



Center for Cooperatives
UNIVERSITY OF WISCONSIN-MADISON

Understanding Worker Cooperative Finances: A Learning and Training Tool

Description

This document accompanies the Worker Co-op Financial Training Tool Excel workbook, a set of linked spreadsheets that allows you to explore business reporting and decision-making in a worker-owned cooperative.

The *Background and Assumptions* section describes a fictional worker-owned coffee shop cooperative and the basic financial assumptions used to create the business model;

The *Financial Reporting* section includes exercises to review how the income statement, cash flow statement, and balance sheet are linked together and used for business decision making;

The *Scenarios* section includes exercises to demonstrate possible trade-offs that a cooperative must weigh as it decides how to manage and grow its business.

Directions for Use

The Excel workbook can be downloaded from the website multiple times. It may be helpful to create a new version of the workbook before working through a scenario, so that you can compare the results of the exercise to the original values.

The workbook has been designed so that the input cells discussed in this document will automatically cause the other values in the linked worksheets to be recalculated. However, an interested user can experiment with changing assumptions and formulas in other cells, which will cause additional recalculations in the worksheets. See the Directions tab in the workbook.

Contact the University of Wisconsin Center for Cooperatives with your feedback: info@uwcc.wisc.edu. We're interested in hearing from you!

The workbook and document use simplified financial and accounting assumptions to illustrate basic cooperative finance and business concepts. They are not intended for use as business decision-making tools.

I. Background and Assumptions

Main St. Coffee Co-op is a worker-owned cooperative coffee shop based in Anytown, U.S.A., a metropolitan area of 400,000-500,000 residents. It is incorporated under its state cooperative statute. The Co-op has been a success for the first two years, posting positive net income in both years. Based on those results, it has developed business projections for years 3-5.

Worksheet: Capital Sources & Uses

The Co-op needed \$111,000 in start-up capital. Six member-owners each contributed \$6000 in start-up equity, for a total of \$36,000. They also obtained a 10 year, \$75,000 loan with a 7.5% interest rate. This money was used to make initial improvements to the rented space (Leasehold Improvements) and equipment needed for operations (coffee makers, tables, chairs, etc.) and cost the co-op \$80,000.

The leasehold improvements and equipment are assets that the cooperative owns and uses repeatedly over time to operate the business. The value of an asset is depreciated over time, which is a way to account for the decline in value of the asset as it is used or becomes obsolete. The Co-op will depreciate leasehold improvements over 10 years.

The initial inventory purchases for the Co-op cost \$12,000. At the end of each year the Co-op holds \$12,000 worth of goods in Inventory.

Worksheet: Loan Repayment

The Co-op also obtained a 10 year, \$75,000 loan with a 7.5% interest rate. The monthly payments for an amortized loan are the same for the term of the loan. However, the portion of the monthly payment that pays off interest and the principle changes over time.

Worksheet: Employment

Members committed to paying themselves salaries. Salaries were determined by their experience in the service industry. Those with slightly higher salaries had more prior experience and are given more responsibility within the co-op.

The Co-op also employs three part-time workers who are not members to meet variable staffing needs. An employee who wishes to become a full-time salaried member must apply to join the Co-op, and if approved, must contribute a \$6,000 equity investment.

Payroll taxes have averaged 13% of wages. Benefits (health insurance, paid vacation, retirement investments, etc.) are paid to members only, and cost the Co-op an additional 25% of member salaries. Benefit levels are determined by the Board of Directors, which is made up of all six of the Co-op members.

Worksheet: Patronage Distribution

As owners, members are also entitled to a share of the Co-op's net income, which is distributed on a patronage basis.

The Board of Directors decided to calculate patronage based on the number of hours worked. Because members all work full time, patronage is distributed evenly among the members.

The Board of Directors meets annually to review the financial performance of the Co-op, and to decide how to distribute the Co-op's net income. The first two years it agreed to retain 35% of the net income

as unallocated equity to reinvest in Co-op operations for the coming year. As unallocated equity, it is a general asset of the Co-op and is not associated with an individual member.

