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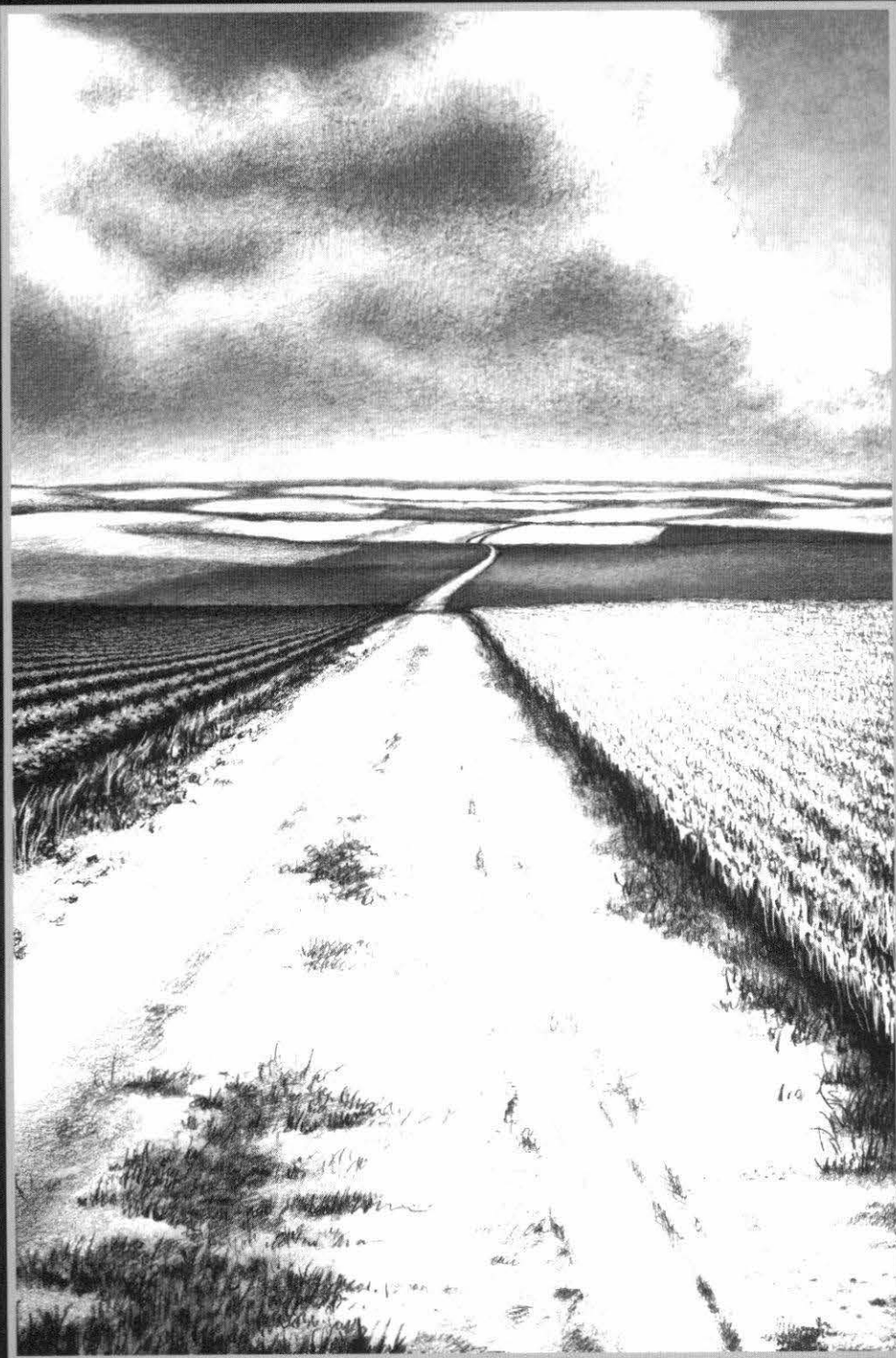
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Developing a Longer Range Strategic Farm Business Plan

Part I in the **6** part series:

Business Management for Farmers



Acknowledgments

This publication is a product of the North Central Regional (NCR) Cooperative Extension Services of:

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NCR-610A
May 1999

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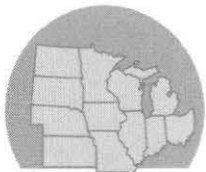
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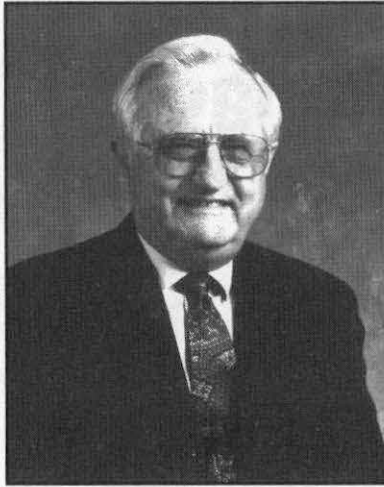
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About the author

Kenneth H. Thomas was an extension economist in Farm Management at the University of Minnesota from 1959 to 1992. That this was a very dynamic period in U.S. agriculture is reflected in the wide range of management issues he worked on and wrote about.

During the 1960s and early 1970s he was very involved in helping farm families develop longer range plans for their businesses. In 1973, he coauthored a North Central Region publication that integrated profitability and financial soundness aspects into business planning and analysis.

Beginning in the mid-1970s he began working in and writing about land rental arrangements and the buying and selling of farmland. He also began working in the areas of getting started in farming, business arrangements, and farm estate planning and transfers, coauthoring four regional bulletins on these topics.

As businesses became larger, he began working on personnel management issues and coauthored a regional bulletin on farm personnel management. He also team-taught an agricultural law course at the University of Minnesota, which led to the inclusion of a number of the legal aspects in this series.

As a capstone of his career and as a transition into retirement, he began writing this six-part series, *Business Management for Farmers*. It is his hope that this six year "labor of love" will prove helpful to present and future generations of farmers.

Table of contents

Preface	vii
----------------	------------

Longer range business planning - an introduction	1
---	----------

1

The U.S. farming industry: A perspective	2
The present diversity of the U.S. farming industry	2
Emerging pattern—the labor and capital leagues	3
More changes to come	4
Longer range business planning: A road map and overview	6
Phase 1: Evaluating the present business situation; setting tentative goals	6
Phase 2: Analyzing opportunities; selecting a longer range plan	6
Phases 3, 4 and 5: Transition planning/acceptance/implementation	7
Overview and use of the FINPACK system	8
Design, purpose and general format of the FINPACK system	8
FINAN—the financial analysis component	8
FINLRB and FINFLO—the financial planning components	9

Evaluating the present business situation; setting goals	11
---	-----------

2

Assessing past business performance	11
FINAN input requirements	11
FINAN output: Accuracy checks; the income statement	12
FINAN output: Profitability measures; their use and interpretation	14
FINAN output: Liquidity measures, interpretation	17
FINAN output: Solvency measures, interpretation	18
Overall results: Strengths and weaknesses; general direction	19
Assessing the future business environment	20
Expectations about farm prices	20
Expectations about production levels and farm costs	20
Comparative advantage of present business/enterprises	20
Changes in government programs and regulations	20
Overall evaluation: Threats and opportunities	21
Determining the availability of resources	21
The quantity and quality of land	21
The quantity and quality of labor	21
Available working assets and capital position	21
Personal management capacity	22
Institutional factors affecting resource availability and use	22
Overall evaluation of the resource situation	22
Setting tentative life-style and business goals	22
Goal setting: Some basic concepts	23
Stage 1. Establish a tentative set of personal/family life-style goals	24
Stage 2. Establish a tentative set of business and career goals	25
Stage 3. Reconcile major life-style and business goal conflicts	25
Where to from here?	26
Option 1. Continue present business as is	26
Option 2. Make improvements in present business	26
Option 3. Make more substantial business changes	26
Option 4. Reorganize the financially stressed business	26

3

Developing a longer range business plan	31
Improving business profitability: Some options	32
Improving profitability of present business (adjustment route 2)	32
Improving profitability through better management of overhead costs	32
Improving profitability through more substantial business changes (adjustment route 3)	34
Improving financial soundness: Some options	38
Improving financial liquidity	38
Improving financial solvency	40
Improving financial soundness through better risk management	40
Analyzing selected business adjustments	41
Select the most promising alternatives	41
Using FINLRB to analyze alternatives	42
The FINLRB output; its interpretation	44
Selecting a tentative longer range plan	46

4

Developing a workable transition plan	49
Phase 3: Developing a workable transition plan	49
Some basics	49
Developing a workable transition plan using FINFLO	50
FINFLO Output: Other information and options	52
Phase 4: Gaining acceptance of the plan; finalizing it	52
Gaining acceptance from lenders and other resource suppliers	52
Checking plans with other outside parties	53
Informing/involving family members, other affected parties	53
Finalizing plans	53
Phase 5: Preparing to implement the transition plan—a checklist	54
Securing funding; signing agreements	54
Sorting out roles and tasks; meeting staffing needs	54
Developing/updating business contracts	54
Developing/updating business arrangements	55
Updating the accounting/information system	55
Developing/updating insurance programs	55
Developing/updating retirement and estate plans	55

5

Managing the financially stressed farm business	57
Document and analyze the financial situation	57
Step 1: Document the present financial situation	57
Step 2: Identify and analyze restructuring options	57
Tax considerations when making adjustments outside of bankruptcy	59
Debt forgiveness and asset liquidations: Business solvent	59
Debt forgiveness and asset liquidations: Business insolvent	59
The role of bankruptcy when making financial adjustments	60
Bankruptcy types—a brief look	60
Bankruptcy: Some key provisions for the farmer/borrower	60
Income taxes and liquidations under bankruptcy protection	62
Negotiating with lenders	63
Conclusions: The need for good help	63

Preface

Management has no choice but to anticipate the future, to attempt to mold it, and to balance short-range and long-range goals. It is not given to mortals to do well any of these things. But lacking divine guidance, management must make sure that these difficult responsibilities are not overlooked or neglected, but taken care of as well as is humanly possible.¹

About the series

This publication is the first in a planned six-part series written for and dedicated to farm operators and managers in the U.S. Parts I, II, III and IV deal with managing an established farm business. Part V focuses on the issue of getting established in farming, while Part VI deals with planning the late career/retirement years. The series should prove useful not only to managers, but to educators, lenders, consultants and others, including persons considering farming as a career. **A list of chapter headings for parts II-VI is on the inside back cover of this publication.**

Part I, *Developing a Longer Range Strategic Farm Business Plan*, focuses on developing a longer range strategic plan for a business. As Drucker¹ suggests (see above quote) this is not an easy task, but one that must be done periodically. And, as someone else has said, too often managers get so focused on “climbing the ladder of success” that they don’t take time to see if their ladder is leaning against the right “wall.” And, even if it is leaning against the right wall, they may be using the wrong kind or size of “ladder.”

Chapter 1 provides an introduction to the planning process. It includes a discussion of the changes and challenges faced by today’s farm operators and managers. This is followed by a presentation of a “road map” and overview of the business planning process. The chapter closes with an overview of the FINPACK system, which will be used to illustrate the analysis and planning process.

Chapter 2 focuses on evaluating a present business situation and setting tentative life-style and business goals. Chapter 3 deals with identifying and analyzing longer range farming opportunities and the selection of a tentative longer range plan. Chapter 4 shows how to develop a workable transition plan, gain acceptance of this plan, and prepare to implement it.

Chapter 5 focuses on the restructuring and/or liquidation of a financially stressed farm business. A manager in this position may want to read Chapter 5 first and refer to earlier chapters as appropriate.

Part II, *Managing the Overall Ongoing Business*, is divided into three sections. Section I focuses on people skills and legal aspects. Section II discusses financial management aspects including financial planning, security agreements, income tax management, and the use of insurance. Section III discusses the development and/or updating of business arrangements and retirement and estate plans.

Part III, *Managing Crop and Livestock Systems*, discusses production and marketing aspects and the use of production contracts. Part IV, *Acquiring and Managing Resources*, focuses on the acquisition of land via lease and purchase; the management of machinery systems; and personnel planning and management.

1. Peter F. Drucker, *Management Tasks, Responsibilities and Practices*, Harper & Row, New York, 1974, p. 121.

Part V, *Getting Established In Farming*, discusses whether one should consider farming as a career, whether to farm together; starting farming via the multi-owner/operator route or partly or mostly on one's own. Part VI, *Planning the Late-Career, Retirement Years*, focuses on life-style planning, financial security aspects and the transfer of farm assets.

A bit of history and some acknowledgments

During the past 40 years, the extension farm management staff at the University of Minnesota has placed major emphasis on longer range farm planning. In the middle 1950s, Ermond Hartmans, Hal Routhe, and Paul Hasbargen developed the Farm Possibility Worksheet, which placed major emphasis on improved production practices and enterprise selection.

By the mid 1960s, business growth and financial management emerged as additional issues in longer range planning. In the academic year 1969-70, the author spent a year of study at Purdue University, which resulted in the North Central Regional Extension Publication 34, *Managing Your Farm Financial Future*. (It was coauthored with the late Richard Weigle of the University of Wisconsin and Richard Hawkins of the University of Minnesota. This publication was later revised, with Professor Robert Luening, replacing Weigle as one of the coauthors.) Part I of this series is intended to replace/update NCR-34.

The worksheet methodology used in NCR-34 for farm planning and analysis became the basis for the development of the computerized FINPACK system. FINPACK, which has been further developed by the Center for Farm Financial Management at the University of Minnesota, is used in this part of the series to illustrate business analysis and planning activities.

The author is particularly indebted to the Center for Farm Financial Management at the University of Minnesota for permission to make extensive use of their FINPACK system in this part and for providing secretarial support for this project. Special thanks also to Professor Emeritus, Richard O. Hawkins, former director of the Center, for his reviews and suggestions.

Thanks also to Paul Brutlag, attorney/farm operator of Elbow Lake, Minnesota, for his help in couching Chapter 5 in a management/legal framework. Thanks to Phillip L. Kunkel, attorney, of St. Cloud, Minnesota, for permission to adapt portions of his fact sheets related to financially stressed business situations.

Finally, the author wishes to thank the North Central Farm Management Extension Committee for their support of this series. Thanks also to the staff at MidWest Plan Service for their expertise in the editing and designing of this publication.



Longer range business planning

1

- The U.S. farming industry: A perspective
- Longer range business planning: A road map and overview
- Overview and use of the FINPACK system



*Two roads diverged in a wood, and I
-I took the one less traveled by, And
that has made all the difference.¹*

Farming is a dynamic, highly competitive industry. As a result, it is important that farm operators/managers continually monitor factors that can affect their business. In addition to this vigilance, developing a longer range strategic business plan helps to clarify needs, goals and desires as well as keep the business in line with industry demands.

