Agricultural Marketing Resource Center
Value-added Agriculture Profile
Iowa State University

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Lesson 8: Servicing the Value-Added Business Debt

Funding was provided by the Agricultural Marketing Resource Center.

OBJECTIVES:

After completion of this unit, the students will be able to:

1. Comprehend and estimate the amount of debt needed to achieve the firm's goals by using the business plan and long-term goals of the business.
2. Perform the needed financial policy decisions for servicing long-term and short-term debt that will keep the business viable.
3. Determine the business's ability to carry and pay a certain level of debt.

MATERIALS/REFERENCES NEEDED:

- Cost of Capital for Agricultural Cooperatives, USDA, Rural Business/Cooperative.
- Larson, Paul, The Montana Entrepreneur's Guide, University Press, 1719 Dearborn, Missoula, MT 59801, 1995.
- Analyzing a Cooperative Business, CoBank, National Bank for Cooperatives.
- A copy of the latest annual report of a local cooperative to be used for numerical illustrations.

VISUAL MASTERS (VM):

See V-A Lesson 08.ppt

VM-1: Table 1: Sample Cash Flow Statement (.pdf)
VM-2: Table 2: Summary of Key Financial Ratios (.pdf)
VM-3: Operating Statement (.pdf)
VM-4: Balance Sheet (.pdf)

INTEREST APPROACH:

This lesson offers instructors a chance to discuss servicing and managing debt without making it personal. However, to begin this lesson, it is suggested that an instructor consider sharing with students a step-by-step process for managing debt. Debt is something almost everyone will incur. It is how we manage and service our debt that makes a difference. Ask students: How many of you are now in debt? How many of you expect to be in the future? What are some principles that everyone should know about handling (managing) debt? How are these personal principles different from principles which apply to managing the debt of a business someone owns? The following are some standard steps for managing debt:

Step 1: Assess your situation
Does your credit-card balance exceed the national debt of Cost Rica? What would a lender think of your debt situation? Have you figured out how you got into this mess in the first place? First, find out if you're carrying too much debt.

Step 2: Create a budget
Effective debt management begins by taking a critical look at how you spend your money, then setting priorities. A budget can help you do both. Create a simple monthly budget and save it. You can access your budget from anywhere and see how your actual spending compares with budgeted amounts.

Step 3: Reduce your expenses
If there's little or nothing left over at the end of the month, you need to find ways to cut your expenses.

Step 4: Consider consolidating your debts
Debt consolidation offers you the chance to lower your monthly payments, but there are drawbacks, and you could end up in worse shape financially if you're not careful. Use our calculator to decide if you'd come out ahead financially by consolidating your debts with one lender.

Step 5: Talk to a debt counselor
There are several nonprofit agencies devoted to helping people cope with an overload of debt. They're generally funded by creditors, so don't expect them to advocate bankruptcy, but they're basically on your side.

Step 6: Work to repair your credit
As you work to get your finances in order, make regular checks on your credit report to be sure that a creditor doesn't say something about you that's inaccurate or out of context. You can order a credit report online from Equifax, one of the Big Three credit bureaus.

Long-term credit (debt) is the usual way of acquiring part of the money to finance land, buildings and equipment. The period of the fixed asset loan depends on a number of factors, but it is usually related to the facility’s projected life.

Short-term credit (debt) is normally used as operating capital for such items as supplies, utilities, wages, raw products, rent and other related items.

It is impossible to make prudent decisions in a value-added business without understanding the essentials of business finance and debt management. Financial management is where sound business principles are applied. These principles provide some sources of servicing credit needs that are not available to other businesses.

Value-added agriculture businesses need funds just like any other business. Funds are needed to purchase land, buildings, equipment, inventory or other assets and to pay operating expenses or meet unforeseen financial contingencies. Sources of funds are as widely varied as in any business. Value-added businesses borrow money just like any other business and the amount depends on how much risk (equity) capital owners initially invest, cash flow, quality of management and degree of risk in the venture. Understanding the basics of servicing debt before starting a business is a good way to get a “jump start” on success!