The Board also decided to allocate 65% of profit to member-owners based on patronage. Since additional equity was needed to support Co-op operations, 60% of the 65% allocation was held as retained equity and 40% is distributed as cash patronage refunds.

If a member decides to leave the Co-op, the Co-op's stated intention is to return the member's initial \$6,000 equity investment at that time. Any allocated retained earnings in the member's name would be returned in installments over a time period to be determined by the Board of Directors. However, in both cases, the Board must approve these transactions, and may defer any equity payments if it would place the Co-op at financial risk.

Worksheet: Revenue & Cost Assumptions

The Co-op rents 1800 square feet for \$2.50/sq. ft. monthly; the utilities have averaged \$1.00/sq. ft. monthly; and insurance costs are \$3.00/sq. ft. These costs increased 2% as a result of inflation in Year 2, and are assumed to increase at the same rate through Year 5.

The coffee shop is open for 355 days per year, and only accepts cash payments. In Year 1 the coffee shop averaged 225 cups of coffee sold per day and 180 sandwiches. Coffee was sold for \$2.50 per cup and sandwiches for \$7.00. They were sold at a markup of 400% and 133.3%, respectively. Coffee sales for Year 2 grew by 3.00%, and sandwich sales increased by 3.25%.

As sales increase, the Co-op manages its inventory purchasing so that larger bulk purchasing offsets any inflation and cost of goods as a percentage of revenue does not increase through Year 5.

The marketing budget is estimated as a percentage of revenue. It has been 1.25% each of the first two years.

The "Other" category (i.e. cleaning supplies, cups, plates, sugar, cream, etc.) is calculated from the volume of coffee and sandwiches sold. These costs were approximately \$0.15/purchase, increased 2% as a result of inflation in Year 2, and are assumed to increase at the same rate through Year 5.

The corporate tax rate for the Co-op is 30%. This applies to all net income held as unallocated retained earnings. Any allocated net income (distributed or retained) is taxed as part of the member's individual income.

II. Financial Reporting

The Co-op uses three basic financial reports to monitor and forecast the Co-op's business. The income statement and cash flow statements summarize business activity over a given time period; the balance sheet reports on what the Co-op owns and owes at a particular point in time. The worksheets for these

reports are automatically calculated from the various assumptions worksheets described in the Background and Assumptions section. These reports are primary decision-making tools for the Co-op.

Worksheets: Income Statement, Revenue & Cost Metrics

The annual Income Statement reports the Co-op’s expenses and revenue during the year so that financial performance and profitability can be measured and evaluated.

The Income Statement uses the accrual method to report financial performance. Transactions that produce revenue in a given time period are matched with the expenses that were incurred to generate that revenue. These revenue and expenses are reported together on the Income Statement, regardless of whether the cash has been received or spent. This allows a more accurate look at the profitability of the business, and whether the revenue is adequately covering the costs.

What is depreciation and why is it included as an expense on the Income Statement?

Depreciation is a way to account for the annual use of a long-term asset that lasts from year to year, but will need to be replaced eventually. The annual depreciation for an asset is calculated by dividing the asset cost by the number of years of expected use. This use is an expense in operating the business.

Why is only the interest portion of the loan payment included as an expense on the Income Statement?

Because interest is the cost for using the loan principle for that year. The principle is not included on the income statement because it is a long-term liability for an asset that is used for multiple years.

Why is corporate income tax only calculated on the unallocated portion of net income?

As a cooperative, profit allocated to members as qualified patronage refunds, whether distributed as cash or retained, is taxed at the individual member level only. (For a basic overview of patronage allocations, see <http://www.uwcc.wisc.edu/issues/Finance/finance%20basics.aspx>)

To analyze expenses and compare profitability over time, expenses and profit are often expressed as percentages of revenue.