Without a strategic plan, the fate of a business is left to chance. Stephen Covey, in his acclaimed book, *The 7 Habits of Highly Effective People*², maintains that to move from a position of dependence upon others or on life's happenings, to a position of independence involves three basic habits.

Being proactive. Proactive people don't just let things happen. They are always exploring their situation, looking for an opportunity to benefit themselves or their businesses.

Beginning with the end in mind. Covey notes that all things are (or should be) created twice. There is a mental or "on-paper"

first creation (Habit 2) followed by a physical "second" creation (Habit 3).

Getting the job done. This includes putting first things first or establishing priorities. This also involves following the plan to realize its accomplishment in real terms of satisfaction, income, security, a legacy for family and other such values.

This chapter introduces the longer range business planning process, or Covey's first two habits. The chapter first describes the diverse, rapidly changing nature of the farming industry. It then presents a "road map" and overview of the steps involved in business planning. The chapter closes with an overview of the FINPACK planning and analysis system, which will be used to illustrate various aspects of the planning process.

1. Robert Frost, *The Poetry of Robert Frost*, Holt, Rinehart and Winston, 1969, p. 105.

2. Stephen R. Covey, *The 7 Habits of Highly Effective People; Powerful Lessons In Personal Changes*, A Fireside Book, Simon and Schuster, New York, 1989, p. 51.

The U.S. farming industry: A perspective

Many statistics could be used to illustrate that the U.S. farming industry is very diverse and subject to rapid, continuing change. Here, a broad view of these changes and their impact or challenge to farm business managers will be presented.

The present diversity of the U.S. farming industry

As shown in Table 1-1, in 1997 about three-fourths of the 2,057,910 farms in the U.S. were best characterized as "hobby" or "small part-time" farm situations. They produced 11% of the total U.S. gross farm income, while off-farm income often had to be used to cover modest yearly losses of the typical farm unit in this category, particularly those farms grossing less than \$20,000. (The 1997 report did not include an estimate of off-farm income per family. Thus, information from a 1990 report was used.) Farm numbers in this category have declined by about 50% over the past two decades. Looking to the future, the number of these types of farms will likely continue to decrease as it becomes increasingly difficult to operate at a profit at this size. Also, as each generation passes, fewer and fewer people will have been raised on a farm. As a result, they will not likely have a strong desire to

return to, or remain in the countryside, and be engaged in farming "as the way of life they remembered as a youth."

In 1997, the "dual career" and "small-sized" commercial farm group represented about 9% of U.S. farms and produced about 9% of gross farm income. In 1990, off-farm income provided about half of the net income of the typical family in the group. Most of these farms would be classed as part-time, dual career farms, though those with gross incomes above \$75,000 may actually be more aptly referred to as small, full-time commercial farms.

The other major groupings in Table 1-1 illustrate the tremendous range of size that exists even among mid-sized to super firm-sized full-time commercial farms. In total, these farms accounted for only about 17% of U.S. farms, but produced about 80% of total gross farm income. Of special note is the fact that the so-called "super firms" represented less than 1% of the farms, but produced about 30% of total gross farm income. In 1990, off-farm income per farm was about the same among this full-time commercial farm grouping, but this represented only 2% to 20% of their total net income.

Another feature of present day farming is the tremendous variation in the financial

Table 1-1. Selected characteristics of U.S. farms, by size, 1997.

Item	Way of life/ part-time farms		Full-time commercial farms			
	Hobby/small part-time	Dual career	Small- sized	Moderate- sized	Large-sized	Super firm
Gross farm income	Less than \$50,000	\$50,000/ 99,999	\$100,000/ 249,999	\$250,000/ 499,999	\$500,000/ 999,999	\$1,000,000 and over
No. of farms (000)	1,527	188	207	83	35	19
Percent Total farms	74.2	9.1	10.1	4.0	1.7	0.9
Pct. Total gross cash income	11.0	9.1	19.1	15.9	13.7	31.2
Net cash income/farm	\$834	\$35,227	\$58,947	\$116,644	\$285,907	\$1,123,721
Off-farm income/family (1990)	\$34,634	\$25,335	\$18,096	\$27,679	\$25,916	\$28,472
Pct. total inc. from off-farm (1990)	96	49	20	15	9.5	2.3

Source: Farm Structure and Performance Branch, Economic Research Service, USDA.

*The names used to describe farms in the various income categories are those of the author.

Table 1-2. Comparison of profitability, liquidity and solvency of average, low and high earnings farms, Southwest Minnesota, 1997.

	Average of all farms	Average for low 20%	Average for high 20%
Number of farms	208	42	42
Gross cash farm income	\$359,710	\$269,007	\$584,737
Profitability (market basis)			
Net farm income	\$66,039	\$4,179	\$133,364
Labor and management earnings	\$41,297	-\$10,164	\$92,808
Rate of return on assets	7.1%	1.3%	10.1%
Liquidity (accrual basis)			
Cash expense as pct. of income	79%	98%	72%
Interest as a percent of income	6%	11%	4%
Solvency (market basis)			
Total farm assets	\$883,213	\$721,874	\$1,249,426
Total farm liabilities	\$318,748	\$361,288	\$356,756
Percent in debt - farm	36%	50%	29%
Farm net worth	\$564,465	\$360,591	\$892,670
Farm net worth change	\$19,065	-\$28,364	\$66,107
Farms sorted according to net farm income; land is valued at conservative market value.			
Source: Southwest Minnesota Farm Business Management Association Annual Report, 1997. Staff Paper, p. 98-3, Department of Applied Economics, University of Minnesota.			

performance among farms in a given group in a given farming area. For example, in Table 1-2 the difference in labor and management earnings between the high and low 20% of farms in the Southwest Minnesota Farm Business Management Association in 1997 was about \$100,000. The low 20% farms showed a 1.3% return on assets and a substantial negative farm net worth change. The high 20% of farms, on the other hand, showed a 10.1% return on assets and a \$66,100 increase in farm net worth. These differences vary from year to year, but have been tending to widen over time.

Emerging pattern—the labor and capital leagues

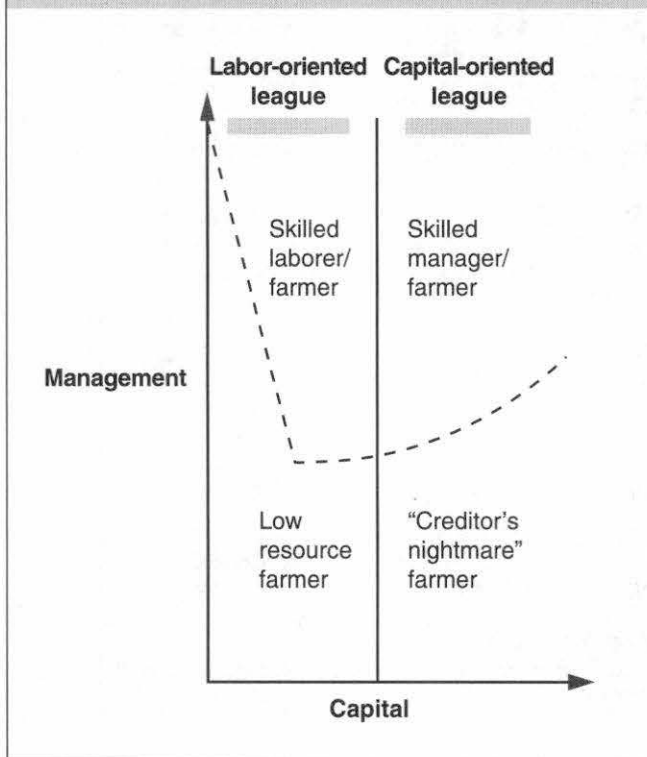
It is becoming increasingly clear that there are very few so-called average farm or farmer situations in the U.S. today. Farms and farmers are becoming more and more diverse in terms of the amounts of resources used and the resultant financial rewards received. In fact, it appears that farmers can now be grouped into “labor-oriented” and “capital-oriented” leagues by their relative use of capital and their managerial skills, Figure 1-1.

Some farmers continue to spend a major part of their time supplying skilled labor to the farm business. They have little desire to hire labor, other than for some occasional or seasonal tasks. Their earnings may be high considering the amount of resources they control, but the relatively limited use of capital and hired labor puts a ceiling on potential earnings. They are the **skilled laborer/farmers** in the **labor-oriented league**. These farmers will have gross incomes between \$75,000 and \$200,000; see Table 1-1.

Others in this labor-oriented league, can best be classed as **low resource farmers**. Many experience low or even negative farm earnings, and depend on off-farm income for most, if not all, of their family living. For example, persons in the under \$50,000 gross income category shown in Table 1-1 received about \$34,000 or about 96% of their income from off-farm sources in 1990. Many dual career farm managers also fall into this category, with about 50% of their spendable income coming from off-farm sources.

At the other extreme, some farmer operators have shifted their work emphasis from that of supplying skilled labor to that of being

Figure 1-1. Grouping today's farmers: the labor- and capital-oriented leagues.



primarily a manager of people and capital. They typically manage a large bundle of assets and labor, and have incurred considerable debt in the process. Their propensity for employing a higher level of debt on large-sized and super firm commercial farms is illustrated in Table 1-3.

Some farmers in this group receive not only a comfortable management wage, but also a good return on their investment. They are the **skilled manager/farmers**. But employing large amounts of capital and labor does not ensure high earnings. For example, if a farmer is inept at handling large amounts of capital, net farm earnings may actually fall dramatically because there are more units to lose money on. As a result, a number of farmers, who earlier in their farming careers expanded too rapidly or bought land at the wrong time, have become so-called **creditor's nightmare** farmers. As noted above, farmers in the large-sized and super firm categories tend to operate with higher levels of debt relative to assets. If efficiency and price levels are not maintained, a rapid erosion in net worth can take place.

More changes to come

Using the past as a prologue to the future, it is expected that change will continue to magnify the diversity of present day farming. For example, a 1993 study³ projected that by year 2000 the number of farms with gross sales below \$40,000 will decrease by an additional 35%, while farms with gross incomes of \$40,000 to \$99,999 will decrease by 30%. As a result, the combined gross sales of these two groups will likely decline from 25% to about 20% of total farm gross sales. On the other hand, farms with gross sales of \$100,000 to \$499,999 are projected to increase by about 24% and will account for around 35%-40% of gross sales. Farms with sales of \$500,000 or more will increase at least fourfold and account for about 40%-50% of gross sales.

Three major factors that are likely to contribute to these on-going changes include technology, international interdependence and public policy.

Technology and the future structure of farming

Technology and its rapid adoption has been a strong underlying force in bringing the current diversity of U.S. farms. A brief listing of ways technology impacts the structure of agriculture should provide a basis as to how it could impact the future of the farming industry.

- Much technology is produced off the farm which leads to: (1) off-farm firms fostering **vertical** integration arrangements, and/or, (2) the individual farmer being able to control and manage more land, livestock, and inputs, thus causing **horizontal** growth of individual businesses.
- Technology tends to lower and flatten the average cost curves of various sizes and types of farm businesses. The smaller farmer can often produce at a similar cost per unit, but the larger farmer produces more units and thus gains a larger total net income, and an increased ability to compete for more resources.

3. *Size, Structure And The Changing Face Of American Agriculture*, edited by Arne Hallam, Westview Press, 1993, p. 592.

Table 1-3. Farm balance sheet of U.S. farms, by sales class, 1997.

Item	Way of life/ part-time farms		Full-time commercial farms			
	Hobby/small part-time	Dual career	Small- sized	Moderate- sized	Large-sized	Super firm
Gross farm income	Less than \$50,000	\$50,000/ 99,999	\$100,000/ 249,999	\$250,000/ 499,999	\$500,000/ 999,999	\$1,000,000 and over
Assets/farm	\$393,800 ^a	\$571,149	\$734,351	\$1,045,230	\$2,703,504 ^b	
Liabilities/farm	\$53,781 ^a	\$75,655	\$112,312	\$208,858	\$539,513 ^b	
Net worth/farm	\$340,019 ^a	\$495,494	\$622,039	\$836,372	\$2,163,991 ^b	
Percent in debt	14%	13%	15%	20%	20%	

Source: Farm Structure and Performance Branch, Economic Research Service, USDA.

^a Estimated by differences, since not reported for that class.

^b Reported as \$500,000 or more gross sales per farm only.

- Improved managerial skills and greater accessibility to current information have increased the competitiveness of the top manager.
- In certain parts of the farming industry, the sole proprietor/family-sized farm continues to be competitive. In others, the movement to larger, more industrialized units has prevailed.

International interdependence and competitiveness

Major changes in the international economy have increased the interdependence of U.S. agriculture and international markets. This greater dependence on trade, the development of international financial markets, and the floating exchange rate has resulted in a great deal of instability in international markets for both commodities and capital.

With rapid changes in Eastern Europe and anticipated changes in the Far East, it is probable that this interdependency and uncertainty will only be magnified. Thus, farmers must keep themselves informed about international markets and institutions, as to the short- or long-term impacts on their businesses and make informed adjustments to these changes.

The public policy environment

More than ever farmers must be aware of trends that are external to farming but may influence individual farm businesses more

than decisions made inside the farm gate. For example, agriculture is subject to an ever growing range of public policies.

■ **Agricultural policies** - For decades, the federal government has intervened regularly on the farmer's behalf. There have been numerous government programs designed to provide assistance to farmers such as research, education, credit and price supports. But of a more recent vintage have been policies to dictate how farmers could better protect other people and the environment. The whole notion of "sustainable" agriculture has both human and environmental impacts, as well as potential impacts on farm productivity and profitability. Again, the farm manager must continually monitor these policies, both on the policy-making side, as well as on the management side in adapting the business to change.

■ **Fiscal and monetary policies** - As the U.S. agricultural sector has become increasingly capital intensive, the profitability and financial soundness of the farm business have become more susceptible to changes in government fiscal and monetary policies. These policies have a direct impact on the farm business through inflation, interest rates, and the availability of capital. These policies can also have a direct effect through changes in international markets and export demands.

- **Tax policies and the national debt** - Tax policies play a significant role in farm business decisions such as purchasing capital assets like machinery, scheduling the marketing of commodities, and choice of business organization. Changes in estate transfer tax laws can also have a marked

effect on the timing and method of farm asset transfers. With the present multi-trillion dollar federal debt, it is likely there will be more changes in the tax area. Some, or perhaps even most, of the changes in tax laws will likely adversely affect the farmer's after-tax income picture.

Longer range business planning: A road map and overview

There are four basic issues to consider when developing a longer range strategic plan:

- What the firm *might* do (its opportunities).
- What the firm *can* do (management capabilities and resources available).
- What the manager(s)/owner(s) *wants* to do (personal values and aspirations).
- What the firm *should* do in meeting its obligations to society (such as following governmental regulations relative to pollution and use of chemicals).

