



Munich Personal RePEc Archive

## **Developing a financial strategy for nonprofits**

Malki, Elli

Financial-Tip

16 February 2025

Online at <https://mpra.ub.uni-muenchen.de/123991/>  
MPRA Paper No. 123991, posted 18 Mar 2025 07:34 UTC

# Developing a financial strategy for nonprofits

Elli Malki<sup>1</sup>

[malki@netmedia.net.il](mailto:malki@netmedia.net.il)

February 2025

## Abstract

Nonprofits operate in a complex environment in which they sometimes have to achieve two conflicting goals. The natural tendency of a nonprofit's management is to maximize the organization's social goals, by using its resources fully. However, every nonprofit needs financial stability, and this goal requires to limit the expenses in order to create reserves. This article presents guidelines for planning toward financial stability, using real life examples from three nonprofits. The article presents the common measures of financial stability and shows how we can project their values for the relevant planning period. Using these projected measures of financial stability, the article presents a methodology to determine the necessary budgetary planning both for the next budget and for the long-run. We also demonstrate how the financial stability measures can be used to manage the risk that emanates from the significant uncertainty regarding income in the nonprofits' sector.

---

<sup>1</sup>The author is the CFO of Keren Or Inc., a center for blind children with multiple disabilities in Jerusalem. He also teaches financial management for nonprofits in two graduate programs in the Hebrew University.

## Introduction

Not-for-profit organizations (hereinafter "nonprofits") function in two dimensions. The first dimension relates to the declared goals of the organization, e.g. welfare, education, culture, advocacy, etc. In this dimension each organization develops a unique strategy in order to achieve its declared goals. Such strategy is reflected in the programs that the nonprofit operates. However, nonprofits must also function in the financial dimension. In this second dimension every nonprofit has one goal, which can be defined using the famous song of the Bee Gees: "Staying Alive". Nonprofits strive to sustain the scope of their programs, or if possible to increase them, while facing unpredictable and non-stable income. A business enterprise that faces a reduction in the demand for its products or services, will usually adjust the level of its expenses to the lower income. A nonprofit will look at this situation differently, since the need for its services does not necessarily depend on its ability to raise funds. Therefore, in face of reduction in their income, nonprofits will try to sustain the scope of their programs for as long as possible, and will decrease or close programs only as a last resort. Since nonprofits face significant uncertainty regarding their income, the only way to absorb fluctuations in income is to accumulate an adequate reserve. Such reserve can be used as a cushion for rainy days. Without adequate reserves nonprofits become financially vulnerable. Any interruption in their income, whether a delay or a temporary reduction, may cause interruption in their programs. Here again there is a fundamental difference between business enterprises and nonprofits. Unlike businesses, nonprofits cannot raise equity from their owners or shareholders. Their only source of reserves is their internal savings, which in the business financial terminology is called accumulated profits (or surpluses). The legal definition of an organization as a nonprofit means that it is not allowed to distribute its surpluses, but in order to achieve financial stability a nonprofit has to accumulate surpluses, at least up to a certain level.

The above discussion clarifies that the financial goal for nonprofits should be to create and to sustain adequate reserves. Each organization, depending on its financial situation, should prepare a strategy to achieve this goal. However, we must remember that nonprofits are not keen to create surpluses. In fact nonprofits are expected to spend their entire income, and in many cases are required to prove to their donors that their donations were fully spent. As a

result, nonprofits face an internal conflict between their social goals and the pressures from their donors that require them to spend their entire income and their financial goal that requires them to limit their spending in order to create surpluses.

The purpose of this article is to present a methodology for the preparation of financial strategy for nonprofits. We will demonstrate this methodology with real financial data of three nonprofits, two from the USA and one from Israel. In the first step we will present the common measures of financial stability in nonprofits. These measures will be calculated using data from the financial statements or the 990 forms in the USA. In the second step we will show a methodology that overcomes the gap in time between the past data from the financial statements and the stability measures that are relevant to the budgetary planning. In the third step we will show how these measures can direct the budgetary planning both for the short-run and the long-run. In the fourth step we will demonstrate how an adequate reserve can be used for risk management.

### **Measures of financial stability**

The common measures of financial stability in nonprofits can be calculated from their financial statements. The financial statements of nonprofits are in the public domain in many countries, usually through designated websites. In this article we will present data of two organizations from the USA and one from Israel. The financial data of the nonprofits' sector are publicly available in both countries, but in a slightly different format. In Israel the financial statements themselves are available, while in the USA the publicly available document is the 990 form, which is submitted to the IRS. In the next example of two US based nonprofits we present the data for 2016 from the 990 forms, but in a format that resembles the financial statements. The figures for Table 1 were taken from the balance sheet (part X in the 990 form). The figures for Table 2 were taken from the statement of activities (parts XI and IX in the 990 form).

Table 1 presents the organization's balance sheet broken down by its major components.

Table 1:

<b>Balance Sheet</b>				
	2015	2016	Difference	Items in 990 Form
<b>Current Assets (CA)</b>				<b>Part X</b>
Cash equivalents	3,904,263	4,551,751	647,488	1-2
Other Current Assets	3,764,389	2,119,707	-1,644,682	3-9
Investments	4,938,261	6,864,714	1,926,453	11-15
Fixed Assets (FA)	36,302,606	34,789,827	-1,512,779	10c
<b>Total Assets (TA)</b>	<b>48,909,519</b>	<b>48,325,999</b>	<b>-583,520</b>	
Current Liabilities (CL)	889,932	195,316	-694,616	17-21
Long Term Debt (LTD)	598,176	618,345	20,169	22-25
<b>Total Debt</b>	<b>1,488,108</b>	<b>813,661</b>	<b>-674,447</b>	
<b>Net Assets</b>				
Unrestricted	37,327,688	33,882,575	-3,445,113	27
Temporarily restricted	4,709,130	6,245,170	1,536,040	28
Permanently restricted	5,384,593	7,384,593	2,000,000	29
<b>Total</b>	<b>47,421,411</b>	<b>47,512,338</b>	<b>90,927</b>	
<b>Total Liabilities (TL)</b>	<b>48,909,519</b>	<b>48,325,999</b>	<b>-583,520</b>	

The assets side is in the upper part of the table (from the line "Current Assets" until the line "Total Assets") and has three components.

a) The line "Current Assets (CA)" which has two sub-components: cash and its equivalents which are taken from lines 1-2 and other current assets which are taken from lines 3-9, both in part X of the 990 form. Current assets refers to all the liquid assets that were available to the organization at the end of the year. Other current assets (also referred to as "Receivables") refers to all the short-term commitments to the organization, for Example: grants and donation that were recorded as income for 2016 but were received only in 2017, fees for service for 2016 that were received only in 2017, etc.

b) The line "Investments" is taken from lines 11-15 in part X of the 990 form. These are financial assets that can be liquid (securities that are traded in the stock exchanges) or less liquid (investments in private companies).

c) The line "Fixed Assets (FA)" is taken from line 10c in part X of the 990 form. This figure represents the net value (at cost after depreciation) of all the fixed assets that the organization owns. Examples are: real-estate, vehicles, furniture, computers, electronic equipment, software, etc.