Net income for Year 1: \$ <u>10,481</u>	% of Revenue: <u>1.6</u>
Projected for Year 5: \$ <u>15,026</u>	% of Revenue: <u>2</u>
Fixed Expenses for Year 1: \$ <u>382,073</u>	% of Revenue: <u>59.1</u>
Projected for Year 5: \$ <u>429,116</u>	% of Revenue: <u>58.5</u>
Cost of Goods for Year 1: \$ <u>253,204</u>	% of Revenue: <u>39</u>
Projected for Year 5: \$ <u>287,191</u>	% of Revenue: <u>39</u>

Worksheet: Cash Flow Statement

The annual Cash Flow statement is used to manage business operations and maintain the positive cash flow that is needed to pay employees, purchase inventory, and pay bills for business expenses. It reports on the cash received and payments made from operating, investing, and financial activities during the year.

While cash flows reflect the activities reported on the Income Statement, the cash position for the same time period will be different. Cash Flows from Operating Activities takes the Net income (or Loss) from

the Income Statement and makes adjustments to reflect the actual cash that has been received, or that has been paid out, during that period.

The Co-op receives cash at the time a sale is made, so no adjustments for outstanding receivables need to be made to this line. But there are some expenses for the year that are shown on the Income Statement, but have not been paid for at the end of year. They are added back into the Net Income figure to reflect actual cash available.

For Year 1, find the values used to adjust Cash Flows from Operating Activities:

Year 1 Initial/Additional Inventory = \$ 12,000

(Capital Sources and Uses worksheet)

Compare with Inventory Purchasing on Cash Flow Statement. Note that this is the initial purchase at business start-up. In this simplified model, this inventory level is assumed to constant, and the accounts payable amount described below is to keep the inventory at this level.

Year 1 Accounts Payable: Inventory = \$ 9,712

(Income Statement worksheet)

Year 1 Accrued Payroll/Payroll Taxes = \$ 10,854

(Income Statement worksheet)

Year 1 Income Tax Payable = \$ 1230

(Income Statement worksheet)

These Year 1 expenses will be paid for in Year 2, and the Year 2 cash flows will need reflect those cash payments. Furthermore, at the end of Year 2, there are outstanding Year 2 expenses that are not paid for until Year 3.

Rather than showing these staggered transactions on the Cash Flow Statement for each year, only the net change, or difference between the values for a given year and the one following it, is reported. As an example, the accrued payroll/payroll taxes for Year 1 is \$10,854, and \$11,319 for Year 2.

Difference between Year 1 and Year 2 Accrued Payroll/Payroll Taxes = \$ 464

(Income Statement worksheet)

Compare to Year 2 Accrued Payroll/Payroll Taxes on the Cash Flow Statement.

The Cash Flow statement must also add back in the depreciation shown on the Income Statement, which was not an actual cash payment.

Depreciation = \$ 5,333

(Income Statement worksheet)

Net Cash Flows from Operations - Year 1: \$ 25,610 Projected for Year 5: \$ 21,307

The Cash Flows from Investing Activities reflects cash payments for Asset Purchases or Leasehold Improvements.

To find the values for Cash Flows from Investing Activities for Year 1:

Asset Cost = \$80,000
(Capital Sources & Uses worksheet)

The Cash Flows from Financing Activities reflects loan and member equity activity. This section includes the amount of principal paid on the Co-op's outstanding loans during that year. Because the interest portion of the loan payment is included as an expense on the Income Statement, no adjustments to the cash flow for that payment are required.

To find the values for Cash Flows from Financing Activities for Year 1:

Year 1 Loan Amount: \$75,000
(Capital Sources & Uses worksheet)

Year 1 Total Principal Paid on All Loans: (\$5236)
(Loan Repayment worksheet)

Year 1 Total Member Equity Contributed: \$36,000
(Capital Sources & Uses worksheet)

Year 1 Member Patronage Refunds: 0 (allocation of \$3045)
(Income Statement worksheet)

Compare with Year 1 Cash Flows from Financing Activities. Year 1 member patronage refunds are calculated at year-end, but are not distributed until Year 2.

The last line the Cash Flow Statement is the Ending Cash Position.

Ending Cash Position for: Year 1: \$ 51,374 Projected for Year 5: \$ 86,412

Worksheet: Balance Sheet

The Balance Sheet reports on what a business own -- assets -- and what it owes -- liabilities -- at a point in time. Equity is what is left over after those assets are used to pay for liabilities, and belongs to the owners of the business.