The manager's task is to blend these components into a longer range plan. Because each manager is faced with a unique business and family situation, an orderly, five-phase sequence—a road map, if you will—for planning the future of a business, is presented in Figure 1-2.

Phase 1: Evaluating the present business situation; setting tentative goals

Evaluating the present business situation involves:

- Assessing the past performance of the business.
- Assessing the business environment in which it will likely be operating.
- Determining the quantity and quality of resources likely available for the future.

This phase also involves setting tentative life-style and business goals, and identifying the broad types of business adjustments that might be considered. This phase is discussed in Chapter 2 Part I.

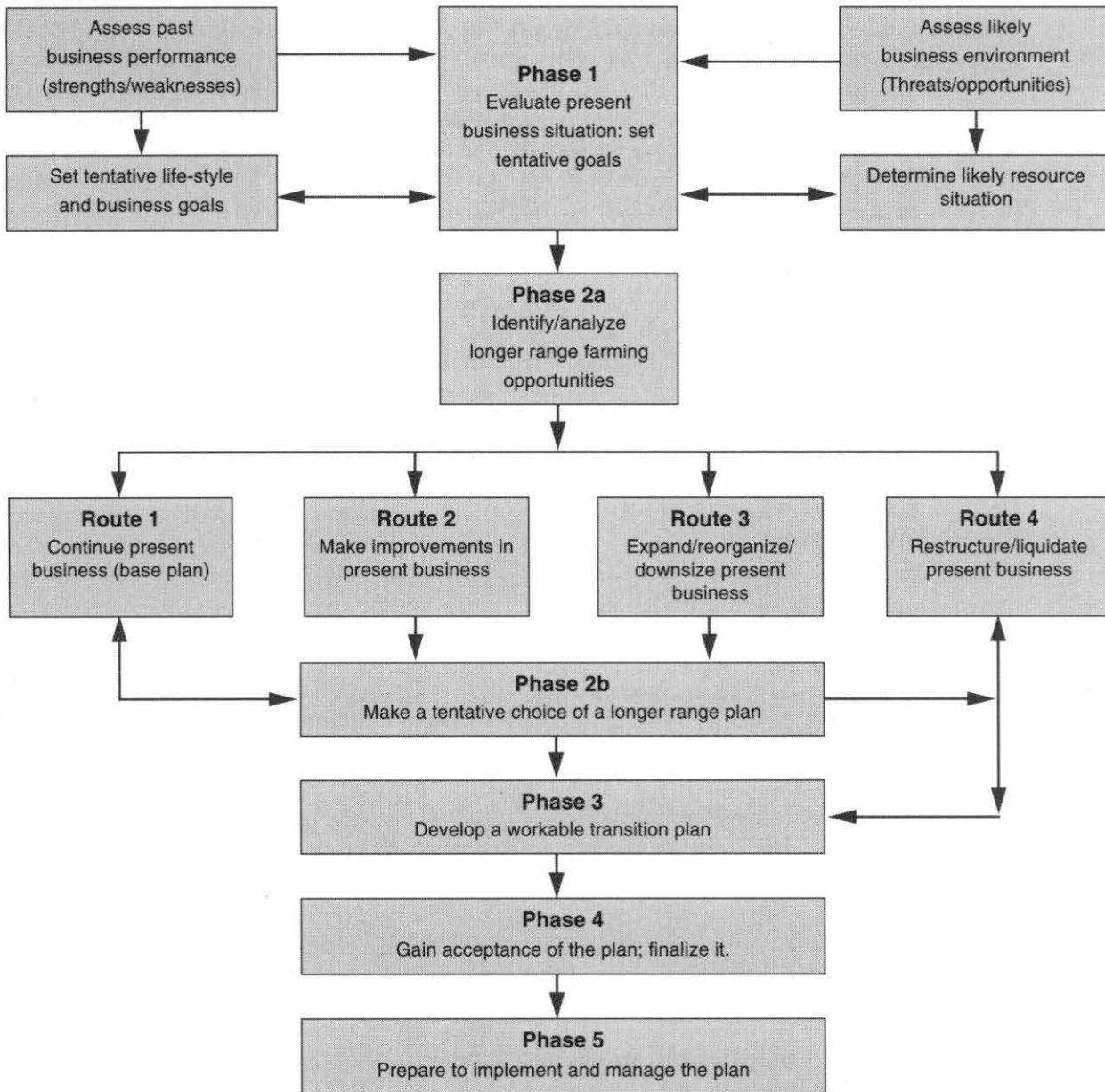
Phase 2: Analyzing opportunities; selecting a longer range plan

It is possible that by the time Phase 1 of this planning process is completed, it is apparent that the **present operation** is capable of remaining profitable and financially sound enough over time to achieve short- and longer-term life-style and business goals (see adjustment Route 1, center-left of Figure 1-2). Or it may be that the business is financially stressed and restructuring options, such as debt restructuring and/or a partial or complete liquidation of the business must be considered (see adjustment Route 4, center-right of Figure 1-2).

In either case, specific planning is still needed. In the first case (adjustment Route 1), developing annual business plans helps ensure continued profitability and financial soundness. (Review the discussion of these topics in Chapter 4 Part I.) In the latter case (adjustment Route 4) refer to Chapter 5 Part I, which focuses on restructuring options, tax considerations, and bankruptcy.

In most situations, however, the manager will need to explore possible business adjustments between these two extremes. Though there is obviously a wide continuum of situations between these to be explored, two broad options are identified. The first is adjustment route 2, which focuses on making improvements in the present business. This option is often referred to as the "get better before you try to get bigger" approach. Broad adjustment Route 3 explores more substantial changes in the business, such as expansion, reorganization, downsizing or some combination of such changes. Chapter 3 Part I focuses on identifying and

Figure 1-2. Road map of the longer range business planning process.



analyzing various longer range farming opportunities and making a **tentative** choice of a longer range plan for the business.

Phases 3, 4 and 5: Transition planning/ acceptance/implementation

Phase 3 emphasizes the development of a workable transition plan, which helps determine

whether the desired longer range strategic plan is achievable. Phase 4 focuses on gaining acceptance of the plan by affected parties and finalizing it. Phase 5 focuses on the steps needed to implement and manage the new strategic plan. These three phases are discussed in Chapter 4 Part I.

Overview and use of the FINPACK system⁴

When making decisions that affect not only a business and a farming career, but a family as well, it is important to have access to a business analysis and planning system that will not only “crunch the numbers” but also provide the proper framework for making informed decisions. One of the most widely used systems in farm management circles today is the FINPACK system developed and distributed by the Center for Farm Financial Management at the University of Minnesota. It is available to farm lenders, advisers and educators, as well as farm operators, and is used extensively throughout the U.S. and several foreign countries. The FINPACK system is used here to illustrate the planning process.

Design, purpose and general format of the FINPACK system

FINPACK is a comprehensive financial analysis and planning system designed to help farmers and ranchers understand their financial situation and make informed decisions. It is not a record keeping system as such. Instead, FINPACK makes it possible to effectively use farm records and other sources of information to make business analysis, cash flow, and longer range planning decisions. Its ease of use, combined with the complete and meaningful results, make it unique in the farm management field.

FINPACK's analysis and planning components help shed light on three major financial objectives:

- Profitability: the ability to generate income.
- Liquidity: the ability to provide cash when needed.
- Solvency: the ability to provide financial growth and security.

For the **farmer and rancher**, FINPACK addresses three questions: “Where am I?”, “Where do I want to be?”, and “How do I get there?” For the **agricultural lender**, these questions might be rephrased as “Is the business financially sound?”, “Is it going in the right direction?” and “Will it have sufficient repayment capacity in the future?” Having the tools to formulate answers to these questions

benefits both borrowers and lenders in today's capital-intensive agriculture.

The FINPACK system is made up of several interactive components, Figure 1-3. The system assumes that the farm operator has (or can provide): (1) beginning and end of the year balance sheets, and (2) some basic farm record information regarding financial, production and marketing aspects (see center of Figure 1-3). The more detailed and accurate the basic information, the more confidence can be placed in the resultant business plans. This information is then used by the three basic computer programs or components of the system, namely, FINAN, FINLRB, and FINFLO.

As shown by the arrows in Figure 1-3, each of these components can be used alone. But the system becomes much more informative in describing a specific farm business—past, present, and future—when used in combination with one or more of the other components. The FINPACK Users Manual gives complete details of its use; see footnote 4.

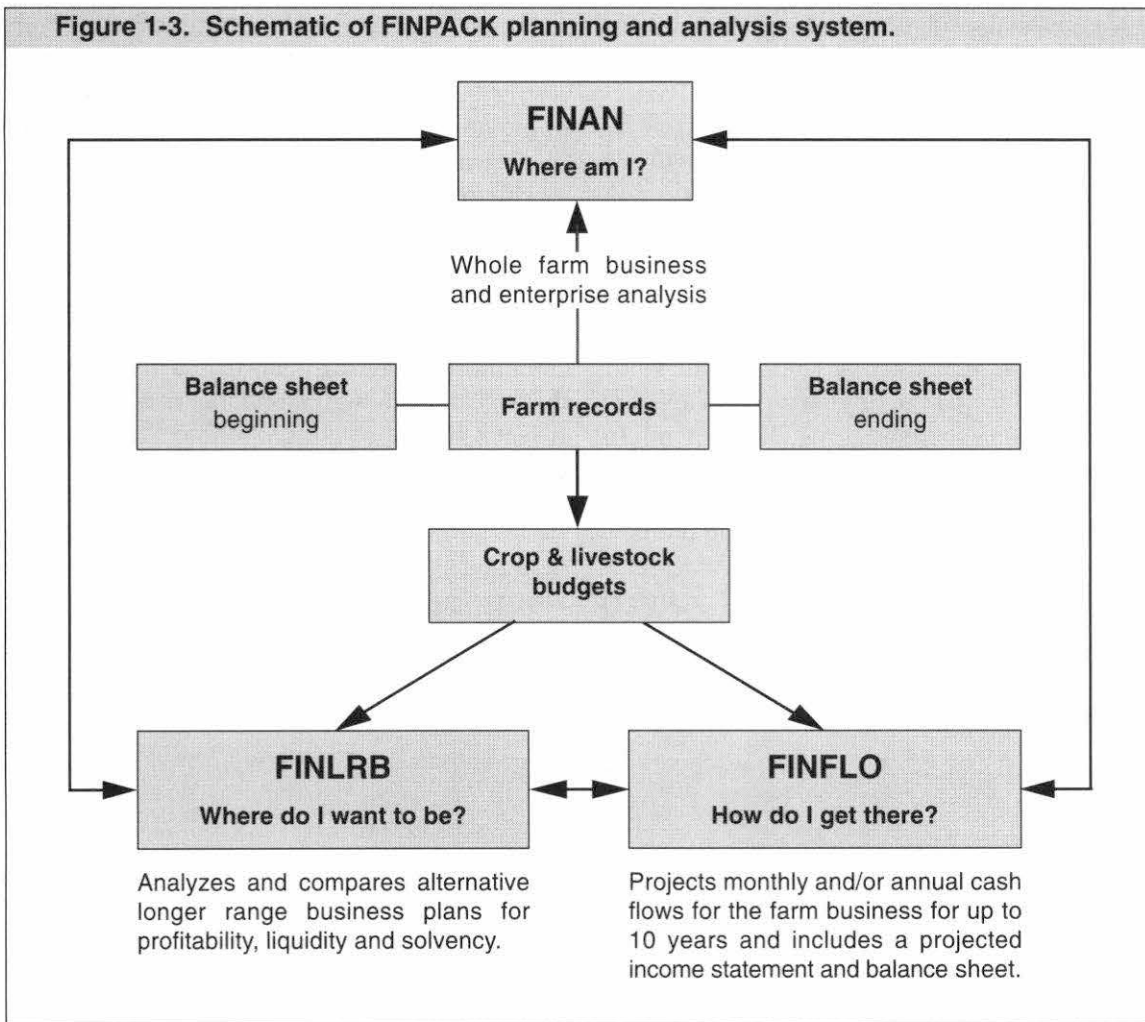
FINAN—the financial analysis component

FINAN analyzes the financial performance of a farm business during the past year. As indicated in Figure 1-3, FINAN can complete a whole farm analysis and/or analyze each individual enterprise on the farm. Based on the farm's financial position at the beginning and end of the year, and income and expenses during the year, FINAN examines the past year's profitability, liquidity, and solvency. This information helps answer the question “Where am I?” (See top portion of Figure 1-3).

Using FINAN year after year generates a historical database that helps evaluate financial, production, and efficiency trends—information that quantifies the past and projects the future. In addition, if there is a FINFLO plan for the previous year, FINAN provides a comparison of planned versus actual cash flow. The use of FINAN is illustrated in Chapter 2 Part I.

4. Richard O. Hawkins, et al, *FINPACK Users Manual, Version 8.0*, Center for Farm Financial Management, University of Minnesota, 1993.

Figure 1-3. Schematic of FINPACK planning and analysis system.



FINLRB and FINFLO—the financial planning components

The financial planning components of the system, FINLRB and FINFLO, use data banks that describe each enterprise used in the planning process and a balance sheet detailing the financial condition of the business at the start of the planning period.

Data Banks

In the planning phase, data banks are used to plan the crop and livestock aspects in both the FINLRB and FINFLO components. These data banks help develop individual crop and livestock budgets. These budgets describe the production levels, expected market prices, and direct costs associated with each enterprise. The more accurate and complete the enterprise records, the more confidence there can be in the data banks and planning results.

FINLRB—the longer range planning component

FINLRB compares alternative farm plans for longer range profitability, debt repayment ability, and potential for net worth growth. It changes the management perspective from the day-to-day details of the operation to the longer range goals, strategies, and efficient use of resources. Use FINLRB whenever major business decisions are being considered, such as in developing a longer range strategic plan for a business.

FINLRB, can compare the longer range viability of the current operation with alternative plans, which may involve new enterprises, new resources, different sizes or combinations of current enterprises, changes in efficiency, or changes in debt structure. FINLRB helps determine the feasibility of a change before it is implemented. Once a viable longer range plan is identified, FINFLO can

project a cash flow plan for the immediate future and/or over time. The FINLRB program is described and illustrated in Chapter 3 Part I.

FINFLO—the cash flow planning component

FINFLO projects farm cash flows for one or more years of business. Based on the plans for crops and livestock production and sales, capital purchases and sales, loan payments, and other transactions, FINFLO projects cash inflows monthly for the coming year, or annually for up to 10 years. The FINFLO program is discussed and illustrated in Chapter 4 Part I.

