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149. Organisational Ratios- 2 | Feb-Mar'10; Released: Mar'11

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Continuing our discussion on financial ratios, we look at two more categories of organisational ratios, related to sustainability of an organisation and the propriety of its financial behaviour.

Sustainability Ratios

Arie de Geus once pointed out that as many as one third of the Fortune 500 companies had been acquired, broken into pieces or merged with other companies, in a short span from 1970 to 1983 (Geus, 1997). In a world where huge companies collapse regularly, is there any hope for NPOs?

Surprisingly, NPOs tend to live longer. Many foundations which were formed in the first half of the 20th century are still around. These include names such as Ramjas Foundation, Ford Foundation, Oxfam, CARE, Gita Press, among others. Perhaps the key to their longevity is the lower level of stress and competitive behaviour in the voluntary sector!

Growth Rate

This rate tells you how fast an organization's revenue is growing. The ratio, which shows compounded annual growth, is expressed as a percentage- the higher the ratio, the faster the growth.

To calculate this, all you need to know is the total revenue of an organization in particular years, available in the Income & Expenditure Account. Take the latest year's total income, and divide it by the base year's income. You then need to obtain a square root or third root of the result, depending on how many years are you working with. This ratio works best when you have at least three years' data.

If you have three years' data, take a square root. If you have five years' data, calculate the fourth root. The result is converted into a percentage, and then the principal is subtracted as shown below:

$$\text{Growth Rate} = \sqrt[n-1]{\frac{\text{Latest Year's total Income}}{\text{Base year's total Income}}} \times 100 - 100$$

(n= number of years)

Most NGOs show an annual growth rate of upto 30%. NGOs making concerted efforts to raise resources may show higher growth, of upto 60-70%. NGOs experiencing consistent growth higher than this over a long period may either be riding a wave of donor support, or be exceptionally well-managed. In some cases, a high growth rate may indicate excessive focus on fund-raising. Growth rate below 10% may indicate lack of management interest or a severe decline of donor interest in the NGO's programs. Higher growth rate normally calls for more careful financial management and controls.

Growth rate may be sometimes buffeted by disasters or other exceptional situations. In such conditions, an NGO may show extraordinary growth for a short period, usually 2-3 years.

Self Sufficiency Ratio

This ratio is designed to indicate how much of the organization's expense can be met from own income.

What does own income mean? Own income excludes all grants from other Agencies and Government. It would therefore typically include donations from individuals, income from corpus, income from fees or other recoveries. Interest on grant funds should be excluded, as these are normally earmarked.

Total expenses include all expenses, except depreciation. Assets distributed to beneficiaries should be included. If any purchase of fixed assets for use has been charged to expenses, then this should be excluded. These figures should be taken from the Income & Expenditure Account.

The ratio is expressed as a fraction:

$$\text{Self-sufficiency Ratio} = \frac{\text{Total Own Income}}{\text{Total Expenses}}$$

In most cases, the ratio will be less than 1. The closer this ratio is to 1, the more self-sufficient the NPO is. A ratio of more than 1 might indicate that the organization is investing in infrastructure or is accumulating funds.

Dependence Ratio

This ratio[1] helps you identify how dependent an organization is on one particular source of income. Excessive dependence on one particular donor can result in erosion of your financial independence, and cause severe disruption in case of withdrawal of support.

To calculate this ratio, you need to identify the largest single source of funds (usually a donor agency or a Government agency). If donor-wise breakup is not available in the Income & Expenditure Account, you will need to look at the FC-3 or the accounts to figure this out.

Total income can be taken from the income side of the Income & Expenditure Account.

The ratio can be expressed as a percentage:

$$\text{Dependence Ratio} = \frac{\text{Income from Largest Source}}{\text{Total Income}} \times 100$$

How much should this ratio be? As a thumb rule, a ratio of up to 20% is not a problem. As you start moving upwards, your vulnerability starts increasing. If the percentage goes beyond 50%, it might indicate either a very close relationship with a donor agency or excessive vulnerability.

The ratio also depends on an NGO's age. Many NGOs work with one or two donor agencies in the initial years. As they grow older, they are able to attract more agencies, and reduce dependence on a particular donor.

This ratio can also be modified slightly to assess dependence on a particular donor:

$$\text{Donor A Support Ratio} = \frac{\text{Donor A's Contribution}}{\text{Total Income}}$$

Infrastructure Ratio

Also called the Property Ratio, this tries to measure the proportion of immovable property of an organization to its total assets.

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This can help assess whether bulk of the resources are getting tied up in property or are available for operational assets. Immovable property includes owned land, building, and construction underway[2]. Long term lease for building[3] is usually treated as owned property. These figures will be found in the Balance Sheet.

$$\text{Property Ratio} = \frac{\text{Total Immovable Assets}}{\text{Total Fixed Assets}}$$

Theoretically, the highest that this ratio can be is 1, at which the entire investment in fixed assets would have gone into property! A ratio of upto 0.3 is more usual for most NPOs.