Assets are subdivided into current and fixed assets. Current assets can be converted to cash or used by the business within a short period of time, typically a year.

To find the values for Current Assets for Year 1:

Year 1 Cash: \$51,374
(Ending Cash Position, Cash Flow Statement worksheet)

Year 1 Inventory: \$12,000
(Initial/Additional Inventory, Capital Sources & Uses worksheet)

In this simplified model, the inventory level established at start-up is assumed to remain constant from year to year.

Fixed assets, such as property or equipment, cannot be easily converted into cash.

To find the values for Fixed Assets for Year 1:

Year 1 Initial Equipment/ Leasehold Improvements: \$80,000
(Asset Cost, Capital Sources & Uses worksheet)

Year 1 Accumulated Depreciation: ____\$5333____

(Income Statement worksheet)

Total Assets = Current Assets + Net Fixed Assets: ____\$138,041____

Liabilities are subdivided into current and long term categories. Current liabilities are obligations due within one year, including the principle payments on loans due in the coming year.

To find the values for Current Liabilities for Year 1:

Year 1 Member Patronage Refunds: ____\$3045____

(Income Statement worksheet)

Year 1 Current Portion of Loan(s): ____\$5642____

(Year 2 Annual Principal Payment, Loan Repayment worksheet)

Current liabilities also include Accounts Payable: Inventory, Accrued Payroll/Payroll Taxes, and Income Tax Payable.

(Income Statement worksheet)

Long-term liabilities are obligations beyond one year.

To find the values for Long Term Liabilities for Year 1:

Loan Payable Year 1: ____\$64,122____

(Year 2 Annual Loan Balance, Loan Repayment worksheet)

The Year 2 loan balance is calculated by subtracting the Year 2 principle payment, which is included in Current Liabilities.

The Equity portion of the balance sheet shows owner equity investments and retained earnings from operations. This is at-risk capital, which means it absorbs losses from a year's operations, or when liabilities are greater than assets at dissolution.

To find the values for Equities for Year 1:

Member Equity: ____\$36,000____

(Total Member Equity Contributed, Capital Sources & Uses worksheet)

Unallocated Retained Earnings: ____\$2869____

(Unallocated Income, Net of Taxes, Income Statement worksheet)

Member Patronage Allocation-Retained: ____\$4567____

(Member Patronage Allocation-Retained, Income Statement worksheet)

Worksheet: Patronage Distribution

The Balance Sheet reports the total amount of retained patronage equity that has been allocated to members. The Patronage Distribution Page shows the amount each member has accumulated in patronage allocations, both as cash refunds and as retained equity in the Co-op. Because Co-op patronage is calculated only on hours worked and all members work full-time, patronage allocations for each Co-op member are the same.

How much allocated patronage was retained as equity for each member in:

Year 1: \$ ____761____ **Year 2:** \$ ____689____

How much are members projected to retain in:

Year 3: \$ 775 Year 4: \$ 956 Year 5: \$ 1,091

How much did each member receive in cash as patronage refunds in:

Year 1: \$ 507 Year 2: \$ 459

How much are members projected to receive in cash as patronage refunds in:

Year 3: \$ 517 Year 4: \$ 637 Year 5: \$ 728

Cumulatively how much allocated patronage would each member accumulate over five years? (Do not include the Member's initial equity contribution in these calculations)

Retained: \$ 4,272 + Cash Distribution: \$ 2,848 = Total: \$ 7,120

Worksheet: Co-op Financial Ratios

The Balance Sheet is the basis for several ratio calculations that can be used to better understand a business's financial situation. Typical ratios may vary by business sector.

Liquidity Ratios measure the ability of the Co-op to pay its total outstanding current liabilities using only cash (Quick Ratio) or by using all current assets (Current Ratio). The Co-op's Current Assets are its cash holdings and inventory purchases.

Year 1 (Current): 2.08 Year 1 (Quick): 1.69
Projected for Year 5 (Current): 2.65 Year 5 (Quick): 2.32

Solvency Ratios are used to examine the Co-op's ability to meet its long-term obligations to creditors and its members. Debt to Equity measures how much the Co-op is using debt relative to equity to finance its activities. Debt to Assets compares the total liabilities to the Co-op's total assets, and indicates the level of financial risk. The Ownership ratio compares the total equity to the total assets of the company, measuring the degree to which the members own the Co-op.