Partial budgeting and capital budgeting procedures - a brief note

In addition to the FINLRB and FINFLO planning procedures described above, the

manager may find partial budgeting and/or capital budgeting procedures useful in analyzing selected aspects of the overall business plan. As the name implies, **partial budgeting** is a shortcut method in which the manager merely measures changes in receipts and expenses associated with a given proposal. It is particularly useful in making a quick analysis of the impact of an adjustment in one segment of the business.

Capital budgeting deals primarily with cash flows related to a given business adjustment. It focuses on the relative amount and timing of inflows and outflows. Using discounting procedures, investments or other changes can be compared on: (1) a present value basis, or (2) a discounted rate of return basis.

Both of these procedures are discussed and illustrated in Chapter 1 Part III.



Evaluating the present business situation; setting goals

2

- Assessing past business performance
- Assessing the business environment
- Determining the availability of resources
- Setting tentative lifestyle and business goals
- Where to from here?



Projecting the future of a farm business without first evaluating the present business situation can be difficult and potentially hazardous to the future of an individual's farming career. There are four aspects of the present situation to address:

- The past performance of the business.
- The business environment present and future.

- The quantity and quality of resources available.
- Setting tentative lifestyle and business goals, Figure 2-1.

Addressing each of these aspects helps identify the current direction of the business and adjustments that need to be considered, if any.

Assessing past business performance

Business performance assessment begins by first analyzing the past year's business performance. The FINAN program¹ is used to illustrate this process. The results allow discussion of the various financial statements and measures, and their interpretation.

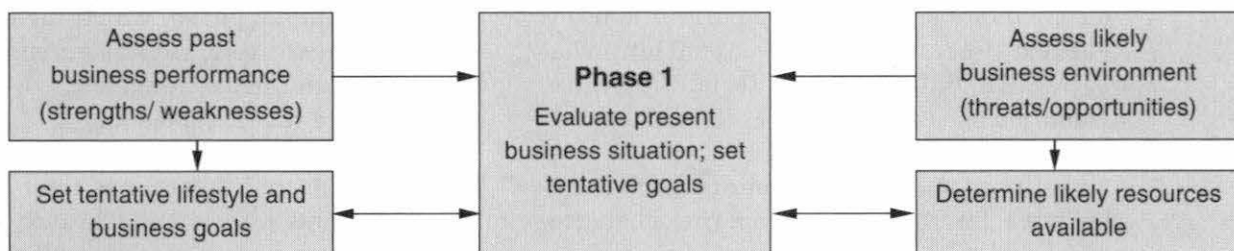
other financial and business information for the period in between. FINAN works with any record system, from simple tax records to detailed computerized systems, as long as it accurately depicts the period between the beginning and ending balance sheets.

FINAN input requirements

To use FINAN, provide complete and accurate beginning and end-of-year balance sheets for the year to be analyzed, as well as

1. For a more detailed discussion of FINAN see: Richard O. Hawkins, et al, *FINPACK Users Manual, Version 8.0*, Center for Farm Financial Management, University of Minnesota, 1993, pp. 419-586

Figure 2-1. Evaluating the present business situation; setting goals.



Developing a balance sheet: General description and format used

A **balance sheet** provides a summary of how funds are invested in the business (assets) and the financing methods used (liabilities and net worth) on a given date. Assets include only what is owned or is due the business as of the statement date. **Net worth**, or equity, is determined by the difference between total assets and total liabilities, Table 2-1. It can be used to evaluate the **solvency** of a farm business. It also provides information about the **debt structure**, and the ability of the business to meet its debt obligations, or to incur additional debt. A balance sheet is also one of the fundamental documents used in describing the financial status of a business. By developing and using the balance sheet, additional statements describing the farm or ranch business can be developed over time.

Most farm-related balance sheets break farm assets and liabilities into either two or three categories; see Table 2-1. The FINPACK balance sheet breaks them into three basic categories: current, intermediate, and longer term. **Current assets and liabilities** have an expected life of less than a year. **Intermediate assets, and associated intermediate liabilities** which support those assets, have an expected life of one to 10 years. **Longer term assets and debts** have an expected life greater than 10 years. The balance sheet used with FINPACK also has a nonfarm section for both assets and liabilities; see lines E and L in Table 2-1.

A major problem in completing the balance sheet is that of placing a value on each asset. Accounting convention holds to the valuation of assets based on cost, even though some of the assets may have been purchased many years ago. On the other hand, lenders and farmers concerned with financial management of the farm business often express the need for a balance sheet based on current market values. Because of this situation, the FINPACK balance sheet format permits valuation of assets on both a cost and market value basis. Note that in Table 2-1, columns for both cost and market value approaches are included. Instructions for preparing a balance sheet and a detailed discussion of the valuation process, can be found in the FINPACK

User's Manual cited at the beginning of this chapter. A completed FINPACK balance sheet is shown in Table 2-8 at the end of this chapter.

Additional information needed for whole farm and enterprise analysis

For the whole farm analysis option, there are 19 sections of input. Six of these come directly from the balance sheet. Other sections include information of:

- Income from various farm and nonfarm sources.
- Direct crop and livestock expenses, and related operating expenses.
- Crop and livestock production and labor information.
- Debts forgiven and assets repossessed.

For an analysis of various enterprises, one must supply additional information and make an allocation of such items as related operating expense among various crop and livestock enterprises.

FINAN output: Accuracy checks; the income statement

The FINAN output contains accuracy checks, a detailed income statement, a statement of owner's equity, and a series of profitability, liquidity and solvency measures.

Accuracy checks

The FINAN output provides cash flow and liabilities checks at the outset. If the input data is inaccurate, it is important to know this at the outset as other financial statements and measures would be inaccurate and unreliable as well.

- **The cash flow check** is designed to verify the accuracy of the cash inflows and outflows used in the input phase, which includes income and expenses, capital purchases, borrowings and debt repayments, living expenses, and taxes, Table 2-2.

This approach first determines total cash inflows for the past year (line A). The next step is to determine cash outflows for the year (line B). Since many farm families do not keep very

Table 2-1. Generalized balance sheet format used in FINPACK.

<u>Assets (what is owned)</u>		<u>Cost</u>	<u>Market</u>
A.	Current farm assets	\$176,345	\$176,345
B.	Intermediate farm assets	110,105	170,000
C.	Longer term farm assets	583,935	904,000
D.	Total farm assets (A+B+C)	\$870,385	\$1,250,345
E.	Nonfarm assets	35,600	35,600
F.	Total assets (D+E)	\$905,985	\$1,285,945
<u>Liabilities (what is owed) and net worth/equity</u>			
G.	Current farm liabilities	\$66,760	\$66,760
H.	Intermediate farm liabilities	45,661	45,661
J.	Longer term farm liabilities	204,260	204,260
K.	Total farm liabilities (G+H+J)	\$316,681	\$316,681
L.	Nonfarm liabilities	6,019	6,019
M.	Deferred tax liability	0	230,161
N.	Total liabilities (K+L+M)	\$322,700	\$552,861
O.	Contributed capital (F-N)	\$583,285	
P.	Capital market net worth (F-N)		\$733,084

Table 2-2. Example of cash flow check from FINAN.

Beginning cash balance	\$11,255	Ending cash balance	\$4,257
Gross cash farm income	350,494	Total cash farm expenses	270,969
Capital sales	-	Farm capital purchases	291,250
Nonfarm income	4,545	Nonfarm capital purchases	-
Money borrowed	358,406	Principal payments	114,289
Gifts and inheritances	-	Gifts, other outflows	-
Beginning nonfarm savings	-	Ending nonfarm savings	-
A Total cash inflows	\$724,700	B Subtotal cash outflows	\$680,765
Apparent money used for family purposes (A-B)		\$43,935	
Household capital purchases	(-)	3,000	
Income tax and social security	(-)	7,542	
Apparent family living expenses (=)		\$33,393	
Family living expenses reported	(-)	32,457	
Discrepancy (=)		\$936	

good family living records, the analysis treats family living expenses as a residual: **Apparent family living expenses** (line A-B). If family living expense records are available and are reasonably accurate, then a comparison can be made between **apparent** and **actual** living expenses. If a discrepancy exists, then the cash inflow and outflow items should be checked. If family living expense records are incomplete or unavailable, make a ball park estimate of family living expenses, and then compare this amount with the apparent family living expenses shown in the output.

- **The liabilities check** verifies whether a proper accounting has been made of borrowings, debt repayments, and beginning and ending liabilities, Table 2-3.

If the ending liabilities **calculated** amount does not equal the ending liabilities **reported** in the balance sheet, check the input data used as well as the balance sheet information.

Income statement

The FINAN income statement determines net income from farming operations over the past year, Table 2-4. **Net farm income** is the base measure of profitability for a farm business. It represents the return to the operator and unpaid labor and management supplied by the family, and returns to the owner's equity (net worth) in the business. Earnings are calculated on an accrual basis. Net cash farm income is determined by subtracting total cash farm expenses from gross cash farm income. Adjustments are then made for inventory changes and depreciation and other capital adjustments, to arrive at net farm income. A completed income statement is shown in Table 2-9 at the end of this chapter.

FINAN output: Profitability measures; their use and interpretation

Profit is generally defined as the difference between the value of products produced and the cost of resources used in their production. The greater the difference, the more profitable the business. But to be most useful in decision making, profits need to be measured in more specific terms such as labor and

management earnings, and/or return on farm assets. Table 2-5 displays the various profitability measures provided with FINAN and how they are calculated.

The following is a brief description of the several profit measures used in FINPACK and where their respective use is most appropriate.

- **Net farm income (line J)** indicates the absolute level of farm earnings after operating and overhead expenses are paid, except for a wage to the operator and unpaid family labor and a charge for the use of the firm's equity capital or net worth. This is the "bottom line" of the income statement described earlier.

- **Labor and management earnings** are determined by subtracting an interest charge on the farm equity from the net farm income. That is:

$$\begin{array}{r} \text{Net Farm Income (line J)} \\ - \text{Interest on Farm Net Worth (line L)} \\ \hline = \text{Labor and Management Earnings} \end{array}$$

This is a good measure of profitability for smaller farms where operator and unpaid family labor are principal sources of labor. These earnings can be compared with those of other farmers, or potential earnings from nonfarm employment. This measure is less useful for highly capitalized farms, where return on investment is of more concern than returns to one's labor.

- **Rate of return on farm assets** is, in effect, the interest rate earned during the past year on all money invested in the business. It is calculated as follows:

$$\begin{array}{r} \text{Return on farm assets (line O)} \\ \hline \text{Average farm investment (line P)} \\ = \text{Rate of return on farm assets} \end{array}$$

Where:

$$\begin{array}{r} \text{Net farm income} \\ + \text{Farm Interest paid} \\ - \text{Value of operator's labor \& management} \\ \hline = \text{Return on farm assets} \end{array}$$

Table 2-3. Example of liabilities check from FINAN.

Beginning liabilities		\$542,988
Money Borrowed	(+)	358,406
Principal payments	(-)	114,289
Change in accounts payable	(+)	5,257
Change in deferred liabilities	(+)	14,569
Ending liabilities calculated	(=)	\$806,932
Ending liabilities reported	(-)	\$806,932
Discrepancy	(=)	0

Table 2.4. Generalized income statement format from FINAN.

Gross Cash Farm Income	\$350,494
Less Total Cash Farm Expenses	270,969
Net Cash Farm Income	\$79,525
Inventory Changes (±)	19,805
Net Operating Profit	\$99,330
Depreciation/Capital Adjustment	-36,072
Net Farm Income	\$63,258

Table 2-5. Example of profitability measures from FINAN.

		Cost	Market	
J	Net farm income	(I-K)	\$63,258	\$38,000
	Labor and management earnings	(J-L)	\$29,388	\$-4,099
	Rate of return on farm assets	(O/P)	7.7%	3.7%
	Rate of return on farm equity	(Q/R)	5.9%	1.1%
	Operating profit margin	(O/S)	24.9%	16.7%
	Asset turnover rate	(S/P)	30.9%	22.9%
K	Change in market valuation		-	\$-25,257
L	Interest on farm net worth	(R* 6%)	\$33,870	\$42,100
M	Farm interest		43,320	43,320
N	Value of operator's labor and management		30,000	30,000
O	Return on farm assets	(J+M-N)	76,578	51,320
P	Average farm assets		997,137	1,371,753
Q	Return on farm equity	(J-N)	33,258	8,000
R	Average farm net worth		564,493	701,663
S	Value of farm production		308,050	308,050

And:

$$\frac{\begin{array}{l} \text{(Beginning total farm assets} \\ + \text{Ending total farm assets)} \\ 2 \end{array}}{\text{=Average farm investment}}$$

If assets are valued at **market value**, the rate of return on investment can be considered as the "**opportunity cost**" of investing money in the farm instead of alternative investments. If assets are valued at **cost** (cost minus depreciation), the rate of return represents the **actual return** on the average dollars invested in the business. The goal

should normally be to attain a rate of return on assets higher than the average interest rate paid on debt. If it is, the investment is earning enough to pay the interest expense with something left over for debt servicing.

Farm assets, particularly farm land, have historically had a low rate of return, especially considering the risks involved. Farm businesses have survived with lower returns because, on average, farms have not been heavily in debt. Even though rates of return have been lower than interest rates, interest costs have been low enough to leave some residual returns to the farmer's equity.

Caution is necessary regarding this relationship between the rate of return on assets and interest rates. **If a business is expanded using debt capital, or if the debt to asset ratio increases over time, profitability takes on added importance.**

- **Rate of return on equity** is, in effect, the interest rate equity (net worth) in the business earned in the past year. It is calculated as follows:

$$\frac{\text{Return on farm equity (line Q)}}{\text{Average farm net worth (line R)}} \\ = \text{Rate of return on equity}$$

Where:

$$\begin{array}{r} \text{Net farm income (line J)} \\ - \text{Value of operator's labor \& management (line N)} \\ \hline = \text{Return on farm equity} \end{array}$$

And:

$$\frac{\text{Beginning farm net worth} + \text{Ending farm net worth}}{2} \\ = \text{Average farm net worth}$$

Like the rate of return on assets, if assets are valued at **market value**, this return can be compared to returns available if the assets were liquidated and **invested in alternate investments**. If assets are valued at **cost**, this represents the **actual return** to the amount of equity capital invested in the farm business.

If the return on assets is higher than the average debt interest rate, return on equity will be still higher, reflecting the fact that there are residual returns to equity capital after paying all interest expense. This is the positive effect of financial leverage. If the return on assets is lower than the average interest rate, return on equity will be still lower, reflecting the fact that borrowed capital did not earn enough to pay its interest cost. This is the negative effect of financial leverage. **As debt to asset ratios increase, these relationships become more pronounced.** So, again, profitability becomes a key concern when there is substantial debt capital in the business.