QUESTIONS:

1. What is short-term debt?

Answer:
Short-term debt is used to finance assets that are liquidated in the short term (usually one year maximum). Short-term loans are usually used to finance inventory, accounts receivable and other situations where cash is needed for only a short period of time. Short-term debt can provide funds for working capital.

2. What is long-term debt?

Answer:
Long-term debt is used to purchase real property such as land, buildings, equipment and other assets that generally have a long life. Long-term debt is usually paid off over long periods of time (several years). Long-term debt (purchase of physical assets) is important for business expansion and growth.

3. What are the advantages and disadvantages of each method of servicing long-term and short-term debt?

Answer:

A. Direct Investment by owners.
B. Retained patronage refunds.
C. Per-unit capital retains.
D. Unallocated equity.
E. Farm Credit Services—an element of the farm credit system that provides money for farmer businesses.
F. USDA, Rural Development Service
G. Credit Unions.
H. Commercial Banks
I. Other sources.

4. Why debt and debt management are important tools for the value-added business?

Answer:

A. Financing is needed to start most businesses.
B. Financing is needed for day to day business transactions (working capital).
C. Financing is needed for purchasing equipment.
D. Financing is needed to purchase land and buildings.

5. How do you choose among business credit sources?

Answer:

A. <u>Credit cards</u> -- The use of credit cards and lines of credit by small businesses has increased significantly since 1993. For the first time, small business owners' use of business credit cards (48.1%) has eclipsed their use of personal cards (46.7%) and is expected to grow. The majority (74%) of small business owners use credit cards as 'charge' cards for transactional purposes and pay their balances in full each month. Approximately one-in-four use credit cards as a source of interim or long-term financing, incurring interest costs.

B. Equity Financing -- Small business owners when weighing debt (bank) and equity financing options often opt for equity financing because they have concerns about either qualifying for a loan or having to channel too much of their profits into repaying the loan. Investors and partners can provide equity financing, and they generally expect to profit from their investments. No debt payments means more cash on hand. Moreover, if no profit materializes, you aren't obligated to pay back equity contributions. The major drawback of equity financing is that you are no longer the full owner of a business once you have other financial contributors who expect a share. As such, you will be relinquishing not just financial control, but will no longer be the sole arbiter of the business's creative and strategic direction.
C. Bank loans -- Business owners may have some trepidation about borrowing from a financial institution, as it means relinquishing some cash profits. But it could be a good option so long as you expect to have sufficient cash flow to pay back the loans, plus interest. The major benefit for debt financing, unlike with equity financing, you'll retain full ownership of your business. The interest on business loans is also tax-deductible, and you'll build your credit. Small businesses frequently take bank loans.
D. Mixing debt and equity financing -- Most businesses have a mix of debt and equity financing. Too little equity could prevent you from securing or repaying loans, while carrying little or no debt could indicate that you are too risk-averse, and that your business might not grow as a result. Check with your industry association to find the average debt-to-equity ratio for your sector.
E. Farm Credit Services (FCS) -- FCS provides financial services to agricultural and rural communities. FCS is a network of independently owned and operated credit and financial services institutions that serve farmers, ranchers, agribusinesses of every size and income range across the country as well as those that desire country living. FCS is focused expressly on agriculture and the agency is committed to helping rural entrepreneurs achieve their unique financial goals. Farm Credit consists of five Farm Credit Banks that provide funding and affiliated services to approximately 100 locally owned Farm Credit associations and numerous cooperatives nationwide. The fundamental purpose of this network of Government-sponsored enterprises is to provide American Agriculture with a source of sound, dependable credit at competitive rates of interest. Farm Credit provides credit and related services to farmers, ranchers, producers and harvesters of aquatic products, rural homeowners, certain farm-related businesses, agricultural and aquatic cooperatives, rural utilities, and to certain foreign or domestic entities in connection with international agricultural credit transactions.
F. USDA, Rural Development Service -- will provide program assistance in many ways, including direct or guaranteed loans, grants, technical assistance, research and educational materials.
G. Credit Unions -- One of their primary responsibilities is to provide capital for members' special needs. Depending upon the credit need they are a possible source of financial assistance.
H. Commercial Banks -- are always available and depending upon the circumstance may be the appropriate source of financing.

