kind expense} \\ - \text{pass-through funds} \\ - \text{unusual, one-time expenses} \end{array}}{\text{Annual cash requirement}}$ $\frac{\text{Annual cash requirement}}{\div 365}$ $\frac{\text{Daily cash requirement}}{\text{Daily cash requirement}}$ <p>Step 2:</p> $\frac{\text{Cash and current investments}}{\text{Daily cash requirement}}$	<p>A quick test of the operating cash or adequacy of the operating reserve. Include all unrestricted cash accounts such as savings and money market accounts.</p> <p>Setting a target for cash accounts should take several factors into consideration, including reliability of income.</p>
Debt ratio	$\frac{\text{Total liabilities}}{\text{Total unrestricted net assets}}$	How much the organization is relying on funding from others, such as loans, payables, and obligated funds. Indication of how much of a cushion there is.
Accounts receivable aging	$\frac{\text{Accounts payable} > 90 \text{ days overdue}}{\text{Total accounts receivable}}$	As receivables get older and more delinquent, it indicates potential collection or billing problems and cash flow issues.
Accounts payable aging	$\frac{\text{Accounts payable} > 90 \text{ days overdue}}{\text{Total accounts payable}}$	An indication that the organization has cash flow problems and potentially severe financial problems.