

Each step of calculating the composite score under the ratio methodology is illustrated in Appendices F and G of these regulations and discussed more fully in the following sections.

Step 1: Financial Ratios

The methodology employs three ratios that measure the same elements of financial health but are customized to reflect the accounting differences

between the sectors. The values of the ratios are determined from information contained in an institution's audited financial statement and are generically defined as follows:

For proprietary institutions:

$$\begin{aligned}\text{Primary Reserve ratio} &= \frac{\text{Adjusted Equity}}{\text{Total Expenses}} \\ \text{Equity ratio} &= \frac{\text{Modified Equity}}{\text{Modified Assets}} \\ \text{Net Income ratio} &= \frac{\text{Income Before Taxes}}{\text{Total Revenues}}\end{aligned}$$

For private non-profit institutions:

$$\begin{aligned}\text{Primary Reserve ratio} &= \frac{\text{Expendable Net Assets}}{\text{Total Expenses}} \\ \text{Equity Ratio} &= \frac{\text{Modified Net Assets}}{\text{Modified Assets}} \\ \text{Net Income ratio} &= \frac{\text{Change in Unrestricted Net Assets}}{\text{Total Unrestricted Revenues}}\end{aligned}$$

A detailed description of the components of the numerators and denominators of the ratios is provided under Appendix F of these regulations for proprietary institutions and under Appendix G for private non-profit institutions.

In view of the public comment and the empirical work performed by KPMG, the Secretary selected these ratios because together they take into account the total financial resources of an institution and provide broad measures of the following fundamental elements of financial health:

1. *Financial viability*: The ability of an institution to continue to achieve its operating objectives and fulfill its mission over the long-term;
2. *Profitability*: Whether an institution receives more or less than it spends during its fiscal year;
3. *Liquidity*: The ability of an institution to satisfy its short-term obligations with existing assets;
4. *Ability to borrow*: The ability of an institution to assume additional debt; and
5. *Capital resources*: An institution's financial and physical capital base that supports its operations.

In identifying these fundamental elements, the Secretary relied on KPMG's extensive experience in analyzing the financial condition of postsecondary institutions and the work of the community task force assembled

to assist the Department and KPMG in developing the ratio methodology.

The *Primary Reserve ratio* provides a measure of an institution's expendable or liquid resource base in relation to its overall operating size. It is, in effect, a measure of the institution's margin against adversity. The Primary Reserve ratio measures whether an institution has financial resources sufficient to support its mission—that is, whether the institution has (1) sufficient financial reserves to meet current and future operating commitments, and (2) sufficient flexibility in those reserves to meet changes in its programs, educational activities, and spending patterns. Thus, the Primary Reserve ratio provides a measure of two of the fundamental elements of financial health—financial viability and liquidity.

The *Equity ratio* provides a measure of the amount of total resources that are financed by owners' investments, contributions or accumulated earnings, depending on the type of institution, or stated another way, the amount of an institution's assets that are subject to claims of third parties. Thus, the ratio captures an institution's overall capitalization structure, and by inference its ability to borrow. With respect to the fundamental elements of financial health, the Equity ratio measures capital resources, ability to borrow, and financial viability.

The *Net Income ratio* provides a direct measure of an institution's

profitability or ability to operate within its means and is one of the primary indicators of the underlying causes of a change in an institution's financial condition.

A more thorough description of the ratios is provided under part 4 of the Analysis of Comments and Changes.

Step 2: Strength Factor Scores

The strength factor score reflects the degree to which an institution demonstrates strength or weakness in the fundamental elements as measured by the ratios. That strength or weakness is assigned a point value of not less than negative 1.0 nor more than positive 3.0, where a negative 1.0 indicates a relative weakness in the fundamental elements and a positive 3.0 indicates relative strength in those elements. The point values are assigned by a linear algorithm (equation) developed for each ratio.

For example, the linear algorithm for calculating the strength factor score for the Equity ratio of a proprietary institution is "6 X Equity ratio result." A proprietary institution with an Equity ratio equal to -0.167 would have a strength factor score of negative 1.0 ($6 \times -0.167 = -1.002$).

The linear algorithms developed for each ratio are contained in Appendix F for proprietary institutions and Appendix G for private non-profit institutions. The algorithms are explained in greater detail under Part 6