The liabilities side is in the lower part of the table (from the line "Current Liabilities" until the line "Total Liabilities") and also has three components.

d) The line "Current Liabilities (CL)" is taken from lines 17-21 in part X of the 990 form. These are short-term debts mainly to suppliers, employees, social security, IRS, pension funds etc.

e) The line "Long-Term Debt (LTD)" is taken from lines 22-25 in part X of the 990 form. These are long-term loans usually from banks but sometimes also via bonds that can be used indirectly to borrow money from the general public<sup>2</sup>.

f) The line "Net Assets", which is divided to unrestricted and restricted net assets (temporarily and permanently), is taken from lines 27, 28 and 29 respectively of part X of the 990 form. A detailed explanation of the net assets category is presented in the following section.

Table 2 presents the statement of activities broken down by its major components.

Table 2:

<b>Statement of Activities</b>					
		<b>Sign</b>	<b>2016</b>	<b>Items in 990 Form</b>	
Income		+	10,517,256	Part XI	1
Program Expenses		-	-6,938,153	Part IX	25 (B)
Overhead (G&M and Fundraising)		-	-3,913,865	Part IX	25 (C,D)
Adjustments		+/-	425,689	Part XI	5-9
<b>Surplus/Deficit</b>			<b>90,927</b>		
Depreciation		-	-1,737,137	Part IX	22 (A)
Adjustments to Depreciation		+/-	0		
<b>Total Depreciation</b>			<b>-1,737,137</b>		
<b>Surplus/Deficit exc. Depreciation</b>			<b>1,828,064</b>		

Income is taken from line 1 in part XI of the 990 form.

Program expenses and overhead expenses (general and management and fundraising) are taken from line 25 (B, C and D respectively) in part IX of the 990 form.

The last component reflects the adjustments between the 990 form and the financial statements (taken from lines 5-9 in part XI of the 990 form). These adjustments can have a positive sign (additional net income) or a negative sign (additional net expenses) or can also be zero.

<sup>2</sup> Such arrangements are possible in the USA, but not in Israel. See: Rosenstiel (2016).

The bottom line of Table 2 reflects the surplus or deficit in the current year (2016). We should also note the connection between the two reports: the surplus of USD 91K in the statement of activities (line "Surplus/Deficit" in Table 2) is identical to the change in the net assets in the balance sheet (line "Total" and column "Difference" in Table 1). The importance of this connection will become clearer in the following section.

The second part of the table shows the surplus without the depreciation cost (USD 1.74M). The depreciation cost, which is taken from line 22(A) in part IX of the 990 form, is an imputed (as opposed to actual) expense. It reflects an estimate of the reduction in value of the fixed assets (FA) over time. Therefore only the surplus which excludes the depreciation (USD 1.83M) will have an effect on the organization's financial reserve. This point will be demonstrated in the following section.

A simple interpretation of the balance sheet may lead to the conclusion that the net assets are the organization's reserve. The rationale of this interpretation is that, if the organization liquidates its entire assets and use the cash to pay all its debts, the net amount that will remain at its disposal will be the net assets. The logic of this calculation is valid, but there are two reservations. The first is that, while the book value of the financial assets is basically equal to their market value, this is not necessarily the case with the fixed assets. The second reservation, which is more important, is that net assets reflect the remaining cash amount in the extreme case, in which the organization has to liquidate all its assets in order to pay its debts. However, for the purpose of financial stability we are not interested in the scenario of liquidating the fixed assets. On the contrary, we are interested in the remaining reserve, after all the debts were paid, without selling any part of the fixed assets. The calculation of this reserve, which is called the "Operating Reserve"<sup>3</sup> (OR), is presented in Table 3.

---

<sup>3</sup>See: The Nonprofit Operating Reserves Initiative Workgroup. (2008)

Table 3:

<b>Net Assets Analysis</b>			
	<b>2015</b>	<b>2016</b>	<b>Difference</b>
<b>Unrestricted N.A</b>	<u>37,327,688</u>	<u>33,882,575</u>	
<b>Programs (OR)</b>	1,025,082	-907,252	-1,932,334
<b>Fixed assets (FA)</b>	36,302,606	34,789,827	-1,512,779
<b>Restricted N.A (RNA)</b>	<u>10,093,723</u>	<u>13,629,763</u>	
<b>Temporarily restricted</b>	4,709,130	6,245,170	1,536,040
<b>Permanently restricted</b>	5,384,593	7,384,593	2,000,000
<b>Total</b>	<b>47,421,411</b>	<b>47,512,338</b>	<b>90,927</b>

In the original balance sheet (Table 1) the net assets were broken down to unrestricted, temporarily restricted and permanently restricted. In Table 3 the two categories of the restricted net assets (RNA) are combined together (USD 13.6M in 2016).

The unrestricted assets (USD 33.9M in 2016) are broken down to the amount which is invested in the fixed assets (FA) and the operating reserve (OR). The OR is the unrestricted part of the net assets that is purely financial and is not invested in fixed assets.

At this point it is necessary to add some explanation about the difference between restricted and unrestricted assets. The organizational budget of a nonprofit can be divided to separate budgets for each program. In such presentation, each program budget will include the income and the expenses of the respective program<sup>4</sup>. The total net assets is the accumulated surpluses in the organization's programs over time. That is why the change in the total net assets during a year equals the surplus/deficit from the statements of activities. However the possibility to use these surpluses depends on the conditions that accompanied each income source.