- **Operating profit margin** is a measure of the **operating efficiency** of the business. It indicates the average percentage operating margin per dollar of farm production. It is calculated as follows:

$$\frac{\text{Return on farm assets (line O)}}{\text{Value of farm production (line N)}} \\ = \text{Operating profit margin}$$

Value of farm production equals gross cash farm income minus feeder livestock purchases and purchased feed plus the inventory change of crops and feed, market livestock, accounts receivable and other income items, and breeding livestock.

The operating profit margin measures how effectively operating expenses are controlled relative to the value of output. Low prices, high operating expenses, or production problems are all possible causes of a low operating profit margin.

- **Asset turnover rate** is a measure of **efficiency in using capital**. It is the amount of gross production per dollar of investment. It is calculated as follows:

$$\frac{\text{Value of farm production (line S)}}{\text{Average farm investment (line P)}} \\ = \text{Asset turnover rate}$$

If a farm business has a high level of production given the capital investment, it will show a high asset turnover rate. If the turnover rate is low, explore ways of using capital more fully. Is there unused production capacity? Are there low return assets that could be sold?

- **Combining these two measures equals the rate of return on farm assets.** Neither the operating profit margin nor the asset turnover rate by itself is adequate to explain the level of profitability of a business. But when used together these two efficiency measures are the building blocks of a farm's level of profitability. This is true because:

$$\text{Operating Profit Margin} \times \text{Asset Turnover Rate} \\ = \text{Rate of Return on Assets}$$

If the operating profit margin and the asset turnover rate are both strong, the business is very profitable, at least for the past year. If the operating profit margin is low, profitability suffers unless the asset turnover rate is high enough to offset the low operating margin. If the asset turnover rate is low, profitability will also suffer unless the net operating margin is high enough to offset the low production per dollar of investment.

FINAN output: Liquidity measures, interpretation

Liquidity is the ability of a business to generate enough cash flow to pay family living expense, taxes, and make debt payments on time. FINAN examines the past year's liquidity of a farm business on both a **cash** and **accrual** basis. The **Cash column** analyzes the actual cash generated over the past year. The **Accrual column** includes the inventory changes from the income statement to determine the liquidity of the business if inventories had remained constant, Table 2-6.

While the Cash column is useful to describe what actually happened over the past year, **the Accrual column better indicates the actual ability of the business to generate cash flow.** If two years' crops were sold to generate enough cash flow to make payments during the past year, the cash liquidity measures may appear healthy, but the accrual measures will show the weakness of the farm's liquidity. Conversely, if cash income was low because inventories were held into the following year, the cash position may appear weak, but the accrual position, adjusted for this increase in inventories, will show a more accurate liquidity picture.

As noted in Table 2-6, a key measure of liquidity is the number of years to turn over intermediate debt. The other measures include the term debt coverage ratio, and the operating and interest expense as a percent of gross income.

■ **Years to turn over intermediate debt** is the calculation in the first section of the liquidity analysis. In the **Cash column**,

Table 2-6. Example of liquidity measures from FINAN.

		Cash	Accrual
		\$350,494	\$350,494
		-	24,069
T	Gross farm income	\$350,494	\$374,563
		270,969	270,969
		-	4,264
U	Total farm operating expense	\$270,969	\$275,233
		\$79,525	\$99,330
		4,545	4,545
		40,935	40,935
	Available for principal payments	\$43,135	\$62,940
		10,310	10,310
		2,290	2,290
W	Available for intermediate debt	\$30,535	\$50,340
X	Average intermediate debt	\$68,895	\$68,895
	Years to turn over intermediate debt	2.3	1.4
	Term debt coverage ratio	145%	188%
	Operating expense as % of income	77%	73%
	Interest as a % of income	12.4%	11.6%

FINAN first calculates net farm operating income by subtracting cash farm expense from gross farm income. This is the same as net cash farm income from the income statement.

In the **Accrual column**, FINAN calculates net farm operating income by subtracting total farm operating expense from gross farm income. Gross farm income is the sum of gross cash farm income and inventory change minus income items. The income items include the change in inventory of crops and feed, market livestock, cash in growing crops, accounts receivable, hedging accounts, and other current assets.

While intermediate debt may never be paid off, it should be turned over so that new borrowings, brought on by capital replacement, are offset by principal reduction on existing intermediate debt. **In the long run, if years to turn over intermediate debt is longer than the expected useful life of the underlying intermediate assets, debt will likely climb over time.** A turnover of 999 years in the printout indicates infinity—the cash generated was not enough to cover interest.

- **Term debt coverage ratio** measures whether the operation generated enough cash over the past year **to cover principal and interest payments on term (intermediate and longer term) debt.** FINAN calculates the term debt coverage ratio by dividing the amount available for principal and interest payments on intermediate and longer term loans by the principal and interest payments due on those loans. The principal and interest payments due are taken from the beginning balance sheet so that the coverage ratio is based on the payments that were supposed to be made, not what were actually made.

If enough cash flow was generated to cover payments on term debts, the term debt coverage ratio will be greater than 100%. **A ratio of less than 100% is a sign of potential liquidity problems.**

- **Operating expense as a percent of income** is calculated as a percent of income by dividing cash farm expense by gross farm income.

This ratio shows the percentage of gross income used for farm expenses. The remainder is available for living expenses, savings, taxes, principal payments, and reinvestment.

- **Interest as a percent of income**, in the Cash column, is calculated by dividing the **farm interest paid by gross farm income.** In the Accrual column, the change in accrued interest is added to the interest paid and is then divided by the gross farm income listed in the Accrual column. **This ratio indicates the percentage of farm income required to cover interest payments.**

FINAN output: Solvency measures, interpretation

Solvency is important in evaluating the financial risk position and future borrowing capacity of a business. The solvency section of the FINAN output, Table 2-7, deals with the overall levels of assets and liabilities at the beginning and end of the year, the debt structure of the business, and the net worth change during the year.

The first three lines of the output indicate the total farm and nonfarm assets and liabilities at the beginning and end of the year, and the resultant net worth. The following describes the various financial measures that reflect the solvency position of the business.

- **Change in net worth** is the difference between net worth at the beginning and at the end of the year. One of the major goals of most businesses is to increase net worth over time. If both cost and market values occur on the balance sheets, the statement of owner's equity will further analyze change in net worth, breaking it down between what was retained from earnings and what was gained through asset value changes.
- **Current percent in debt** is calculated by dividing the sum of all current farm liabilities by the sum of all current farm assets on the beginning and ending balance sheets. This shows the very short-term solvency position of the business and may forecast liquidity problems in the years ahead.

■ **Current and intermediate percent in debt** is calculated by dividing the total of all current and intermediate term liabilities by the sum of current and intermediate term farm assets. This is the percentage of all farm non-real estate assets that have debts against them. It is an important measure to monitor from year to year because future cash flow problems may well be forecasted by a deteriorating short-term solvency position of the business.

■ **Longer term percent in debt** is calculated by dividing total longer term farm liabilities by total longer term farm assets. This is the percentage of longer term farm assets that have debts against them. A tight longer term position leaves little room for future debt restructuring.

■ **Nonfarm percent in debt** is total nonfarm liabilities divided by total nonfarm assets.

■ **Total percent in debt** is the sum of all the farm and nonfarm liabilities divided by the sum of all the farm and nonfarm assets, calculated for both the beginning and end of the year. A ratio of 50% indicates that the amount of debt and equity capital are equal. The total debt percentage can be important in assessing the risk position of the farm business, and in the ability to borrow capital in the future.

Overall results: Strengths and weaknesses; general direction

To assess the strengths and weaknesses of a present business and the general direction it is headed, put the past year's performance in perspective.

Table 2-7. Example of solvency measures from FINAN.

	Beginning	Ending
Total Assets	\$1,276,072	\$1,538,633
Total liabilities	542,988	806,932
Net worth	\$733,084	\$731,701
Change in net worth		-\$1,383
Current percent in debt	34%	43%
Current & intermediate pct. in debt	30%	32%
Longer term percent in debt	23%	39%
Nonfarm percent in debt	17%	10%
Total percent in debt	43%	52%

With records of the financial and production performance of a business over the past several years, a direct comparison can be made. It would also provide a perspective of any trends that are developing that indicate the general direction a business is headed. FINAN used year after year automatically provides trend information. If information from previous years is not available, then the strengths and weaknesses noted in the overall operation must be judged as either typical results or due to some temporary, perhaps self-correcting, situation.

If information regarding the past performance of crop and livestock enterprises is available, then the strengths, weaknesses, and trends associated with these enterprises are assessable as well.

Use Worksheet 2-1 at the end of the chapter to indicate the strengths and weaknesses of the present operation. Also, make note of any financial or production trends.

Assessing the future business environment

Before attempting to project the future of a present business, take a detailed look at the business environment within which it will likely be operating. Relate this appraisal directly to the questions that need answers as the planning process begins:

- What is likely to happen to farm prices?
- What will likely happen to farm costs?
- What will likely happen to yields and production levels?
- What is the comparative advantage as regards the location and size of business for relevant enterprises?
- What effect will government regulations and policies have on the business?

Expectations about farm prices

Developing a set of farm price expectations for the longer run (3-5 years) requires some judgment regarding the supply and demand for products produced on the farm or those being considered.

The customer/consumer demand

Expectations concerning product demand need to take into account the demographics of potential customers/consumers and various economic factors that may impact demand. **Demographics** relate to the general population targeted. Agriculture's increased dependence on international markets necessitates a broader demographic search.

The stage in the business cycle of the overall economy can have a considerable impact on the demand for various products. The general availability of various product substitutes as well as changes in tastes and preferences among consumers need to be considered. The value of the dollar will likewise affect the demand for U.S. products by other countries. And of course, government food subsidy-type programs can have an effect on both domestic and foreign demands.

Competitors/supply

When trying to estimate the supply of products under varying price levels, first explore the degree of unmet demand in a

specific industry or sector. Then try to estimate the "trigger point" at which existing or new competitors will either enter, expand, or contract operations. Changes in technology can also increase the supply of products that will be produced from a given set of resources and/or will lower the "trigger point" or cost of production level at which an expansion will take place.

Expectations about production levels and farm costs

Weather, technology and management skill impact production expectations. However, don't get too optimistic regarding expected production levels if a relatively major change in the business is contemplated.

Estimates of associated operating costs should reflect the kinds and amounts of inputs to be used and the bargaining position with suppliers. Government monetary policies, inflation and lenders' attitudes will affect expected interest rates. Government fiscal policies will affect tax rates and the tax management opportunities available. The availability of, and competition for, land and labor in the area will likewise affect the rent and wages paid.

Comparative advantage of present business/enterprises

In appraising the future business environment, explore the comparative advantage of the present business and enterprises from the standpoint of both location and economies of size. With regard to **location**, do the present enterprises compete favorably with other areas of the country or world?

Since in the long-run, the competitive edge favors the lowest cost of production, a related question is: Is there a comparative advantage from the standpoint of the size of the enterprise(s) or business? For more on comparative advantage, see Chapter 3 Part 1.

Changes in government programs and regulations

The emphasis on the environment—e.g. water quality, soil conservation, and wildlife habitat—has brought with it government

programs and regulations that affect the future of farming operations. Also, the growing emphasis on consumer protection relative to the use of pesticides, feed additives and other issues has prompted advocacy groups to call for a return to a less technically-oriented agriculture and must be considered.

Overall evaluation: Threats and opportunities

The ever changing nature of the business environment can present threats to the future of a business, and it can present opportunities. **Record these in the right side of Worksheet 2-1 at the end of the chapter.**

Determining the availability of resources

Next, determine the quantity and quality of land, labor and other capital and management resources that may be available. Also make note of those institutional factors that must be considered.

The quantity and quality of land

The **land** resource can be considered from two standpoints: (1) its productivity and flexibility of use and (2) its general availability in the area. The potential productivity and flexibility of land resources will impact the potential earnings that can be garnered from present land holdings. The general availability of land in a given area will affect the size of business that can be developed as well as the price that may have to be paid to own or rent it.

The quantity and quality of labor

The **labor** supply is comprised of two parts: the operator and family labor, and the hired labor. The lifestyle and business goals (to be determined in the next segment of this chapter) will impact the supply of operator and family labor available to a business. The degree of involvement in nonfarm activities will affect the amount of time devoted to the business. If children are grown and are leaving the farm, the family labor supply is decreasing.

The availability of hired labor in an area, as well as management's attitudes toward hired labor and their willingness to learn to manage it, will also impact the size and composition of a potential labor force. Likewise, the cost of hired labor and related fringe benefits will affect the profitability and feasibility

of using hired labor. If farm labor is scarce in an area, a year-round position may be required to ensure help is available when it is most needed. This, in turn, will impact the size of business, enterprise selection, and/or the desirability of substituting additional machinery and equipment for labor.

Working assets and capital position

Working assets and capital position are two aspects of a farm's capital position and use. Major **working assets** include the machinery, buildings and breeding stock. It is particularly important to note if the machinery line is adequate or more than adequate for servicing the present size of business. The ability to handle more acres with present machines or the availability of custom operators in the area will obviously affect expansion plans. The availability of space for livestock production and machine, feed and crop storage, particularly as it relates to its flexibility and present level of use, should be noted. The numbers and productivity of breeding stock on hand should also be noted.

Evaluate the **capital position** of the business in terms of its liquidity and solvency. This process was described earlier in this chapter. Also note the manager's ability and willingness to acquire additional debt capital. The ability to acquire credit is determined by the present financial position, the profitability of the business alternatives, and one's credit rating. The manager may wish to impose more severe restrictions on borrowing than those imposed by a lender. If this is probable, the manager should indicate the maximum debt

and/or the percent indebtedness that is preferred. Obviously, these measures may limit the range of farming opportunities, but ignoring these internal capital limits may result in projecting farm plans that are unacceptable from a financial and/or personal risk-bearing standpoint.

Personal management capacity

Management capacity is perhaps the most difficult resource to assess. However, the business' track record, as discussed earlier in this chapter, indicates the extent to which the existing business is under control. Success in the areas of production, marketing, financial and personnel management, indicates a likely **excess** of management capacity and the ability to expand or reorganize. If things are more or less under control, but there is room for improvement, then a more modest farm adjustment plan may be in order. If things

appear to be totally out of control, then a downsizing strategy may be in the future.

Institutional factors affecting resource availability and use

Many **institutional factors**, such as environmental and health regulations, will also affect the organization of a farm business. Government farm programs, marketing orders, and environmental restrictions all affect operations. Estate, gift and income tax laws also affect business plans, especially in the areas of business expansion, contraction, and/or in related farm transfers.

Overall evaluation of the resource situation

Again, in **Worksheet 2-1**, indicate the strengths and weaknesses of resources as well as any threats or opportunities associated with the availability or quality of the resources.

Setting tentative lifestyle and business goals

Previous segments of this chapter described the process of evaluating the present business situation. They included a discussion of:

- Assessing the past performance of the business.
- Assessing the expected future business environment.
- Estimating the quantity and quality of resources likely to be available.