Using the Balance Sheet, calculate the Debt/Equity, Debt/Assets, and Equity Ratio at the end of Year 1:

Long-term Liabilities+Current Portion of Loan: \$ 69,764 / Total Equity: \$ 43,436 =
Debt/Equity Ratio: 1.61

Long-term Liabilities+Current Portion of Loan: \$ 69,764 / Total Assets: \$ 138,041 =
Debt/Assets Ratio: 0.51

Total Equity: \$ 43,436 / Total Assets: \$ 138,041 = Ownership Ratio: 0.31

Compare these values to the Co-op Financial Ratios.

III. Scenarios

The following exercises guide the user through making workbook spreadsheet changes, and evaluating the effects of those changes using the financial reports.

A new version of the workbook can be saved before working through each exercise, to make it easier to compare results with original projections and the results of other exercises.

The first two years were successful for the Co-op, and resulted in positive net incomes and cash patronage refunds to members. The Year 2 ending cash position for the Co-op is \$58,159. During the second year of operations the store space located next to Main St. Coffee Co-op was vacated.

There has been discussion among members about whether it would be a good investment to expand into the space next store. Some questions that have been raised include:

- Can the Co-op afford the costs associated with expansion?
- How will the Co-op increase employment in order to staff the extra space?
- How much would sales need to increase for the expansion to be more lucrative than continued steady growth in their current location?

Exercise 1A.

The expansion into the space will cost \$45,000 for leasehold improvements and equipment. Enter the \$45,000 cost to the Capital Sources & Uses page as a Year 3 Asset Purchase (Cell D18). The depreciation schedule is 10 years (Cell D19), shorter than the Initial Equipment/Leasehold Improvements.

After the expansion the Co-op is now 1,200 sq. ft. larger. Adjust this on the “Revenue & Cost Assumptions” page by changing the “Area of Building” (Cells D5:F5) for Years 3, 4, and 5 to 3,000 sq. ft.

The Co-op expects a large jump in its growth rates in Year 3 due to more than doubling the gross square footage of the café, but lower growth rates than those currently forecast for Year 4 and Year 5. On the “Revenue & Cost Assumptions” adjust the “Coffee Growth” and “Food Growth” for Year 3 to 35% (Cells D17, D18), and change the growth rates for Years 4-5 to 2% (Cells E17-18 and F 17-18).

The Co-op estimates it will need to purchase an additional \$6,000 of inventory to support the expansion. On the Capital Sources & Uses page, add \$6,000 under Year 3 (Cell D20) as Initial/Additional Inventory.

The Co-op will also need to increase its staff to handle the increase in sales. It plans to hire five additional part-time staff at \$10.50/hour, and have all staff work 20 hours a week. All staff will be paid a \$0.25/hour increase each year. On the Employment worksheet, for Part-Time D-H (on rows 23-27), add 10.50 as the Hourly Wage column. Increase those wages to \$10.75 and \$11 for Years 4 and 5. Change or add 20 to the Hours/Week column for all staff in Years 3-5.

Does the Income Statement show that the increased sales in Year 3-5 from the expansion are large enough to cover the Year 3 expansion? What are the effects on the Cash Flow Statement?

_____ The Income Statement shows positive net income at using those assumptions. The net cash flow for Years 4 and 5 are slightly higher than in the original forecast, but the ending cash positions are less, because of the use of member equity to pay the costs of expansion. Year 3 has a substantially negative net cash flow because of the investment in the expansion. _____

What is the effect on member equity, as shown on the Balance Sheet and Patronage Distribution worksheets?

____ **Retained member patronage and unallocated retained earnings continue to grow. At the end of five years each member is projected to have \$10,048 of equity invested in the cooperative, which includes both the initial and retained equity investments.**_____

Does the Co-op have the cash reserves to pay back all of the member equity investments at the end of Year 5?