For example, surpluses from income that is linked to the level of the services (like fees for services or government contracts in which payments are connected to the number of service recipients) can be used by the organization without restrictions. These surpluses will be added to the unrestricted net assets (and also to the operating reserve (OR) after the deduction of the investment in fixed assets).

<sup>4</sup>See: Malki (2014) p-3 and p-5 for an explanation on the dual presentation of the programs' expenses.



In contrast, surpluses from income that depends on reports of actual expenses (mostly grants, but also private donations sometimes) can be used by the organization only for the specific program for which the income was designated. These surpluses are in fact commitments to the donors and therefore will be added to the restricted net assets<sup>5</sup>.

The OR is considered as the most important measure of long-term stability<sup>6</sup>. It represents the amount of financial (and mostly liquid) assets that will be available to the organization once it pays all its debts and fulfill all its commitments to its donors. The OR is the free surplus that will be available to the organization, if it needs to sustain the level of its programs in face of reduction or delay in income.

In addition to the OR there is another measure for financial stability which is called the "Working Capital" (WC) and is defined as follows:

$$(1) \text{ Working capital (WC) = Current assets (CA) – Current liabilities (CL)}$$

While the OR is a measure of long-term financial stability, the WC is a measure of stability in the short-term. It shows the amount of liquid assets that will be available to the organization once all the short-term obligations are paid.

Table 4 presents these two measures of financial stability for the organization in our example.

Table 4:

	2015	2016	Difference
<b>Working Capital (WC)</b>	6,778,720	6,476,142	<b>-302,578</b>
<b>WC / Income</b>		61.6%	
<b>Operating Reserve (OR)</b>	1,025,082	<b>-907,252</b>	<b>-1,932,334</b>
<b>OR / Income</b>		<b>-8.6%</b>	

There was a large surplus in the WC at the end of 2016 (USD 6.5M), which means that in the short-term the organization was financially stable. The ratio of the WC to the income in 2016 was 62%. This ratio, when multiplied by 12, provides an estimate of the number of months that this nonprofit could operate without any income (7 months), assuming that the budget in 2017 was similar to the previous year.

<sup>5</sup> See: Malki (2025).

<sup>6</sup> See: The Nonprofit Operating Reserves Initiative Workgroup. (2008).

In the OR, on the other hand, there was a deficit at the end of 2016 (USD -907K) which points to financial vulnerability in the long-run. We can also see that the decrease in the OR occurred during 2016, since there was a surplus in the OR at the end of 2015.

The OR and the WC are the determining factors of the financial strategy of nonprofits. However the figures that are presented in Table 4 are basically "water under the bridge", due to the inherent delay in the preparation of the financial statements. In this example the financial statements for 2016 were ready by June 2017 at best, and probably even later. At that point in time, in which this nonprofit's management received its financial statement for 2016, it began to plan its budget for 2018. Table 4 demonstrates clearly that the OR can change significantly during a period of a year. Therefore the stability measures for the end of 2016 were not very helpful and it was necessary to have projections of these measures for the end of 2017. Needless to say that this is not a unique example since the delay in the preparation of the financial statements is unavoidable for any organization.

In order to prepare projections for the stability measures we will use a different presentation of the balance sheet, which will be referred to as "the simplified balance sheet".<sup>7</sup>

---

<sup>7</sup> See: Malki (2016).

## The simplified balance sheet

The general format of nonprofits' balance sheet is presented below (see also Tables 1 and 3 above).

<b>Assets</b>	<b>Liabilities</b>
Current assets (CA)	Current liabilities (CL)
Investment	Long-term debt (LTD)
Fixed assets (FA)	Unrestricted net assets for programs (Operating reserve - OR)
	Unrestricted net assets that were used for fixed assets (FA)
	Restricted net assets (RNA) <sup>8</sup>

Since the item "Unrestricted assets that were used for fixed assets" in the liabilities side is identical by definition to the item "Fixed assets" in the assets side, they can simultaneously be removed from the balance sheet.

By deduction the fixed assets from both side of the balance sheet we can focus only on the financial assets and their sources of funding.

<b>Assets</b>	<b>Liabilities</b>
Current assets (CA)	Current Liabilities (CL)
Investment	Long-term debt (LTD)
	Operating reserve (OR)
	Restricted net assets (RNA)

Using the definition of WC in equation (1) above we can present the WC explicitly by subtracting the CL from both sides of the balance sheet.

---

<sup>8</sup> Restricted Net Assets (RNA) are divided according to the type of the restriction (permanent or temporary). However for the analysis that follows this division is not important.

<b>Assets</b>	<b>Liabilities</b>
Working capital (WC)	Long-term debt (LTD)
Investment	Operating reserve (OR)
	Restricted net assets (RNA)

Since the cash balances are included in the CA then:

$$(2) CA = \text{Cash} + \text{Receivables}$$

We will define "Net Working Capital" (NWC) as:

$$(3) NWC = \text{Receivables} - \text{CL}$$

The net working capital represents the amount that will remain once the organization receives the income that it is owed from the previous year and pays the short-term obligations from that year. A surplus in the NWC will increase the cash balances during the next year while a deficit in the NWC will decrease them.

We can insert equations (2) and (3) into equation (1) in order to receive the following definition:

$$(4) WC = \text{Cash} + NWC$$

The last step is to insert equation (4) into the simplified balance sheet in order to present the cash balances explicitly.

<b>Assets</b>	<b>Liabilities</b>
Cash	Long-term debt (LTD)
Net working capital (NWC)	Operating reserve (OR)
Investment	Restricted net Assets (RNA)

The simplified balance sheet presents explicitly the financial asset (cash, NWC and investment) and their funding sources - debt, commitments to donors (RNA) and

free surpluses (OR). Table 5 presents the simplified balance sheet of the nonprofit in our example.