These three steps provide preliminary consideration to three of the four issues, noted in Chapter 1, Part 1, that pertain to developing a business plan:

- What the firm **might do**.
- What the firm **can do**.
- What the firm **should do** as far as society is concerned.

The fourth item — **what does the manager/owner want to do?** — involves personal values

and aspirations. Many people, even farm managers, live out their lives without ever putting their goals on paper. Or if they do, the goals often tend to be very general and open-ended.

A well thought out set of lifestyle and business goals brings several benefits to the complex task of managing a business. First, goals can bring an improved balance to the life of individuals and families. Second, if goal setting is done correctly, communication among family members and other affected parties will improve and thus increase the mutual support given to business activities. Finally, with specific goals in hand, there is a greater likelihood that necessary actions will be taken toward achieving these goals, and that the necessary commitment will be there to see it through.

The process of establishing a set of lifestyle and business goals that ideally are both attainable and compatible will now be discussed. The specific goals set at this time should be viewed as being **tentative**, since a person or family

cannot set firm goals until they first determine the “costs” and /or possible consequences of actions needed to achieve these goals.

Goal setting: Some basic concepts

The focus here will be on:

- Attaining a balanced lifestyle.
- Involving family and other affected parties in the process.
- The characteristics of meaningful, useful goals.
- An overview of the goal setting process.

Everybody's different, but most people seek a balanced lifestyle

No two people will have the same goals and values in life. This is true of farmers as well as other business people. No two farm families have the same goals; likewise, no two members of a given farm family have the same goals. At one extreme, some farm families attempt to manage their farms to obtain the greatest possible amount of income, even though it means constant hard work and limited time to enjoy the fruits of their labors. This often results in parents finding that their children have grown up and left, and as a result, have missed those good times revolving around their children's activities. As these parents advance in age, they may also find that they are afraid to retire because they have developed few if any outside interests, though they may have plenty of money to do many things. They can be referred to as “being too hungry for money to enjoy living.”

At the other extreme, there are farmers and farm families who place more emphasis on leisure than on the business of earning a living. They tend to view farming largely as a way of life, not as a business. They would rather work less and accept a lower level of living. But, as a result, they may not generate sufficient income to buy the things the family needs or wants. And, as they advance in years, they may well find that they are “too old to work but too poor to retire.”

While obviously there are farmers and farm families operating and living at these extremes, most successful farm managers (and farm families) attempt to lead a more balanced life. Their goal is to bring about a three-way balance.

First, to manage the farm well enough and work hard enough to maintain a good level of living at present, as well as providing adequately for their retirement years. Second, to spend enough of their income to have an acceptable level of living at present. Third, to take enough time off for fun, recreation, and other nonbusiness activities to enjoy life as they go along.

Involving family members and/or other affected parties

Typically, each family member and/or affected business partner wants something different out of life, which, in turn, impacts the farm business. Thus, all affected parties need to talk over the situation and ultimately reach agreement as to what a balanced lifestyle looks like. If all affected parties are not involved in the goal setting process, and/or general agreement has not been reached regarding lifestyle and business goals, conflicts will likely arise. And in all probability, if things don't work out as planned, there will not be the cohesive, committed group present to help see it through. The “I told you so's” will have their day!

But as the family and/or other affected business partners begin the goal setting process, there are two key issues that require attention in the family business setting.

■ Issue 1. Overlap of the family entity and the business entity: how much?

Many farm businesses are still family owned and operated. In these cases, families are dealing with two entities whose “rules of the road” are often exact opposites in nature. The **family/personal entity** is largely a socially focused entity, where relationships are emotion-based, and where high priority is placed on loyalty and support, on family continuity and harmony. The **business entity**, on the other hand, is largely task oriented, with high priority given to competence, commitment, and to growth and change.

A certain amount of overlap of these two entities can be viewed as being **constructive** in nature. Such overlap can bring about

more fulfilling family relationships and business success. But **excessive** overlap can bring about a very untenable situation, one in which the family/personal relationships become vulnerable to business issues, and the business entity becomes vulnerable to personal/family issues and entanglements. This obviously provides the setting for many potential conflicts from which, in the farm setting, there is little place to hide or take refuge.

■ **Issue 2. Allotting time and money between family and business**

As the family and/or other affected business partners begin the goal setting process, it is also important to recognize that they must reach a compromise between meeting **present satisfactions** and **longer term expectations**. No family, whether they live on a farm or in the city, can afford to buy everything they want at once, nor can they spend as much time as they desire having fun. Thus, they will have to pick and choose; a compromise must be reached that fits the situation. This is not an easy task, but a very necessary one. If it is done together now, it will eliminate a lot of “second guessing” and conflicts later on.

Characteristics of meaningful/useful goals

A goal is a target toward which an individual or group is willing to work or have a commitment. Meaningful and useful goal statements:

- Are specific and, if possible, measurable.
- Are realistic and attuned to the situation.
- Require considerable effort, yet are attainable.
- Include a time frame within which they are to be achieved.
- Vary in degree of difficulty or time required so there is a sense of accomplishment along the way.

Keep in mind that some goals will compete with other goals. Some goals will be complementary, while still others will be relatively independent of each other. Also, keep in mind that as times and situations change, goals should be reviewed and changed if needed.

Finally, be realistic. It is likely that not all goals will be attained within the time period set. Learn from this experience as new goals are established later on.

Overview of the goal setting process

To begin goal setting, use a three-stage process. First, establish longer term family/personal goals that relate to family and personal lifestyles. Second, list longer term business and career goals. The third stage is “crunch time”—the process of resolving any major conflicts between lifestyle and business goals. The remaining goal conflict areas can be left until alternative business plans have been studied.

Stage 1. Establish a tentative set of personal/family lifestyle goals

Since, for most people, the farm business provides a means to an end—a meaningful, satisfying lifestyle—start the goal setting process by first focusing on lifestyle goals. **Use Worksheet 2-2 at the end of this chapter to go through a three-step process as follows:**

Step 1. Sketch out desired lifestyle goals

The manager and spouse (if any) should do this individually at first, keeping in mind the present family and business situation, as well as the apparent demands of the farming industry and society. If there are other partners or families involved in the business, they should be a part of this lifestyle goal setting process as well.

Research suggests that everyone has five basic needs to be met in order to feel satisfied with life. These include:

- A certain level of income.
- A certain degree of security.
- A feeling of acceptance and esteem.
- A feeling of achievement and recognition.
- A feeling of growth and fulfillment.

Obviously, the importance of each of these needs, and the extent to which they have already been met vary by individual. Therefore, first sketch out the **longer term lifestyle goals** that are desired personally and for the family. Also consider things to do in the near term, i.e. in the next one to three years.

Step 2. Compare proposed lifestyle goals; make needed adjustments

Share the list of lifestyle goals with all affected parties. Look first for similarities—things of agreement. There are also likely to be some significant differences. This will call for some negotiation, some give and take. At this point, develop a tentative set of goals; leave some goal differences in place until further business planning is done.

Step 3. Determine the impact of lifestyle goals on the business

Once there is tentative agreement about personal and family goals, consider what impact these goals could have on the business. For example, what do the lifestyle goals imply regarding the amount of money needed for family spending? for possible savings? for education? for travel? What do the goals imply relative to a desire for increased financial security, or a willingness to accept physical and emotional stress? The need for acceptance, recognition, status and personal growth may require that one spend less time managing the business and more time meeting personal needs or the needs of others. Or, it may involve a major improvement in the business. Make two or three estimates for several time periods, reflecting priorities with each successive step. But remember, these are tentative goals at this point.

Stage 2. Establish a tentative set of business and career goals

Next, in the bottom portion of **Worksheet 2-2**, establish a tentative set of business and career goals. In doing so, take into account the lifestyle goals just set, as well as the present status of the business, and the anticipated

business environment. This may be done using the same three steps used above in setting lifestyle goals. Work together (manager, spouse, affected parties) in setting goals for the business.

In setting business and career goals, use a format that first reflects the findings of the business assessment. For example, what are production level goals? Will the size of the business increase or decrease? What changes will be made in marketing the products? In the financial and personnel management areas? Financial goals might include the level of net income, return on investment, net worth change and/or debt/asset ratio. The latter ratio would reflect the manager's preferred level of financial risk. Controlling risks in the production and marketing phases may need to be explored as well. Personnel management goals may reflect the amount of operator and family labor to be allocated to the business, and/or goals relative to the use of hired labor.

Rank business goals in terms of their relative importance. Recognize that not all business goals will be achieved, but hopefully the ones given highest priority will be met.

Stage 3. Reconcile major lifestyle and business goal conflicts

Before proceeding further with the planning process, make an attempt to resolve major conflicts, if any, between the tentative business and family/personal lifestyle goals. Again, this does not have to be a complete resolution of differences at this point. But indicate the relative importance or priority given to these competing goals. This helps select the alternative business adjustments to be analyzed as well as establish a strategic plan for the business.

Where to from here?

The focus of previous segments of this chapter was on determining:

- Where the business has been.
- Where the business and the farming industry appear to be headed.
- The quantity and quality of resources available if the present business is changed.
- Tentative lifestyle and business goals.

There are four options or routes that might be considered in developing a longer range plan. Decide which option(s) to explore, given the business' situation and goals.

Option 1. Continue present business as is

From the analysis of one's family and business situation, the manager, spouse, family and/or co-owners may agree that no business adjustment is currently needed (adjustment Route 1 of Figure 1-2 Chapter 1). As Zimmerman² points out, the chief characteristic of such a situation is **that any crisis the business may be in is not broadly perceived by those involved**. This can result in a delay in taking any corrective action, which may result in the firm being unable to survive later on. Business survival is virtually impossible if nobody wants to change.

In any case, in developing a longer range plan first determine whether maintaining the status quo is a feasible option. If it is, then focus primarily on fine tuning the present operation. This option also serves as a base plan against which other alternatives can be compared.

Option 2. Make improvements in present business

The previous analysis and goal setting process may have indicated the need to consider more substantial adjustment options. However, major changes should not be made when

fine tuning or small, incremental adjustments would suffice. If too much change is introduced too soon, it can bring more confusion than progress, and result in a traumatic, dysfunctional situation for those involved.

Thus, in the process of identifying and analyzing possible business adjustments, first zero in on possible adjustments that would improve the present business (adjustment Route 2 in Figure 1-2 Chapter 1). This may include fine tuning the present operation and/or making adjustments in its financial structure.

Option 3. Make more substantial business changes

If it appears that more substantial changes in the size and/or organization of the business are needed or desired, consider alternatives that are feasible in light of the business situation and goals (adjustment Route 3 in Figure 1-2 Chapter 1).

To further analyze one or more of the above options, first go to Chapter 3 Part I which focuses on development of a longer range farm plan. Then go to Chapter 4 Part I, which discusses the development of a workable transition plan, gaining acceptance of the plan, and then preparing to implement and manage the revised business.

Option 4. Reorganize the financially stressed business

This option is for the financially stressed business situation (adjustment Route 4 in Figure 1-2 Chapter 1.). Options to be considered include debt restructuring, rescheduling, and/or the liquidation of assets. If this is the situation, first go to Chapter 5 Part I. Then refer to Chapters 3 and 4 Part I as needed.

2. Fredrich M. Zimmerman, *The Turnaround Experience: Real World Lessons Revitalizing Corporations*, McGraw Hill, Inc., pp. 9-11.

Table 2-9. Example of FINAN income statement.

Cash farm income			Cash farm expense			
Item	Quantity	Value	Item	Cost		
Corn	55,980 bu.	\$122,980	Seed	\$15,875		
Soybeans	8,244 bu.	51,360	Fertilizer	24,156		
Corn (govt. loan)	4,000 bu.	7,120	Crop chemicals	22,149		
Soybeans (net gvt sale)	2,000 bu.	2,291	Crop insurance	6,050		
Finish hogs	1,314 head	131,422	Drying fuel	8,124		
Cull breeding livestock		2,156	Crop marketing	791		
Deficiency payments		11,968	Feeder livestock purchase	29,166		
Other government payments		8,724	Purchased feed	32,847		
Insurance income		12,473	Veterinary	3,067		
		-	Livestock supplies	2,950		
		-	Livestock marketing	1,956		
		-	Interest	41,242		
		-	Fuel & oil	12,890		
		-	Repairs	17,056		
		-	Hired labor	10,157		
		-	Land rent	28,050		
		-	Real estate taxes	3,850		
		-	Farm insurance	3,997		
		-	Utilities	4,146		
		-	Miscellaneous	2,450		
(C) Gross cash farm income		<u>\$350,494</u>	(D) Total cash farm expense	<u>\$270,969</u>		
(E) Net cash farm income			(C-D)	\$79,525		
Inventory changes						
	Crop & feed	Market livestock	Receivables & other income items	Prepaid expenses & supplies	Payables & accrued expenses	Total
Ending inventory	\$136,593	\$21,692	\$19,500	\$2,500	\$14,070	
Beginning inventory (-)	111,880	20,787	21,050	1,500	19,333	
(F) Inventory change (=)	<u>24,713</u>	<u>905</u>	<u>-1,550</u>	<u>1,000</u>	<u>-5,264</u>	\$19,805
(G) Net operating profit			(E+F)			\$99,330
Depreciation and other capital adjustments						
	Breeding livestock	Machinery & equipment	Buildings & improvements	Other assets	Total	
Ending inventory	\$34,753	\$198,090	\$182,378	-		
Capital sales (+)	-	-	-	-		
Beginning inventory (-)	-	110,105	49,935	-		
Capital purchases (-)	39,250	110,000	142,000	-		
(H) Depreciation / cap adj (=)	<u>-4,500</u>	<u>-22,015</u>	<u>-9,557</u>	<u>-</u>	\$-36,072	
(I) Net farm income			(G+H)			\$63,258

Worksheet 2-1. Strengths and weaknesses - opportunities and threats to the business.

<p>Strengths</p>	<p>Opportunities</p>
<p>Weaknesses</p>	<p>Threats</p>

Worksheet 2-2. Developing a tentative set of lifestyle and business/career goals.