____ **No. The Balance Sheet shows that cash totals \$37,245, and initial and retained member equity is \$36,000 and \$24,287. This is to be expected, As equity, member investments have bought assets and provided cash for successful business operations, which support member salaries and benefits.**_____

Exercise 1B

Save a new version of the worksheet from Exercise 1A that includes the addition of the assumptions described in Exercise 1A.

The Co-op is wants to evaluate financing the expansion using debt in the form of a \$45,000, 5 year bank loan at 7.5% interest beginning in Year 3. This would allow the Co-op to maintain higher cash reserves for returning member equity. Add this loan information to the "Capital Sources & Uses" page (Cells D7:D9).

What are the effects of the loan on the Income Statement and the Cash Flow Statement? How does it affect the Balance Sheet?

____ **The Income Statement shows smaller net incomes because of the increased interest expenses. Patronage allocations are correspondingly smaller. The ending cash positions are better because of the loan. But total net cash flows for Years 3-5 are negative. Net operating income doesn't cover the principle and interest costs of the loan. The impact of the increased debt is reflected in the solvency ratios on the Co-op Financial Ratios worksheet.**_____

Exercise 1C

Save a new version of the worksheet from Exercise 1A that includes the addition of the assumptions described in Exercise 1A, but does not include the Year 3 loan on the Capital Sources and Uses worksheet.

One of the part-time workers is interested in full-time membership as the Co-op expands. The Co-op wants to evaluate the effects bringing on a full-time member, instead of hiring two part-time workers at 20 hours a week. On the Employment worksheet, delete hours and wages Part Time G and H on rows 26S and 27 for Years 3-5. On row 10, for Years 3-5, add another salary, using the values of \$32,000, 33,000, and 34,000. Note that the new member's equity contribution appears under Year 3 on the Capital Sources and Uses worksheet, the Cash Flow Statement, and the Balance Sheet.

What are the effects on the Income Statement and the Cash Flow Statement?

____ **The Income statement shows negative net income values for Years 3-5. The revenue isn't sufficient to cover the net increases in wage, benefits, and payroll expenses. Although the new member contributes a \$6000 equity investment, which helps to offset the costs of expansion in Year 3, the net cash flows for all three years are negative.**_____

Exercise 1D

Save a new version of the worksheet from Exercise 1C that includes the addition of the assumptions described in Exercise 1C.

The Co-op is concerned that finding and keeping good part-time employees will be challenging. It is continuing to explore ways that it could offer membership to the interested part-time worker, who would share in the risks and rewards of ownerships.

What are the effects if the members keep their salaries at the same level for years 3, 4 and 5? What do the Revenue & Cost Metrics show? How do these metrics compare with those in 1C, and with original forecast before the expansion?

_____ **The Income statement shows positive net income values for Years 3-5, even with the expansion. The new member contribution of a \$6000 equity investment helps offsets the costs of expansion in Year 3. Wages, Payroll Taxes, and Benefits are all a smaller percentage of net sales by year 5, compared with the original forecast and with 1C.** _____

What is the effect on patronage allocation and distribution? What questions might be discussed by the members given the salary freeze?

_____ **The Patronage Distribution worksheet shows that each member receives a patronage allocation and distribution in Years 3-5 because the business remains profitable. The allocation and the distribution are less than the salary raises would have been, but the business remains profitable. Members might discuss whether to distribute more than 40% of the annual allocation, or smaller raises. These approaches would need to be balanced against equity reserve and cash flow needs of the Co-op. Because salary increases are a commitment while patronage distribution is driven by profitability, the Co-op has greater flexibility in managing its costs, cash flow, and capital needs.**__

Exercise 2A

Save a new version of the original worksheet, which does not include the expansion assumptions described in 1A.

In this scenario, it is two years later. The Co-op decided not to pursue the expansion in Year 3, and to base their business expectations on the original projections for Years 3-5. Members wanted to prioritize equity accumulation, and were reluctant to take on the risk of expansion.

Actual results for Years 3 and 4 varied from the original projections. Sales for both coffee and food increased 2%, not 3%, over the previous year's levels. The inflation rate for fixed costs came down to 1%, but cost of goods increased by 1%. The Co-op has adjusted its projections for Year 5 using those actuals.