Table 5:

<b>Simplified Balance Sheet</b>			
	<b>2015</b>	<b>2016</b>	<b>Difference</b>
Cash	3,904,263	4,551,751	647,488
Net Working Capital (NWC)	2,874,457	1,924,391	-950,066
<b>Working Capital (WC)</b>	<b>6,778,720</b>	<b>6,476,142</b>	<b>-302,578</b>
Investment	4,938,261	6,864,714	1,926,453
<b>Financial Assets</b>	<b>11,716,981</b>	<b>13,340,856</b>	<b>1,623,875</b>
Long Term Debt (LTD)	598,176	618,345	20,169
Commitments to Donors (RNA)	10,093,723	13,629,763	3,536,040
Internal Savings (OR)	1,025,082	-907,252	-1,932,334
<b>Sources of Funding</b>	<b>11,716,981</b>	<b>13,340,856</b>	<b>1,623,875</b>

The financial assets of this nonprofit at the end of 2016 were quite significant (USD 13.3M). In fact the amount of the financial assets was larger than the organization's total income for that year (see Table 2). The WC was about half, and the cash balances were about 1/3, of the financial assets. Therefore, it is clear that the financial position of the organization in the short-term was stable. It could easily absorb delays in its income.

However, the main source of the financial assets was its commitments to its donors (RNA). These are designated donations that were not used fully in the previous years and thus should have to be used according to the commitments that were made to the donors. In fact the RNA (USD 13.6M) was larger than the financial assets, and in addition to that the organization had an outstanding balance of long-term debt (USD 628K). Consequently the OR, which is the measure of financial stability in the long-run, had a deficit. The large amount of financial assets was the result of a surplus in the restricted income and the long term-debt, while the internal reserve was actually in a deficit. Overall, the short-term financial position was stable, but in the long-run this nonprofit was financially vulnerable. It did not have enough financial assets to cover its commitments to its donors and its long-term debt.

The simplified balance sheet provides a full and accurate picture of the organization's financial position at the end of 2016. However, for planning its next budget (for 2018) the organization needed projections of its financial position for

the end of 2017. In order to explain how this projections were made we have to present first the connections between the simplified balance sheet and the statement of activities.

The first part of our analysis is the calculation of the amount that was invested in fixed assets (FA). This amount does not appear explicitly in the 990 form, but can be calculated according to the following equation:

$$(5) FA_1 = FA_0 - \text{Depreciation} + \text{Investment in FA}$$

The notations 0 and 1 represent the beginning and the end of the period respectively (in our example the end of 2015 and the end of 2016). The investment in FA can be either positive (investment: net purchase of FA) or negative (divestment: net sale of FA). The calculation for our nonprofit is presented in the upper part of Table 6 (investment of USD 224K).

Table 6:

<b>Investment in Fixed Assets</b>				
Fixed Assets	2015	- Depreciation	-/+ Investment	2016
	36,302,606	-1,737,137	224,358	34,789,827

  

<b>Statement of Activities</b>		<b>Balance Sheet</b>		
Surplus/Deficit exc. Depreciation	-	Investment in Fixed Assets	= Δ O.R.	+ Δ R.N.A
1,828,064		-224,358	-1,932,334	3,536,040
		1,603,706		1,603,706

The lower part of Table 6 shows the connection between the financial net assets (OR and RNA)<sup>9</sup> and the statement of activities. The right part shows the changes in the OR and the NRA. These figures are taken from the right column of Table 5 ("Difference"). During the year 2016 the RNA increased by USD 3.54M, while the OR decreased by USD 1.93M. The combined effect of these changes was an increase in the financial net assets of USD 1.6M. The left part of Table 6 shows the connection with the statement of activities. The organization had a surplus (excluding depreciation) of USD 1.83M (see Table 2). From this surplus the organization used USD 224K for investment in FA, and therefore its final surplus

<sup>9</sup> The term "financial net assets" is used here to reflect the sum of the OR and the RNA in the liabilities side of the balance sheet. It should be confused with the term "financial assets" which is used to reflect the sum of the WC and the investment in the assets side of the balance sheet.

was USD 1.6M. The general connection between the statement of activities and the net assets is presented by the following equation.

$$(6) \Delta OR + \Delta RNA = \text{Income} - \text{Expenses (excluding depreciation)} - \text{Investment in FA}$$

The term  $\Delta$  in equation 6 refers to the changes in the OR and the RNA during the period.

The final stage of our analysis is to explain the change in the financial assets<sup>10</sup>, and this is presented in Table 7.

**Table 7:**

<b>Analysis of the change in the Financial Assets</b>						
$\Delta$ Financial Assets	=	$\Delta$ RNA	+	$\Delta$ OR (Savings)	+	$\Delta$ L.T.D
1,623,875		3,536,040		-1,932,334		20,169
$\Delta$ Financial Assets	=	Surplus/Deficit exc. Depreciation	-	Investment in Fixed Assets	+	LTD
1,623,875		1,828,064		-224,358		20,169

The financial assets increased by USD 1.62M as can be seen in the right column of Table 5 ("Difference"). This increase can be explained in two ways, which are presented in Table7:

(i) It is equal to the sum of the changes in the OR (a decrease of USD 1.93M) and the RNA (an increase of USD 3.54M) plus the net change in the long-term debt (increase of USD 20K).

(ii) It is equal to the surplus without depreciation (USD 1.83M) minus the investment in FA (USD 224K) plus the net increase in the long-term debt (USD 20K).

These relationships will be the building blocks of our projections of the simplified balance sheet for the end of the current year (2017 in our example).

<sup>10</sup> See footnote 9 above.

## Planning for financial stability

The first step of the financial planning is to estimate the organization's income and expenses for the current year (2017 in our example). These estimates are presented in Table 8.

Table 8:

<b>Projection's assumptions</b>			
Estimates for the year	2017		
Unrestricted donations & income	9,067,367	Including income from all other sources	
Restricted Donations	0		
Operating Expenses	-6,766,031		
Investment in Fixed Assets	-781,106		
<b>Change in Net Assets</b>	<b>1,520,230</b>		
Change in Debt	21,679		
<b>Change in Financial Assets</b>	<b>1,541,909</b>		

The source of the data in Table 8 should be the organization's updated budget. As was mentioned earlier the timeline of the planning process begins when the financial statements for the previous year (2016 in our example) are ready. At this stage, which will most probably be only at second half of the current year (2017 in our example), the organization can have a reasonable estimate of its annual income and expenses, based on data that are already available plus projections for the remaining period until the end of the year. Thus for example, if the organization began to plan for the 2018 budget at September 2017, it had already actual data until August and it would have to make projections for the remaining four months. The accuracy of the projections improves with time, the closer we get to the end of the year. In our example the data in Table 8 are the actual figures for 2017, as if we had a perfect foresight. The following estimates are required for Table 8:

- (i) Income – the estimated income should be broken down to unrestricted income and restricted donations. As was discussed above the restricted income refers to those donations and grants for which the nonprofit has to prove that it spent them fully.
- (ii) Operating expenses – the initial estimate is for the total expenses of the organization, since the breakdown of the expenses between restricted and unrestricted sources is not yet known. Once this breakdown can be reasonably



estimated, it will be incorporated into the projections. The estimate should relate only to the actual expenses, and therefore by definition will not include depreciation.