I. Others -- Potential for other local, regional and national sources of capital may be available to businesses as times and conditions change

5. How do you determine a value-added business's ability to service credit?

Answer:

A. Determining the current financial situation of the business is the first step in determining its ability to service debt or add more debt. An operating statement and a balance sheet are two documents that are useful to start analyzing the business financial situation. In established businesses, changes in financial position (comparing one year to another) are extremely useful.

1. An operating statement shows operating results for a certain period of time, usually a month or a year. (see VM3)
2. A balance sheet shows financial condition of a business at a given moment in time. (see VM4)
3. A Statement of Financial Changes compares financial resources provided and used from one year to the next. Technically, the Statement of Changes summarizes the changes between two balance sheets that are recorded in two separate moments of time.

To effectively analyze financial statements they must be reduced to data that can be compared to historical results and/or similar kinds of business or industry standards. Because of differences in size and volume in comparing one business to another, to itself, and to a desired goal, RATIOS are quite frequently used. Ratios are simply relationships. Ratios, stated in accounting terminology, compare similar amounts within a balance sheet, one to another; or they describe the relationship of operating statement amounts to each other; or they describe any combination of two things to one another. Due to the nature of ratios, their usage allows for easy comparison from one time to another in the same business or from one business to another. They eliminate size differences when comparing a company with $10,000,000 in sales to one with $50,000,000 in sales, if, and only if, the companies have a similar mix of sales. For example: successful, financially strong grain marketing businesses do have different ratios than successful, financially strong petroleum businesses.

Ratios are generally expressed as "something to something;" for example "Term Debt to Fixed Assets." The ratio asks, "What is the relationship between term debt and fixed assets?" or how many dollars (or parts of a dollar) of term debt are there for every dollar of fixed assets. Some financial indicators are traditionally displayed as true ratios (1:1 for example) while others are traditionally shown as percentages.

No one financial indicator by itself will provide adequate information by which to judge a business's financial health. It is important to examine and look at them in groups and over time. *Analysis* includes examination and testing; *interpretation* simply means understanding what you see; and *evaluation* is making judgments and decisions about possible courses of action based on analysis and interpretation.

B. **Leverage ratios** are useful in determining if the business is capable of servicing its debt obligations. Depending on the situation, the manager and/or owner may select some other ratios. For total analysis, CoBank suggests 12 financial indicators (ratios).

1. Debt to Total Assets--the debt to total assets ratio is computed by dividing total debt by total assets (total debt/total assets). Dividing the total debt by total assets reveals the proportion of total assets financed by total debt. Using the attached balance sheet that number is 0.757, less than one, or debt is 75% of total assets. Used in conjunction with return on equity, this calculation indicates the degree of ease or difficulty the business might be in if it has a high debt ratio compared to net margins. This ratio is commonly used by all groups analyzing a firm's financial statement.

2. Long-Term Debt to Stockholders' Equity minus Regional Investments. This is computed by dividing long-term debt by the stockholders equity minus regional investment (total long-term debt/total members' equity–regional investment). This measures "debt capital" in relationship to "risk" capital.

Guideline: .50:1 (no more than 50 cents of long-term debt for each $1 in local members' equity). In our illustration it is 0.83, which is above the 0.5 guideline.

Ways to improve if needed: Reduce long-term debt by disposing of unproductive assets using proceeds to liquidate debt, accelerating payments on long-term loan. Improve local equity by generating higher levels of local savings, slowing down equity retirement programs, selling additional capital stock or retain a greater portion of allocated savings.

3. Term Debt to Fixed Assets. This is computed by dividing total long-term debt by net fixed assets (total long-term debt/net fixed assets). This is a measurement of the relationship between long-term debt and fixed assets. It indicates whether term debt is used to finance fixed assets or other assets (working capital) and if long-term debt has been repaid in accordance with the expected life of fixed assets.

C. **Liquidity Ratio** or current ratio.

1. Current assets to current liabilities -- is computed by dividing the current assets by the current liabilities (current assets/current liabilities). This estimate measures the ability of the business to meet its short term obligations in a timely manner.

Guideline: 1.80:1 (or $1.80 in current assets for each dollar in current liabilities). Our example exceeds this guideline, which is a positive for the business.