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[1] Also called Reliance Ratio (Barr, 2008)

[2] Capital Work in Progress

[3] 30 years or more

For organizations such as schools and hospitals, this ratio is likely to be higher. Organizations which are into residential training also would have a higher investment in property.

The ratio also tends to increase with the age of an NGO. A newly formed NGO may not have any property, whereas one that has been around for a decade would have purchased some property.

It should also be kept in mind that a large number of property transactions in India are undervalued in account books. Therefore, the actual ratio is likely to be slightly higher in reality.

Propriety Ratios

Propriety refers to 'details or rules of behaviour considered correct'. While there is no law against impropriety, it can earn you a bad name. On the other hand, if your financial behaviour is proper, it will increase your goodwill. It will also make you more attractive to donors and grant-makers.

In NPO context, there are at least three ratios that auditors and donors are concerned about: 1. Do you have lots of doubtful borrowings? 2. Are you building up non-earmarked funds very fast? 3. Do you recover much more for use of your facilities than they cost?

Accomodative Borrowing Ratio

Accommodative borrowing is a variant of the old trick of 'borrowing from Peter to pay Paul'. However, in our case, the borrowing may not actually happen, except as a book entry. This ratio tries to assess the risk of such friendly lending of book entries.

To calculate this ratio, you need to identify the unsecured loans from office bearers, relatives, members and other individuals. These are compared to the total funds. All these figures will be found in the Balance Sheet.

$$\text{Accommodative Borrowings Ratio} = \frac{\text{Unsecured Funds borrowed from Members and others}}{\text{Total funds}}$$

Most NGOs are unable to access loan funds from banks, as they do not have an assured cash flow or surplus generation[4]. Therefore, most of the loans in such cases tend to be unsecured, from their own circle and often in cash.

This ratio should ideally be zero. If it is more than 0.05, the sources of funds need to be assessed for genuineness[5].

Own Funds Build-up Ratio

This ratio helps you figure out the accumulation of own funds in the organization.

Own funds typically represent non-earmarked surplus funds as well as other funds such as Corpus, Endowments and Reserves. Total funds usually will be the total of liabilities side of a horizontal Balance Sheet[6].

$$\text{Own Funds Build-up Ratio} = \frac{\text{Increase in own funds over last three years}}{\text{Increase in total funds over last three years}}$$

While there may be good reasons for this build-up, it is useful to monitor it carefully. This is especially relevant for organizations which raise funds from the public or other sources. The logic is that donors forego their personal needs in order to contribute to your cause. Do you then spend this money on the cause or do just squirrel it away?

The build-up should be reviewed in absolute terms as well as a ratio.

This ratio is not designed for use in case of Foundations and other organizations which are Corpus based, and do not raise funds from public.

[4] NPOs such as schools, hospitals and micro-credit organizations are able to obtain loans from banks.

[5] In some cases, an NGO may borrow cash from an unregistered money lender in cash, using ornaments etc. as security.

[5] In case of a vertical Balance Sheet, current liabilities and assets are netted off. In such a case, the total of current liabilities should be added to total of 'Source of Funds' to arrive at total funds.

Recoveries to Cost Ratio

Most donor agencies give grants to NGOs on reimbursement basis. This means the NGO is allowed to charge actual expenses incurred for a project.

However, a problem arises if the NGO uses its own facilities for some of the activities. In such a case, the NGO needs to recover costs of the usage from the project. How much should this cost be? Ideally, this should be the direct cost of usage, plus an amount for depreciation and wastage.

For example, if the NGO's vehicle is used partly for a project, then the NGO might debit the project with hiring charges. Should this be at the market rate for hiring a similar vehicle?

That would be wrong in most cases - because a taxi service's rates include an element of profit also. Further, if the driver's salary is being charged to another project, then the hiring rate should be reduced further. This kind of detailed analysis is usually done by the project auditors.

Figuring this out at the organisational level is easier. Compare the value of recoveries appearing as income in the General Fund Income & Expenditure, with the related expenses on the other side. If the two match or are slightly higher, then the recoveries are reasonable. If the recoveries are significantly higher, then you may be charging more than what is justified.

The formula for this ratio is:

$$\text{Recoveries to Cost Ratio} = \frac{\text{Total Recoveries}}{\text{Total Related Expenditure + Depreciation}}$$

Also remember that this ratio can give wrong results as the recoveries or expenses may be classified in different ways by different organizations. It must therefore be interpreted cautiously.

Other Organizational Ratios

The ratios listed here are not all that can be used for understanding non-profit finances. For instance, Kate Barr has provided a list of fourteen commonly used ratios (Barr, 2008). Similarly, Holman and others have analyzed selected financial ratios for 99,682 NPOs in six subsectors that had filed a tax return in 2003 (Holman, Ihrke, & Grasse, 2007). Both documents offer useful insights into financial ratios.

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[7] Including depreciation.
[8] Defensive Interval, Liquid Funds Indicator, Liquid Funds Amount, Savings Indicator, Debt Ratio, proportion of revenue from different sources

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