(iii) Investment in FA – sometimes nonprofits include the investment in FA in their operating budget and separate it only for the preparation of the financial statements. In this case there is no need for this additional line. However, if the investment in FA is presented explicitly in the organization's budget, a separate estimate is needed.

As was shown in equation 6 and Table 6, these estimates are sufficient to calculate a projection for the change in the financial net assets (the combined change in the OR and the RNA) at the end of the period. We can see in Table 8 that the sum of the OR and the RNA was expected to increase by USD 1.52M.

In order to estimate the change in the financial assets<sup>11</sup> we need also an estimate for the net change in the long-term debt. Since loans payment schedules are known in advance, the expected decrease in in LTD should be known for certainty. The projection should related only to an anticipated increase in debt, e.g. taking new loans. In our example it was estimated that net LTD will increase by USD 21K and therefore the expected increase in the financial assets was USD 1.54M.

Based on the estimates in Table 8 it is possible to create an initial projection for the simplified balance sheet at the end of 2017. This projection is presented in Table 9.

Table 9:

<b>Projected Simplified Balance Sheet for the end of</b>			<b>2017</b>
	<b>2016</b>	<b>2017</b>	<b>Difference</b>
<b>Working Capital</b>	6,476,142		
Investment	6,864,714		(*)
<b>Financial Assets</b>	<b>13,340,856</b>	<b>14,882,765</b>	<b>1,541,909</b>
Long Term Debt (LTD)	618,345	640,024	21,679
Commitments to Donors (RNA)	13,629,763		
Internal Savings (OR)	-907,252		
Net Assets	12,722,511	14,242,741	1,520,230
<b>Sources of Funding</b>	<b>13,340,856</b>	<b>14,882,765</b>	<b>1,541,909</b>
(*) Excluding gains or losses from the investment			

<sup>11</sup> See footnote 9 above.

The financial assets in this example were expected to increase to USD 14.9M. Both the financial assets and the WC were already significant at the end of 2016, and the short-term financial position was stable. Therefore we can safely assume that an increase of USD 1.54M in the financial assets will only improve the short-term position. We cannot predict the exact division of the financial assets between WC and investment at the end of 2017. We also cannot predict gains and losses from the financial investment. Nevertheless there is little doubt in this case that the amount of the liquid assets (WC + liquid investment) will remain significant, and most probably higher than in the previous year.

Predicting the long-term financial position is trickier. As was demonstrated in Tables 6 and 7 above, an increase in the financial net assets does not necessarily mean an increase in the OR. At this stage of the financial planning the attribution of the expenses between restricted and unrestricted sources is still unknown. Such attribution can be estimated more accurately as we get closer to the end of the year, when the organization gains a more accurate picture of its actual expenses. However, it is possible to examine two scenarios that define the full range of possibilities regarding the OR. These scenarios, which represent the worst and the best case regarding the OR, are presented in Table 10 in accordance with equation 6 above. The best case scenario for the OR is presented in Table 10-A.

Table 10-A:

<b>The expenses are from restricted income and the RNA, until the full use of the RNA</b>						
<b>Scenario 1: the best case scenario</b>						
	<b>2016</b>	<b>2017</b>				
	Balance	Income	Expenses	Inv. in FA	Balance	Difference
OR	-907,252	9,067,367	0	0	8,160,115	9,067,367
RNA	13,629,763	0	-6,766,031	-781,106	6,082,626	-7,547,137
<b>Total</b>	<b>12,722,511</b>	<b>9,067,367</b>	<b>-6,766,031</b>	<b>-781,106</b>	<b>14,242,741</b>	<b>1,520,230</b>
OR/Income					90%	

In this scenario all the expenses (including the investment in FA) can be attributed to the RNA. The RNA balance is expected to decrease to USD 6.1M. Since there are no expenses that are attributed to unrestricted sources, the entire income is in fact a surplus. This surplus can be attributed to the OR, which is expected to increase to USD 8.16M (90% of the income). In this specific example the RNA was larger than the sum of the expenses and the investment in FA.

We should note that this example is very specific. In the general case of this scenario the expenses that can be attributed to the restricted sources will be limited to the amount that will bring the RNA balance to zero (since RNA cannot be negative). The rest of the expenses will have to be attributed to the unrestricted sources. An example of this scenario, for a different nonprofit, is presented in Table 10-A-1.

Table 10-A-1:

<b>The expenses are from restricted income and the RNA, until the full use of the RNA</b>						
<b>Scenario 1: the best case scenario</b>						
	<b>2015</b>	<b>2016</b>				
	Balance	Income	Expenses	Inv. in FA	Balance	Difference
OR	1,883,633	6,097,993	-213,621	-8,208	7,759,797	5,876,164
RNA	3,672,311	2,576,811	-6,249,122	0	0	-3,672,311
<b>Total</b>	<b>5,555,944</b>	<b>8,674,804</b>	<b>-6,462,743</b>	<b>-8,208</b>	<b>7,759,797</b>	<b>2,203,853</b>
OR/Income					89%	

This organization had an expected income of USD 8.7M which was divided between restricted sources (USD 2.6M) and unrestricted sources (USD 6.1M). The organization was able to attribute expenses of USD 6.25M, out of its total expenses of USD 6.46M, to the restricted sources (RNA plus the restricted income) and thus to use them fully. The remaining expenses of USD 214K and the investment in FA (USD 8K) had to be attributed to the unrestricted sources. The end result was a free surplus of USD 5.9M that was added to the OR and increased its value to USD 7.76M.

The worst case scenario for the OR of the first organization is presented in Table 10-B.