On the Revenue and Cost Assumptions worksheet, change D17:F18 to 2%. Change D9:F9 to 1%. Change D26:F26 to 1%.

What is the net income for Year 3-4 on the Income Statement? Projected for Year 5? What are the impacts of this on the Cash Flow and Balance Sheet?

_____ The Co-op's profitability is declining, and net losses are expected in Year 5 if these trends continue. Operating activities on the Cash Flow statement are positive, but the cash is not sufficient to cover both principal payments on the loan and patronage cash refunds in Year 4 and in Year 5 projections. Member equity would absorb projected losses for Year 5, as shown on the Balance Sheet. .

What do the Revenue and Cost Metrics show? What aspects of this analysis might have implications in a worker co-op?

While the revenue per day has increased, so have expenses as a percentage of revenue. Cost of Goods and Wages as a percentage of sales show the greatest increases. Managing the Cost of Goods is an important business strategy to offset inflation and maintain profitability. Wages would be another logical place to trim costs, given declining profits. This approach would conflict with the interests of the worker as employee, who is concerned with maintaining wages and benefits. The member-owners of the Co-op are both business owners and workers, and must balance both sets of interests._

Exercise 2B

Save 2 new versions of the worksheet from Exercise 2A.

The Co-op looks at its business more closely. To understand the effects of decisions about patronage allocation and distribution, it looks at what might have happened if it had not allocated any patronage to members in Years 3 and 4, versus if it had made only the minimum required cash patronage refund. It also applies those what- assumptions to at Year 5 projections.

On one version, change the assumptions on the Patronage Distribution worksheet to 100% unallocated (D:F2), 0% allocated (D:F3) for Years 3-5. On the second version, leave the original assumptions for unallocated/allocated, but change the distribution percent to 20% for Years 3-5 (D:F5).

What do the financial statements reveal about the effects of these decisions?

If net income before taxes had been 100% unallocated, the increase in taxes was lower than the cash distribution to patrons. More of the net income could be retained, and the cash flow and equity position on the balance sheet is thus stronger.

If the allocation to the patrons had remained at 65%, but the cash patronage refund was only 20%, the net income, cash flow, and balance sheet show improvements over the 100% unallocated option. This option has the lowest level of cash paid out of the earnings of the Co-op, and the highest for equity retained by the Co-op.

What are some of the implications of these income distribution strategies for the Co-op ?

The patronage allocation decisions the Co-op followed for Years 3-4 put more cash in the members' pockets, and left less to be reinvested in the Co-op. The 20% patronage distribution strategy minimizes taxes for the Co-op and leaves more for equity reinvestment. Depending on the patron's individual tax position, the 20% distribution may not cover the incremental income tax from the entire 65% that is allocated to the patron, and for which he/she may be responsible. Retained allocated patron equity accounts protects patron member interests in the case of dissolution, but may be misleading when individual members wish to withdraw from the Co-op. Why?

Exercise 2C

Save a new version of the worksheet from Exercise 2A. Make sure that the Patronage Distribution assumptions are the original 35%/65% split, with 40% distributed as cash.

The Co-op realizes that its success in the first two years has placed pressures on its staffing and existing space, which has not been able to accommodate even the 2% increase in sales without noticeable declines in service quality and experience. The labor market is tight, and it has been difficult to keep its part-time employees. Furthermore, there is a competitor who is looking to expand into the Co-op's service area.

The expansion opportunity next store is still available, and the Co-op would like to explore the option again. The Co-op projects the business impact will be the same as it was the earlier scenario, with many of the same assumptions.

Enter these worksheet changes described in 1A for Year 5, instead of Year 3:

The expansion into the space will cost \$45,000 for leasehold improvements and equipment. Enter the \$45,000 cost to the Capital Sources & Uses page as a Year 5 Asset Purchase (Cell F18). The depreciation schedule is 10 years (Cell F19), shorter than the Initial Equipment/Leasehold Improvements.

After the expansion the Co-op is now 1,200 sq. ft. larger. Adjust this on the "Revenue & Cost Assumptions" page by changing the "Area of Building" (F5) for Year 5 to 3,000 sq. ft.