Ways to improve if needed: Increase current assets by increasing local savings, selling additional capital stock, borrowing additional long-term debt or disposing of unproductive fixed assets and retaining proceeds. Reduce current liabilities by retaining a greater portion of allocated savings (reducing the cash portion)

2. Current assets minus inventory to current liabilities – is computed by dividing current assets minus inventory by the current liabilities (current assets-inventory/current liabilities).

This determines the extent to which a business can meet its short-term obligations without relying on the sale of inventory.

3. Another useful ratio is the return on equity. This is, the net margin divided by the stockholders equity (net margin/stockholders equity) equals the return on equity. Using the sample operating statement and balance sheet this is $12,500 divided by $75,000 or 16.6%.

D. **Summary of Key Financial Ratios**: Table 2 is a summary of 10 financial indicators, some of which have been included in B and C above. As indicated earlier there are other ratios but if the management has an understanding of the ones presented in this lesson, it will enhance their financial policy making decisions.

E. **Cash Flow**: using a Cash Flow Statement is important when planning for the servicing of long-term debt obligations, especially in highly leveraged businesses. For a new business, not having the cash to make interest and principal payments on loans can lead to failure. Cash flow transcends all areas of business, accounts receivable collection, payments to vendors, timing of purchases and subsequent sales of inventory, etc.

The cash flow statement measures the cash that comes in (cash inflows or dollars available) and that which flows out (cash outflows or dollars used) of a business. Your accountant can provide you with a cash flow for your business.

A statement of cash flows is useful because it provides answers to the following simple but important questions about the business.

1. Where did the cash come from throughout the period? (year, quarter, month).
2. What was the cash used for during the period?
3. What was the change in cash balance during the period?

Unlike the balance sheet and the operating statement, the cash flow statement provides a summary of all the cash operating, investing and financing activities. Examples of transactions which fall into each of the categories of activities are:

Operating

Cash Inflows

From Sales of goods or services

From returns on investments (dividends)

Cash Outflows

To vendors for inventory

To employees for labor

To lenders for interest on loans

Investing

Cash Inflows

From sale of fixed assets (property, plan and equipment)

From collection of outstanding debts

Cash Outflows

To purchase fixed assets

To make loans to members

Financing

Cash Inflows

From retained patronage refunds

Loans from financial institutions

Cash Outflows

To members as dividends

To pay loans

The cash flow statement is helpful in determining the ability to service existing and future credit. By using a trend analysis the business can use historical cash flow statements to make projected future cash flow. This projection coupled with the analysis of the operating statement and the Balance sheet provides some of the basic information needed in making a determination of the business's ability to furnish current debt and perhaps leverage more debt.

An example of the information available in a cash flow statement is in Table1, a sample cash flow statement. (VM1)

6. What is Opportunity Cost and its use in estimating Credit Availability?

Answer:

<u>The opportunity cost of funds approach relates the cost of capital to the rates of return from alternative uses of capital</u>. The focus is on the expected (or required) rates of return from alternative investments which reflect the degree of risk involved.

A. When analyzing the need for a new loan or capital infusion into the business, management needs to determine what is a **needed rate of return** on the investment before seeking funding for the effort or the project.

The cost of equity capital is in actuality the <u>opportunity cost of funds</u> to business owners. The cost of capital is generally related to alternative uses of capital (investment alternatives of the investor) and not to the source of capital (credit).

The opportunity cost approach, to determining the cost of capital, is important because it emphasizes the characteristics of the asset and the uncertainty of the net returns of the investment over the life of the asset.

B. When evaluating the need for and expected cost of added equity capital, management needs to determine an **acceptable rate of return** (standard) on business investments (a standard of 15 to 25 percent is common for most firms). In other words they have estimated what the business's opportunity costs are for capital. Management can establish this in many different ways but once it is established implementation is rather straight-forward. Once the acceptable rate of return is established it is compared with the calculated internal rates of return of the proposed investments. If the estimated rate of return is below the previously *set standard* then it probably is a poor investment. Acceptable projects have an estimated return greater than the previously *set standard*. The advantage of this approach is that it is relatively easy to implement and it allows for other criteria to enter into the final decision concerning which projects are preferred.