Table 10-B:

<b>All the expenses are from unrestricted income</b>						
<b>Scenario 2: the worst case scenario</b>						
	<b>2016</b>	<b>2017</b>				
	Balance	Income	Expenses	Inv. in FA	Balance	Difference
OR	-907,252	9,067,367	-6,766,031	-781,106	612,978	1,520,230
RNA	13,629,763	0			13,629,763	0
<b>Total</b>	<b>12,722,511</b>	<b>9,067,367</b>	<b>-6,766,031</b>	<b>-781,106</b>	<b>14,242,741</b>	<b>1,520,230</b>
OR/Income					7%	

In this scenario all the expenses (including the investment in FA) had to be attributed to the unrestricted income. Therefore the RNA balance was expected

to remain unchanged. The surplus in the net assets of USD 1.52M was attributed fully to the OR, which was expected to increase to USD 613K (7% of the income).

A different scenario occurs when income is divided between restricted and unrestricted sources, as was the case for the second organization that was presented in Table 10-A-1. An example of the best scenario for such case is presented in Table 10-B-1.

**Table 10-B-1:**

<b>All the expenses are from unrestricted income and the OR</b>						
<b>Scenario 2: the worst case scenario</b>						
	<b>2015</b>	<b>2016</b>				
	Balance	Income	Expenses	Inv. in FA	Balance	Difference
OR	1,883,633	6,097,993	-6,462,743	-8,208	1,510,675	-372,958
RNA	3,672,311	2,576,811			6,249,122	2,576,811
<b>Total</b>	<b>5,555,944</b>	<b>8,674,804</b>	<b>-6,462,743</b>	<b>-8,208</b>	<b>7,759,797</b>	<b>2,203,853</b>
OR/Income					17%	

In this example the RNA increased by the full amount of the restricted income to USD 6.25M. The OR decrease by USD 373K, but remained still with a surplus of USD 1.51M.

The best and worst case scenarios are the borderlines of the full range of possibilities for the OR. The actual OR can be either one of these scenarios or somewhere between them. The scenario analysis can sometimes be enough to determine the financial strategy that is required. The example of the first organization in Tables 10-A and 10-B shows that the OR, that was in a deficit at the beginning of the year, was expected to increase to a surplus in both scenarios. The example of the second organization of Tables 10-A-1 and 10-B-1 shows that the OR, that was in a surplus at the beginning of the year, was expected to increase even more in both scenarios. The fact that the OR is expected to be positive in both the best and worst case scenarios has a significant affect on the organization's financial strategy. In the following discussion we will present several possible scenarios of the financial position and the recommended financial strategy for each one of them. But before that we still need to present the final stage of the financial projections, once the organization has a reasonable breakdown of its expenses between restricted and unrestricted sources. This breakdown, for the first organization, is presented in Table 11.

**Table 11:**

<b>Actual Breakdown of Income and Expenses</b>						
	<b>2016</b>	<b>2017</b>				
	Balance	Income	Expenses	Inv. in FA	Balance	Difference
OR	-907,252	9,067,367	-3,438,885	-781,106	3,940,124	4,847,376
RNA	13,629,763	0	-3,327,146		10,302,617	-3,327,146
<b>Total</b>	<b>12,722,511</b>	<b>9,067,367</b>	<b>-6,766,031</b>	<b>-781,106</b>	<b>14,242,741</b>	<b>1,520,230</b>
OR/Income					43%	

The actual expenses were divided almost equally: USD 3.3M were attributed to the RNA and USD 3.4M and the investment in FA were attributed to the unrestricted income. As a result the RNA decreased to USD 10.3M and the OR increased to USD 3.9M (43% of the income).

The discussion above shows how we can project the stability measures (OR and financial assets) for the end of the current year. The following section will present three possible scenarios of the organization's financial position, and the respective financial strategy that should address each scenario.

(i) A deficit in the financial assets and in the OR.

This situation should raise a red flag to the organization's management. A deficit in the financial assets is by definition also a deficit in the WC (since the investment cannot be negative). Also by definition, a deficit in the financial assets means also a deficit in the OR. To be clear, a deficit in the financial assets means that the short-term obligations (CL) are larger than the sum of the CA and the investment. Therefore an organization in this situation does not have enough financial resources to cover even its short-term obligations. The organization is extremely vulnerable and even short delays in its income can cause financial distress. The required financial strategy for this situation is to plan a budget with a surplus that is large enough to close the deficit in the financial assets. The financial strategy in this case should be given first priority since the ability of the organization to continue its operations is at risk. If the organization finds it impossible to close the deficit in the financial assets in one year, it can also seek a loan for several years. A loan can mitigate the short-term financial pressure and will buy some time for the organization. However a loan will not address the deficit in the OR, which in the long-run will have to be closed. It is advisable in this situation to prepare the nonprofit's staff for a reality of tight budgets, in order to

create the necessary surplus that will ensure stability. It should be emphasized that the planning a budget with a surplus requires to limit the scope of the programs or even to close subsidized programs with negative contributions<sup>12</sup>.

(ii) A surplus in the financial asset, but a deficit in the OR.

This was the situation of the first organization in our example at the end of 2016. A surplus in the financial assets and at the same time a deficit in the OR are possible only if the organization has RNA and or LTD that can offset the deficit in the OR. In this situation the financial risk depends on the timeline of the commitments to the donors (RNA) and on the payment schedule of the LTD. The shorter these timelines, the faster the deficit in the OR will become also a deficit in the financial assets. Therefore the organization has to prepare a plan to close the deficit in the OR. Such plan may be less urgent than in the previous scenario, but it still has to be prepared. Also in this case creating a surplus in the budget may not be enough. A surplus in the RNA will diminish the risk of a deficit in the financial assets, by extending the timeline of the RNA. However in order to solve the fundamental problem, the organization has to create a surplus in its OR. The first step to achieve this goal is to attribute the maximal possible amount of the expenses to the RNA and the restricted income (see Tables 10-A and 10-A-1 above). This requires only orderly financial reporting and sometimes may be enough to solve the problem. In other cases the organization will have to plan its budget is such a way that the expenses from the unrestricted sources will be lower than the income. In most cases this will not require the full closure of programs, but will require limiting the scope of certain programs.

(iii) A surplus in the financial asset and in the OR.