The Co-op expects a large jump in its growth rates in Year 3 due to more than doubling the gross square footage of the café, but lower growth rates than those currently forecast for Year 4 and Year 5. On the "Revenue & Cost Assumptions" adjust the "Coffee Growth" and "Food Growth" for Year 5 to 35% (Cells F17, F18).

The Co-op estimates it will need to purchase an additional \$6,000 of inventory to support the expansion. On the Capital Sources & Uses page, add \$6,000 under Year 5 (Cell F22) as Initial/Additional Inventory.

Save 2 new versions of the worksheet for 2C that include the above assumptions.

The Co-op will also need to increase its staff to handle the increase in sales. It needs to consider costs, and whether taking on new member is appropriate.

On one version, the Co-op looks at a plan to hire five additional part-time staff at \$10.50/hour, and have all staff work 20 hours a week. On the Employment worksheet, add Part-Time Employees D-H on rows 23-27 by adding \$10.50 as the Hourly Wage in column O, and Hours/Week as 20 in column P. Change Hours/Week to 20 for Part-Time Employees A-C (on rows 20-22) in column P.

In the other version, the Co-op considers the relative benefits of adding a new member and 3 part-time staff. On the Employment worksheet, add Part-Time Employees D-F on rows 23-25 by adding \$10.50 as the Hourly Wage in column O, and Hours/Week as 20 in column P. Change Hours/Week to 20 for Part-Time Employees A-C (on rows 20-22) in column P. Add Member G (row 10) by adding \$34,000 in salary in column N.

What do the financial statements and Revenue and Cost Metrics worksheet indicate?

The Co-op has the equity cash reserves to pay for the fixed costs of the expansion. If the Co-op uses all part-time employees to meet the increased demand from the expansion, the net cash flow from operating activities shows that operating costs for the larger operation are covered, and also sufficient to also cover the annual principal loan payment. The net income, while small, reverses the downward trend shown in 2A and restores the Co-op to profitability. If the Co-op adds a new member and fewer part-time employees, the larger wage and benefit cost increases are enough to make the net cash flows from operations activities negative. Wages and benefits as a percentage of revenue have increased just enough with this option to make the slim net income percent negative.

What governance issues might the Co-op consider when weighing these two options?

The more profitable option using part-time employees means that there are almost as many employees as owners. If the Co-op is organized around the concept of a democratically organized and fully participatory workplace, it needs to consider how it would manage this change.

Exercise 2C-extended

Continue using the 2 versions created for exercise 2C.

In the midst of these discussions about the expansion and hiring decisions, two members decide that they want to resign membership from the Co-op at the end of Year 4. The year-end statements that the Co-op has issued to members at the end of Year 4 show that the total accumulated retained equity allocated to each member is \$7903. Both members request that 100% of their membership equity contribution, and their retained patronage allocations, be returned in Year 5.

The Co-op wants to evaluate the financial impact of paying out the full amount of the recorded retained member equity to both members at the end of Year 5.

On the Patronage Distribution worksheet in both versions, under the Member Equity Payout section, enter 100% in cells I20 and I22.

What impacts of the 100% payout in the two sets of financial reports?

The net cash flow from financing activities shows the net effect of member equity payouts on the Member Equity Contributions/Payouts (F27). The initial equity contribution from the new member

offsets the equity payouts, but not enough to make it cash neutral. With the all part-time employee option, the ending cash position if the payout was made leaves very little cash reserves. In the new member option, the ending cash position is negative: the Co-op doesn't have the cash to cover both its operating loss and the member equity payout.

Look at the Balance Sheet for both versions. The projected operating loss in the new member version is applied against the Co-op's equity. What additional decisions would the Board need to make when the Co-op incurs a loss? How might those decisions affect decisions about member equity payouts? Unallocated/allocation decisions?

The Board needs to decide whether the loss would be absorbed by the unallocated retained earnings, or by the retained earnings allocated to Members. If some or all of the loss was applied to member equity, any payout in subsequent years might be less. Having larger percentages of unallocated equity creates a larger buffer so that losses that would not be absorbed by recorded member equity.