The chief limitation of the simple rate-of-return method is that it fails to consider the timing of cash flows.

7. What is break-even analysis?

Answer:

A. Breakeven analysis tells the business what level of sales are needed in order to pay expenses. It is the point where total revenues equal total expenses. At the breakeven point the business is not showing any income, rather it is just covering expenses. When calculating the breakeven point, remember it is only an estimate. It does provide a ballpark estimate of whether or not the business will be profitable at a given sales level. It is another helpful tool when planning an expansion or change in the business.

B. It is possible to calculate the breakeven point for either a month's or a year's time. If it is a seasonal business it is better to do it on annual basis. If the business is not seasonal then a monthly breakeven may be easier to interpret.

C. The first step in of the breakeven analysis is to label all of your expenses as either fixed or variable or a combination of the two.

Fixed costs are expenses that tend not to change with the level of sales of the business. For example rent and insurance costs do not generally fluctuate with sales. Whether you have a good month or bad month, these areas are not affected.

Variable costs are those expenses that fluctuate directly with sales. For example sales commissions and costs of the goods sold vary with the volume. Cost increase depending on volume.

Some operating costs are a combination of fixed and variable. Utilities and payroll are examples that could be a combination of fixed and variable cost. For example: you have to spend a certain amount of electricity to keep the lights on and the building heated but, increased volume may require more heat, light, and power. If employees are guaranteed a base that is a fixed cost; plus a commission on volume of sales, which is a variable cost, then obviously you have a combination of fixed and variable costs based on the volume of business.

D. The breakeven formula is:

BEP = FC/(1-VC)

BEP is the breakeven point in dollars
FC is total fixed costs
VC is variable costs expressed decimal form

Example:
Total fixed costs = $25,000
Cost of product averages 40% of sales = 0.40
Cost of direct labor = 20% of sales = 0.20

BEP = 25000/ 1- 0.60 = 25000/ 0.4 = $62,500

Given these costs, the BEP is $62,500 in sales

At this point the business is only meeting expenses; it needs to be above this level to generate added revenue. These projections are estimates based on current information. Time and conditions do cause change. Management needs to decide how far above BEP estimate they need to be before they are willing to assume the risk.

Breakeven analysis lets you know how much you have to sell in order to pay your bills. It also tells you what profit or loss you would have at different sales levels. It is only a general estimate. But it does give you an idea of the sales volume you need to cover costs.

8. How do you get ready for the Credit (Loan) request?

Answer:

A. In summary, when a business is considering the need for increasing its' financial resources there are several questions that should be asked and carefully answered.

1. Are additional funds really needed in the business?
2. Why are the additional funds needed?
3. What increase in revenue and/or profit will be generated by added funds?
4. When will these added funds be needed?
5. For how long a period will these added funds be needed?
6. How much is needed in the way of added additional financial resources?
7. Where can these additional funds be obtained?
8. How much will these additional funds cost the business?
9. If the funds are borrowed, how will the indebtedness be repaid?

B. Assuming you have answered the above questions to your satisfaction then get ready to seek out funding. Lending sources will be more receptive to working with the business if you can present historical evidence of performance, trends, and future plans. Develop this information and organize it in the following suggested manner:

1. balance sheet and profit and loss statements for at least the last three years.
2. trends in sales, expenses, profits, etc. (ratios are helpful here)
3. description of the market (customers, products and services, supplies)
4. information about working capital, aging accounts receivable , turnover, inventory, (again ratio analysis is helpful)
5. credit references, and background of the management team (manager and the board of directors in the case of a cooperative business)
6. evidence of planning for the future; that is, cash budget, expansion, pro forma financial statements (an updated Business Plan is useful)
7. history of the business

Always be candid and honest. Facts should not be withheld, even those that can be damaging, since they will likely surface anyway. A simple test is for managers to ask themselves, “If we were presented with this information, would we make a loan on this basis?”

CONCLUSION

Servicing debt is critical to every business and everyone who participates in our economy. A business has a better chance to succeed if its owners manage and service debt. Owing no debt is a great goal for businesses and individuals, but few businesses or individuals start without incurring debt.