This was the predicted situation for the end of 2017, of both organizations in our example, in the best and the worst scenarios (Tables 10-A and 10-A-1 and 10-B and 10-B-1). Obviously this was also the situation in the final scenario which related only to the first organization (Table 11). Clearly in such situation there is no current financial risk to the nonprofit, but the question that has not yet been answered is whether the level of the OR is large enough to be considered safe. In order to address this issue a benchmark for the minimal OR that is required for

---

<sup>12</sup> See: Malki (2014)

financial stability was recommended<sup>13</sup>. This benchmark is 25% of the organization's income, which is equivalent to three months of operation without any income. Thus it is advisable for nonprofits that their OR is lower than this benchmark to plan for a surplus in their OR using the same methods that were described for the previous scenario. In this scenario the steps for achieving financial stability can be taken more gradually since there is no immediate financial risk. It is possible to prepare a multiyear plan that is aimed to gradually increase the surplus in the OR. Nonprofits with OR that is above the benchmark have attained the goal of their financial strategy, but still have to take measures to sustain the level of their OR.

Based on the discussion above we can now go back to the organization of our first example and demonstrate how its financial planning for the 2018 budget should have been. The organization began its financial planning in the second half of 2017 with the knowledge that at the end of 2016 it had a significant surplus in its financial assets, but a deficit in its OR. Apparently steps were taken already in the 2017 budget as we can see from the two projections of the worst and best case scenarios (Tables 10-A and 10-B). In the best-case scenario the OR was expected to reach to 90% of the income, while in the worst-case scenario the expectation was to a small surplus in the OR of 7% of the income. Therefore it was clear that in both scenarios there was no immediate financial risk. If the worst-case scenario had materialized the organization should have prepared a plan to gradually increase the OR. However since there was no urgency, the organization probably waited until it had reasonable estimates of the breakdown of the expenses in order to have a more accurate projection of its OR (Table 11). This projection showed that the OR was expected to increase to 43% of the income and therefore the goal of financial stability was achieved at the end of 2017.

As was discussed at the beginning of this article, sufficient level of OR helps to sustain the nonprofit's programs at times of disruptions in its income. But many nonprofits must use their OR each year in order to manage the inherent uncertainty in their income projections<sup>14</sup>. An example of such use is presented in the next section.

---

<sup>13</sup> See: The Nonprofit Operating Reserves Initiative Workgroup (2008)

<sup>14</sup> See: Malki (2016).

## Financial stability and risk management

The next example presents the budgetary planning in a small Israeli nonprofit for the 2022 budget. In this example the budgetary planning was at its last stage (the end of 2021) and there was already a reasonable breakdown of the expenses between the restricted and unrestricted sources. The data and the projections are presented in Table 12.

Table 12:

<b>Forecast for the OR in 2021</b>	OR	RNA	Total
OR in 1/1/2021	1,267,007	625,303	1,892,310
Expected Income 2021	2,426,380	102,000	2,528,380
Expected Expenses 2021 (*)	-1,785,404	-727,303	-2,512,707
Surplus / Deficit 2021	640,976	-625,303	15,673
<b>Forecast for the OR 1/1/2022</b>	<b>1,907,983</b>	<b>0</b>	<b>1,907,983</b>
(*) Including Fixed Assets			

According to the organization's financial statements the OR at the end of 2020 was NIS 1.27M and the RNA was NIS 625K. The expected income and expenses for 2021 were NIS 2.53M and NIS 2.51 respectively. The breakdown of the expenses shows that it was possible to attribute NIS 727K to the restricted sources, and thus the RNA was fully spent. As a result the surplus in the unrestricted sources was expected to be NIS 641K and therefore the OR was expected to increase to NIS 1.91M (76% of the income).

The CEO of this organization presented to the board of directors a requested budget for 2022 of NIS 2.75M. This budget included an increase in the scope of several programs, and also an increase in the salaries of several employees. The board of directors had to decide whether the higher budget can be approved. The board asked the organization's management to prepare a forecast of its expected income in 2022. Here we encounter a challenge that many nonprofits face in the process of planning their budgets. Nonprofits are characterized by a significant uncertainty regarding their income projections for the next year. This is typical of nonprofits due to their reliance on income from donations and grants. Faced with such challenge it is a common practice to divide the expected income sources to three categories: guaranteed, high-probability and unclear. Such breakdown for the organization in this example is presented in Table 13.



Table 13:

<b>Risk Analysis for the 2022 budget</b>	<b>Income Forecast</b>		
<b>Expected Income for 2022</b>	<b>Guaranteed</b>	<b>High Probability</b>	<b>Unclear</b>
Income Projections	791,910	964,191	350,000
Accumulated Income	791,910	1,756,101	2,106,101
Expected Expenses 2022	-2,746,290	-2,746,290	-2,746,290
Expected Surplus / Deficit 2022	-1,954,380	-990,189	-640,189
<b>Expected OR 1/1/2023</b>	<b>-46,397</b>	<b>917,794</b>	<b>1,267,794</b>
<b>Risk</b>	Very Low	Low	High
<b>Feasibility</b>	Not Feasible	Feasible	Feasible

All the income sources for 2022 were expected to be unrestricted and were divided to NIS 792K guaranteed income, NIS 964K income with high probability to be received and NIS 350K income that the chances that it will be received were still unclear. Based on these projections the organization faced three scenarios regarding its income. The first scenario was that only the guaranteed income will be received (NIS 792K). The second scenario was that the guaranteed income and the income with the high probability will be received (NIS 1.76M). The third scenario was that in addition to the income from the previous scenario all the unclear income will also be received (NIS 2.1M).

The consequences of approving the required budget (NIS 2.75M) were checked against each scenario. Apparently all the scenarios led to an expected deficit at the end of 2022. Therefore, if the organization hadn't have a surplus in its OR this budget could not be approved. However, given the expected OR of NIS 1.91M at the end of 2021 the organization could approve a budget with a deficit, providing that it did not create a deficit in its OR. Thus for each scenario the expected OR for the end of 2022 was calculated. We can now define each scenario according to two dimensions. The first dimension is its feasibility: a negative expected OR at the end of 2022 is not feasible, while a positive one is feasible. The second dimension is the level of risk which is caused by the uncertainty of the income projections. We can attribute a very low risk to the first scenario, which relies only on the guaranteed income. The second scenario has somewhat higher risk, since income with high probability may not materialize after all, but still its level of risk can be defined as low. The third scenario, which relies on income with unclear probability to materialize, will be defined as having a high-risk level.

Based on these dimensions we can determine a simple decision rule for the board of directors regarding the approval of the requested budget. Such decision rule can be defined as follows: consider only the feasible scenarios and determine the maximal level of risk that you are willing to allow. If one or more of the feasible scenarios is within the allowed level of risk, then the requested budget can be approved.