Lifestyle goals: Manager/ family	
1 to 3 years	Longer term
Business/career goals	
1 to 3 years	Longer term

Developing a longer range business plan

3

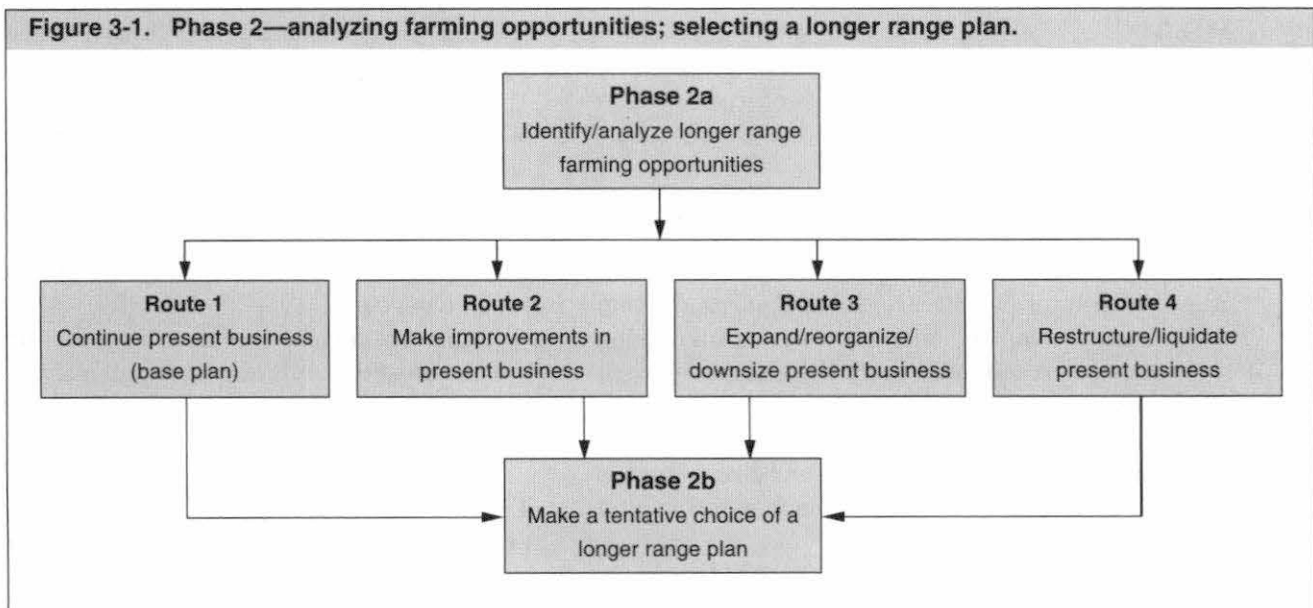
- Improving business profitability: Some options
- Improving financial soundness: Some options
- Analyzing selected business adjustments
- Selecting a tentative longer range plan



Chapter 2 discussed the process of evaluating a present business situation and setting tentative lifestyle and business goals (Phase 1 of the business planning process). This chapter focuses on developing a longer range plan for a business, Figure 3-1. It involves identifying and analyzing selected longer range farming opportunities (Phase 2a) and making a tentative choice of a preferred longer range plan (Phase 2b).

Two characteristics of a good manager include the ability to: (1) identify alternative ways of solving problems; and (2) give ample consideration to each possible solution. The purpose of the next two segments of this chapter is to assist the manager in identifying possible solutions to business problems. Later segments focus on analyzing these alternatives and reaching a tentative decision about a longer range plan.

Figure 3-1. Phase 2—analyzing farming opportunities; selecting a longer range plan.



Improving business profitability: Some options

In Chapter 2, several measures of business profitability were discussed. The need to decide the nature and extent of a specific profitability problem (e.g. low returns, stagnant or negative net worth) and whether the problem is likely to be of a short-term, self-correcting nature, or of a more serious, longer term nature was discussed.

If there are more serious longer term profitability problems or the stated goal is to increase profits, the next step is to identify opportunities for improving profitability. As shown in Figure 3-2, these adjustment possibilities tend to fall into three categories:

- Improved operational efficiency.
- Improved enterprise choices and combinations.
- Adjustments in the size of business and amounts of resources used.

The focus here will be to help identify ways of improving the profitability of a business either by making: (1) selected adjustments in the present operation, or (2) more substantial adjustments in the business.

Improving profitability of present business (adjustment Route 2)

Opportunities for improving the profitability of present operations include:

- Increasing returns over direct costs.
- Minor adjustments in the enterprise mix.
- Better management of overhead costs, Figure 3-2.

Increasing returns over direct costs; adjusting the enterprise mix

To improve the profitability of production enterprises, first identify ways of increasing sales or receipts by more than direct or variable costs, or by reducing sales by less than direct costs for each enterprise. To make this analysis, first develop income and direct expense budgets or data banks for each existing crop and livestock enterprise.

Once this is done, look for possible improvements in three areas. First, are there changes in production practices or levels of input use

that would increase the profitability of the enterprise? Second, are there ways of improving the quality and/or handling of the product that would increase profits? Third, would improvements in the marketing program increase the profitability of present enterprises? This might include reducing costs of purchased inputs and/or increasing the price received for products produced. Also consider minor adjustments in the enterprise mix. This might involve scaling back or eliminating unprofitable enterprises, while making a modest expansion of more profitable ones.

To make an in-depth analysis of these possible adjustments, see Chapters 2 and 3 Part III.

Improving profitability through better management of overhead costs

Since the objective is to develop a more profitable longer range plan for the present business, analyze overhead costs as a means of improving profitability. The areas that might be explored include machinery, labor, land and buildings. A brief discussion of possible adjustments in these overhead costs is provided here. For a more detailed discussion of each of these overhead cost areas, see Chapters 1 through 5, Part IV.

Machinery-related adjustments

Machinery-related adjustments involve three major decision areas:

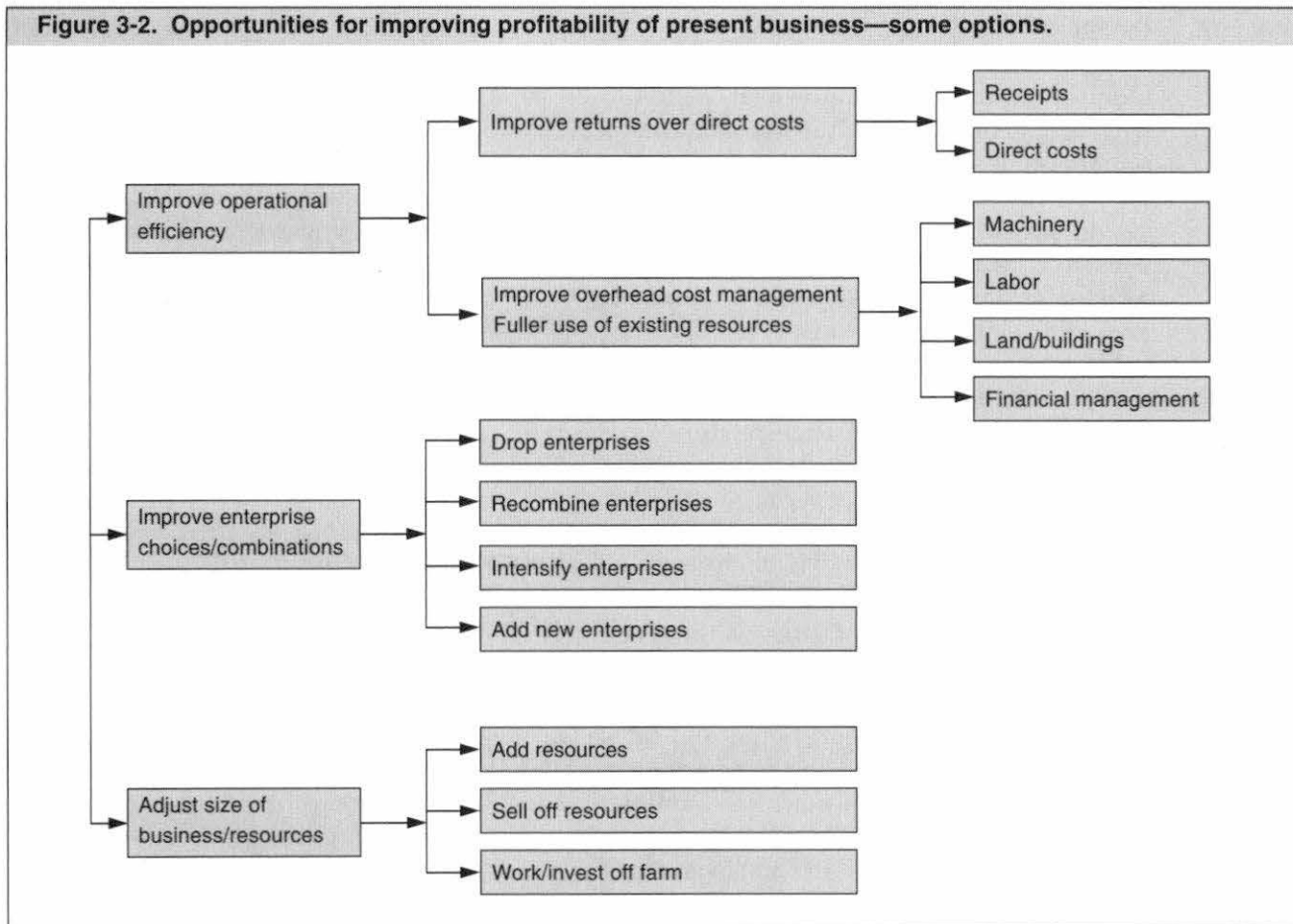
- Machinery size and system selection.
- Replacement decisions.
- Methods of acquiring use of machinery.

The focus here will be primarily on the latter two aspects.

When to replace a machine is probably one of the most difficult machinery decisions. The reasons for replacing a machine include such factors as:

- The ownership and operating costs for the existing machine likely exceed the costs of owning a new machine.
- The machine is undependable.
- The machine is obsolete.

Figure 3-2. Opportunities for improving profitability of present business—some options.



- The machine is too small.
- Tax considerations.
- The farmer just wants new “paint” (and can afford it).

The replacement decision is one of finding the economically optimal time in the life of an old machine to make the investment to replace it. This involves estimating the cost of owning and operating the present machine for another year. Comparing this amount to the projected annual cost of a new or used replacement will indicate which is less costly.

Acquiring farm machinery services means gaining control of a machine long enough to accomplish a given task. There are five common methods of acquiring farm machinery services. Short-term control can be accomplished through custom hire, rental, and exchange work with a neighbor. Long-term control can be gained through ownership or a commercial lease. Consider each method

whenever additional machine services are needed or when an existing machine needs to be replaced. No single method will be best for all farms or for every situation on a particular farm. For a more detailed discussion of decision-making relative to machinery and equipment, see Chapter 3 Part IV.

Land and building-related adjustments

When renting land, is the rent reasonable or is it more than the going market rates just because it keeps labor and machinery busy? Similarly, is there owned land that is costing more than it's worth? Is it possible to get an adjustment on the total land debt outstanding or repayment terms? Can the crop rotation be changed or intensified to include growing higher return crops? If there is excess building capacity, can it be rented to someone else? Would adjustments in the size or kinds of enterprises make fuller use of it? See Chapter 1 Part IV for a more detailed discussion of leasing farm land and facilities.

Personnel-related adjustments.

Improved management of personnel—both family and hired—can improve labor productivity and, in turn, the profitability and financial soundness of a business. Careful selection, thorough training and adequate supervision of workers can improve productivity. Consider substituting more capital (e.g. machinery, equipment) for labor to improve productivity and efficiency of workers. But, in this latter case, determine whether the annual cost of these new capital items is lower than the annual cost of the labor replaced. See Chapters 4 and 5 Part IV for a more detailed discussion of these personnel-related aspects.

Making fuller use of existing machinery, labor, and facilities: a combined look

When analyzing each of these overhead cost areas, it is important to recognize that many of these decisions involve proportionality aspects. That is, are the machinery, land and labor resources being combined in the best proportions? Is there too much machinery relative to land and labor? Would it be more profitable to increase the amount of land and labor to utilize a given set of machinery more effectively? Arriving at a perfect balance is often difficult in that the land, labor and machinery resources are generally not available in small, easily divisible units.

Often a farm has unused capacity in terms of its machinery or facilities. Failure to use this capacity means the business must carry a higher overhead cost per dollar of sales than necessary. Thus, expanding one or more enterprises, doing custom work with one's machinery, and/or selling off machinery or renting out buildings, might help improve profitability.

Improving profitability through improved financial management

There are two avenues for improving profitability via improved financial management. One involves changing the combination of assets used: (1) shifting highly liquid assets to more fixed, higher return assets, and/or, (2) selling off fixed assets that aren't being used and which will not likely be used in the future.

A second avenue is to change the sources and combination of liabilities. Reducing the cost of capital by finding lower cost sources of debt capital, or rewriting more favorable leases or contracts, will also lower the cost of capital. More rapid repayment of debt through increased earnings, and/or lower family spending, will reduce interest expense over time.

Increasing annual net worth change

Increasing business profits may go for naught if family living expenses are out of control or income tax management is lax. Therefore, consider changes in these areas as well to increase net worth over time.

Improving profitability through more substantial business changes (adjustment Route 3)

The focus now shifts to adjustment Route 3, Figure 3-1, which includes the possibility of making more substantial changes in the size and/or organization of the business. Some considerations and consequences of developing an expansion plan, and/or one involving a reorganization or downsizing of a business are discussed.

This route focuses on the possibility of improving the profitability of a business without unduly jeopardizing its financial soundness. In fact, over time it is hoped that the change would increase the financial soundness of the business as well. This route may involve: (1) expanding present enterprises, and/or (2) doing something different with the same or more resources.

Broad option 1: Expanding the business with present enterprises

If a business has excess management available and is in a relatively strong financial position, expanding the present operation, i.e. doing more of what has been done well, may improve profits sufficiently. This course of action usually represents less of a change and thus less management stress than if a shift into new areas or enterprises occurs. Ideally, most of the technology of present enterprises is under control and thus the major task becomes learning how to manage and control a larger volume of business.

Table 3-1. Effect of debt levels and rates of return on net worth change.

	Debt-free		High debt	
Total assets	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Return per dollar	15%	0%	15%	0%
Earnings before interest, taxes, and family living	\$150,000	\$0	\$150,000	\$0
Amount of debt	0	0	800,000	800,000
Interest on debt (9%)	0	0	-72,000	-72,000
Earnings before tax	\$150,000	\$0	\$78,000	-\$72,000
Income tax due	78,000	0	32,760	0
After-tax income	\$72,000	\$0	\$45,240	\$0
Family consumption	-25,000	-25,000	-25,000	-25,000
Change in net worth	\$47,000	-\$25,000	\$20,240	-\$97,000
Beginning net worth	\$1,000,000	\$1,000,000	\$200,000	\$200,000
Percent change in net worth	4.7%	-2.5%	10.1%	-48.5%

But expanding existing enterprises does not come without cost. Besides some added management stress, the financial soundness of the business can be adversely affected, at least at the outset. Most expansion programs today require the use of additional outside capital, most commonly in the form of debt capital. This, in turn, can have an adverse affect upon the liquidity and solvency of a business, at least in the short run. There are three important concepts or principles that relate to this issue.