In the organization in this example the first scenario was not feasible due the expected deficit in the OR. The second and the third scenarios were feasible since the OR was expected to have a surplus. The board decided to allow only a low level of risk. That means that the board was willing to rely on the income with the high probability, but declined to rely on the income with unclear chances to materialize. Since the second scenario met this condition the requested budget was approved.

The approval of the budget based on the considerations above requires on-going monitoring of the income in order to ensure that the expected income is actually received<sup>15</sup>. In addition to that, once the financial statements for 2021 were ready the organization checked its actual OR and compared it to the projection. Table 14 presents the actual data for 2021.

**Table 14:**

<b>Actual OR in 2021</b>	<b>OR</b>	<b>RNA</b>	<b>Total</b>
OR in 1/1/2021	1,267,007	625,303	1,892,310
Income 2021	2,426,298	102,000	2,528,298
Operating Expenses 2021	-1,822,738	-727,303	-2,550,041
Fixed Assets 2021	-7,898		-7,898
Total Expenses 2021	-1,830,636	-727,303	-2,557,939
Surplus / Deficit 2021	595,662	-625,303	-29,641
<b>OR in 1/1/2022</b>	<b>1,862,669</b>	<b>0</b>	<b>1,862,669</b>

The comparison of Table 14 to Table 12 shows that the income projection was very accurate. There was a minor underestimate in the projected expenses and as a result the actual OR was slightly smaller: NIS 1.86M instead of NIS 1.91M.

Nevertheless the projection that was made at the beginning of the year was sufficient for effective risk management. In fact, even if the board had been able

<sup>15</sup> See: Malki (2016) and (2025).

somehow to get the accurate figure of the OR in advance, its decision would have remained the same.

## **Summary and conclusions**

A major challenge for the managements of nonprofits is the necessity to achieve two conflicting goals. The natural tendency of nonprofits' management is to maximize the organization's social goals, by using all its resources. However, achieving financial stability often requires that the organization will limit the use of its resources in order to create reserves. Such actions can be sometimes very urgent, since avoiding them will bring the organization to financial distress. Therefore nonprofits have to develop and to manage a financial strategy, in order to ensure their financial stability.

The first step of such strategy is to have concrete measures of financial stability. Two common measures were described in the discussion above: the WC for the short-term and the OR for the long-term. These measures can be calculated from the organization's financial statements or from the 990 form in the USA. Given the delay in the preparation of the financial statements it is necessary to estimate the projected values of the stability measures for the end of the current year. The discussion above presented the simplified balance sheet and its use for the preparation of such projections. The projected OR is the long-term, and also the main, stability measure. Since it is not possible to estimate the WC we use the financial assets instead. The financial assets are the sum of the WC and the financial investment, and therefore when there is a deficit in the financial assets, it means by definition a deficit in the WC.

The second step is to determine the financial strategy that is required, based on the projected stability measures. Such strategy can be divided in general to four alternatives:

- 1) In case there is a deficit in the financial assets (and therefore also a deficit in the WC and in the OR), an urgent decrease in expenses is necessary in order to create a surplus in the budget. If possible the organization can also try to receive a long-term loan.

2) In case there is a surplus in the financial assets and a deficit in the OR, it is necessary to create a surplus in the OR. The first step is to attribute as much expenses as possible to the RNA. This step can sometimes be sufficient, but if not a decrease in expenses is also required. The level of urgency of the decrease in expenses depends mostly on the timeline of the commitments to the donors (RNA).

3) In case there is a surplus in the OR that is below the suggested benchmark of 25% of the income, there is no immediate financial risk. Nevertheless, it is advisable to limit the scope of certain programs (based on the organization's priorities) in order to create surpluses that will increase the OR to its recommended benchmark.

4) In case there is a surplus in the OR that is above the suggested benchmark of 25% of the income, the organization has achieved the goal of financial stability. The organization can use its OR in order to manage the risk that emanates from the significant uncertainty of the income projections in the nonprofits' sector. It is also important to sustain the level of the OR and to take the necessary actions if it decreases below the benchmark.

Finally it is important to relate to the organizational culture of nonprofits and its possible effect on the financial strategy (or the lack of it). It is clear from the discussion above that achieving financial stability demands tough decisions. The consequences of decreasing expenses are usually related to the organization's staff: dismissing employees, freezing or reducing salaries etc. These are painful measures and nonprofits' CEOs and boards of directors prefer not to take them, unless there is an imminent crisis. However, there are many examples of recovery plans that failed, and organizations that had to cease their operations, since the organization's management waited too long. It is a well-known fact that prevention of problems is less costly than solving them. This truism is very relevant in the case of financial strategy for nonprofits.

## References:

Malki E (2014). A servant of two masters: The dual role of the budget in nonprofits. *Journal of Accounting, Auditing and Taxation*, 1(1): 002–007.

Retrieved at January 29, 2025, from Academia:

[https://www.academia.edu/53492455/A\\_servant\\_of\\_two\\_masters\\_The\\_dual\\_role\\_of\\_the\\_budget\\_in\\_nonprofits](https://www.academia.edu/53492455/A_servant_of_two_masters_The_dual_role_of_the_budget_in_nonprofits)

Malki, E. (2016). A simple model for cash flow management in nonprofits.

Retrieved at January 29, 2025, from SSRN:

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2732052](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2732052)

Malki, E. (2025). Financial management of welfare organizations. In: H. Schmid, Y. Sabah (Editors), *Leadership and Management in Social Services in Israel Theory, Research and Practice*. (Pages 363-395), Tel Aviv: RESLING Publishing. (Hebrew) - Forthcoming.

Rosenstiel, P. (2016). An Overlooked Financing Tool: How Nonprofits Can Issue Tax-Exempt Bonds.

Retrieved at February 15, 2025, from CalNonprofits:

<https://calnonprofits.org/wp-content/uploads/2021/04/CalNonprofitsBonds.June2016.pdf>

The Nonprofit Operating Reserves Initiative Workgroup. (2008). *Maintaining nonprofit operating reserves: An organizational imperative for nonprofit stability*  
Retrieved at January 29, 2025, from The Nonprofit Operating Reserves Initiative Workgroup:

<https://www.nonprofitaccountingbasics.org/sites/default/files/01-OperatingReservesWhitePaper2009.pdf>