Concepts 1 and 2: The leverage/liquidity conflict; the increasing risk principle

Since most expansion programs involve the use of additional debt capital, a definite conflict can arise relative to the increased use of debt capital (leverage) and the liquidity of an operation. This concept can be summarized as follows: Business expansions usually require the use of additional debt capital or leverage. Leverage brings into play the increasing risk principle which suggests that unfavorable events have a greater negative financial impact than positive impacts resulting from positive events. Note the high debt situation in Table 3-1.

This increased risk is due primarily to the fact that interest charges on debt continue and accumulate in adverse situations, and families have to live. This, in turn, means that a growing, more highly leveraged business

needs greater liquidity to protect itself from these increased risks. But, ironically, an expansion program's increased capital demands typically reduces the firm's liquidity position—its readily salable assets and/or its excess borrowing capacity. Thus, the paradox.

A related negative effect on the liquidity position in the short-run is the fact that getting a new expansion program into full production may involve some development time and/or require a buildup of inventories before products are available for sale. As a result, additional operating capital will probably be needed to get past this early implementation phase.

Concept 3: The "lost capital" concept

Another fact of life that can have a marked negative affect on solvency is the "lost capital" concept. This concept comes into play particularly in the case of added buildings and facilities. The reality of the market is that once a building or facility is constructed, the market value of such a structure is usually considerably less than its original cost. Of course, the extent of this "lost capital" varies by type of facility and its location. For example, a highly specialized building will be discounted more than a more flexible facility. Similarly, a dairy facility in a heavy dairy area will retain its value better than one located in a largely cash crop area.

Broad Option 2: Reorganization/possible size change

The reorganization route may call for a change in the kinds as well as the sizes of enterprises. It may also involve a shifting of some resources to off-farm endeavors and/or a reorganization of the balance sheet. Such changes may be up for consideration for financial and/or other reasons. From a financial standpoint, such changes can:

- Improve profits while maintaining a reasonable level of financial soundness.
- Improve the financial soundness of the business while maintaining reasonable profit levels.
- Improve both.

Other reasons for such a change might include the manager's skills and preference for various enterprises, attitude toward risk, as well as goals and stage of career.

But here again the major concern is the impact of such changes on the profitability and financial soundness of the business. That is, is the change "affordable"?

This option includes the possibility of shifting to new enterprises and/or dropping some existing enterprises while expanding others. It may also involve a change in the amount of resources used to better fit a new enterprise mix. The types of enterprises that best fit a given situation depend on several factors including:

- Comparative advantage.
- Financial position and ability to assume risk.
- The amount of land, labor and capital available.

Comparative advantage

Comparative advantage has two dimensions: (1) location and (2) personal "comparative advantage" and preferences. Location relates to the tendency of an economic unit—an individual farm, region, or nation—to concentrate on the production of those items that give it the greatest relative advantage or the least relative disadvantage.

Physical, biological and economic forces determine the most profitable crops or livestock in an area. In addition to soil, which is a principal

factor affecting productivity differences among farms and regions, climate, topography and distance to market influence the location of production. Biological factors such as insects, plant diseases, and weeds can also affect location. Similarly, new farming techniques can alter production responses and thus affect the comparative advantage of an area or farm. Economic forces involving relative prices and costs also influence where products are produced, or even if they are produced at all. Over time, population, incomes, and in turn, markets, influence the location of production.

Personal "comparative advantage" and preferences refer to skills and motivations. What is the manager good at? Milking cows? Farrowing pigs? Growing and marketing crops? Likewise, what does the manager enjoy doing? If personal skills and preferences are at odds with the types of enterprises that best fit the farm or locale, two facts of life come into play: (1) profits may not be as high as they could be if other enterprises were acceptable, or (2) a different type of farming or a farm in a different locality may be in order.

Financial position and related risk aspects

Financial position and related risk aspects include two important concepts: (1) the profit-risk concept, and (2) diversification versus specialization strategies in the management of risks. As noted earlier, the stability of income and risk characteristics of the various alternatives must also be considered.

A key paradox of the business world is the relationship between **profits and risk**. Actually, two relationships tend to exist: (1) more profitable ventures tend to be riskier, and (2) the difference in profits between a more profitable and less profitable venture generally is just enough to compensate the average investor/manager for the greater risk assumed. Since there are few "average" investors in a given industry, managers will vary in the risk premium required, or their willingness to take on risky ventures. This variation may arise from their personal attitude toward risk as well as the ability of their business to withstand variations in earnings. For a more detailed discussion of production and marketing risks, see Chapters 2 and 3 Part III.

In attempting to manage risks, managers sometimes consider a second concept or strategy: the **diversification** of their business. Diversification may be either **horizontal** or **vertical**. The common view of diversification is that of horizontal diversification—the production of a number of farm commodities. (For many decades, Midwest farms had several crop and livestock enterprises.) **Vertical** diversification refers to the various steps in producing, processing, and marketing a product. A discussion of the pros and cons of diversification and specialization follows.

- **The Case for Specialization.** Most farms have become more specialized both vertically and horizontally. They are producing fewer products and are involved in fewer steps in the producer-to-consumer food chain. When other firms or farms can perform a function more efficiently, individual farmers give up that function to concentrate on others they can perform more efficiently. One reason for this movement toward specialization is that it is difficult for family farm managers to become specialists in several enterprises—their management resource is spread too thin. Specialization also permits an increase in the volume of production to achieve economies of size and increase profits per unit. Since investments in machinery, equipment, and facilities can be quite considerable and very specialized, farmers with limited capital find it more profitable to invest adequately in the production of a limited number of commodities, rather than inadequately in a larger number.

- **The Case for Diversification.** It may be possible to obtain some advantages of both diversification and specialization by producing more than one crop, for example. It may also be profitable to diversify if the new enterprises complement or supplement the primary farm enterprise(s). For example, finishing feeder pigs on a large crop farm can better utilize regular hired labor during the noncropping periods. Diversification can also provide greater stability of income. This often involves dealing with enterprises that compete with each other. How well this

might work depends on the income variability characteristics of the enterprises and degree of association between them.

The kind and amounts of land, labor and capital available

The proportionate mix of the major resources—land, labor and capital—can markedly affect which combination of enterprises will best fit a particular farm situation. This is tied to the principle that the most profitable enterprise combination will be the one that yields the **highest return to the most limiting resource**.

- In keeping with this concept of maximizing returns to the most limiting resource, the proportionate mix of the major resources (land, labor, and capital) has a marked effect on which enterprises will generally best fit a particular farm situation. For example, on relatively **small farms** (360 acres or less per worker in the Corn Belt) where land and capital are short relative to labor, livestock enterprises that are labor intensive should normally be selected if the operator hopes to make a living from full-time farming. Typically, dairying or feeder pig production are best suited to this situation. For this size of farm, plan the livestock program first, and then fit the cropping program to the feed needs.
- On **larger farms** (800-900 crop acres or more per worker, Corn Belt) labor is usually the limiting factor, especially during the cropping season. In this situation, there may or may not be livestock. If there is livestock, then livestock finishing enterprises often fit well. These enterprises require very little direct labor but need large quantities of both capital and feed. In this situation, plan a high return cropping program that is consistent with good soil management. Livestock can then be added to the extent that labor, facilities, and management interest and ability are present.
- **Medium-sized farms** (Corn Belt farms of 360 to 800 acres per worker) usually require moderately intensive livestock enterprises

to provide adequate returns to a farm family. The highest return livestock on such farms will usually be a farrow-to-finish hog enterprise. A second enterprise that uses any forage produced is often found on these farms. With this size of farm, the crop and livestock programs generally should be planned together.

Shifting resources to off-farm endeavors.

Another expansion alternative is to diversify vertically into the agribusiness sector, e.g. farm supply, processing, or marketing aspects. Still another alternative is investment of both management and capital—or just capital—outside the agribusiness sector. Such an investment may become an integral part of the overall business situation or merely represent a place to invest excess funds, such as in an apartment building in Arizona or in a mutual fund.

Broad Option 3: Downsizing for personal, family or business reasons

Downsizing for personal, family, or business reasons, may be the result of the business having grown too fast or having become too

large to manage effectively. Consider a reduction in the size of the business to reduce risks, improve financial soundness, and/or to reduce management and time demands.

Another downsizing option may be one in which an established business, for financial, management, or other reasons, has not reached the level of profitability that is needed to meet family living demands and still permit financial progress. In this case, consider shifting to a dual career path, coupling farming with a good off-farm job. In both instances, consider whether the downsizing should be made with the present or a changed set of enterprises. (See earlier discussion of enterprise selection.)

But, probably one of the most typical, personally imposed downsizing situations occurs when the farm operator goes into semi-retirement. In many cases, the farm is not going to be taken over by a younger family member. Here, elimination of part or all of the labor intensive enterprises, or those enterprises that may be threatening the financial stability of the business, needs to be considered.

Improving financial soundness: Some options

The financial soundness or permanence of a business hinges on its ability to meet current and on-going financial commitments in a timely fashion (liquidity), and its ability to cover all debts if the business were to be liquidated at a given time (solvency). As shown in Figure 3-3, there are three broad areas to explore when considering the improvement of the financial soundness of the present business. These include:

- Liquidity.
- Solvency.
- Risk exposure aspects.

Improving financial liquidity

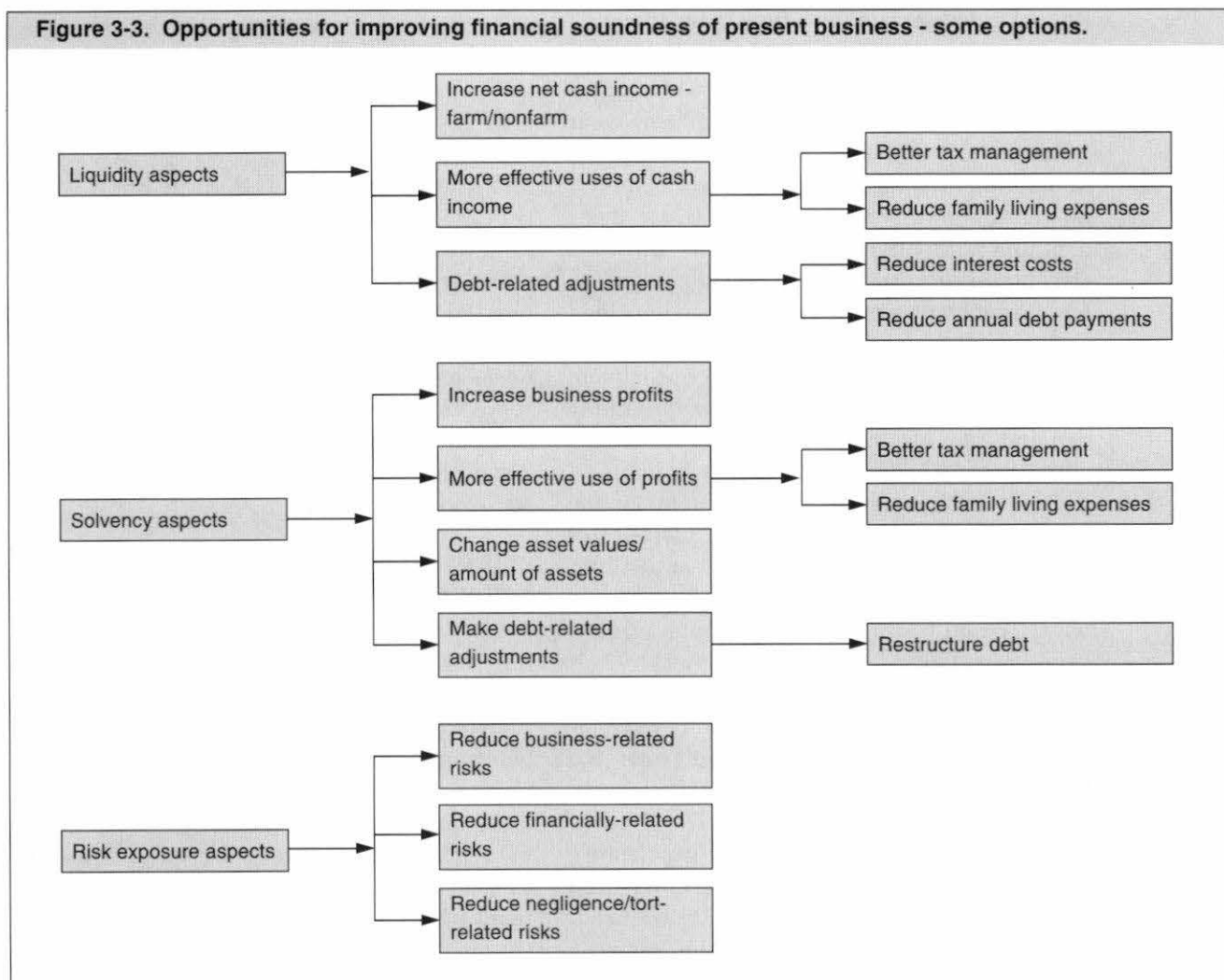
If there are problems meeting cash flow or **liquidity demands**, examine opportunities to

increase the net cash income from farm and nonfarm sources. Or, make more effective use of the income received by reducing income taxes through better tax management and/or reducing family living expenses, and other nonfarm draws. It may be possible to make debt-related adjustments through reduced interest costs and/or rescheduling debt payments.

Reducing short-term cash flow imbalances

Maintaining sufficient cash inflows depends upon the liquidity of existing assets, the cash reserves on hand, and the ability to obtain funds from outsiders as needed. Time is of the essence in dealing with short-run (within the year) liquidity problems. Broad alternatives are of two kinds: (1) those that may help reduce the extent of the cash inflow/outflow

Figure 3-3. Opportunities for improving financial soundness of present business - some options.



problem, and (2) those that can make up the difference—solve the cash inflow-outflow problem.

There are at least two alternatives to reduce the extent of potential cash flow imbalances. First, try to increase the amount and rate of cash inflows by adjusting the amount and timing of sales, and through careful management of inventories and receivables. Second, look for ways of reducing or delaying outflows of cash by delaying acquisition of, or payment for, inputs used in the business. If it is sound from a longer run standpoint, consider shifting debt to a longer term repayment schedule or reduce family living expenses.

Cash reserves, the liquidity of various assets, and borrowed funds are three other major alternatives for alleviating a short-term

cash imbalance. Typically, however, cash reserves won't be sufficient to meet short-run emergencies, and the ease of converting non-cash liquid assets such as crop and livestock inventories into cash varies. So the major source of new funds in the short-run is generally from creditors, who must decide whether to lend on the basis of their interpretation of the farmer's credit rating.

To meet an impending short-term liquidity crisis: (1) make as many internal adjustments as possible, and (2) work with the lender and develop plans to determine how a short-run financial crisis relates to the longer term development of the business. Often, a business in a turnaround or substantial adjustment phase, will experience short-run liquidity problems.

Reducing longer run cash flow imbalances

Since the business also needs to meet cash outflow demands over time, look to strategies that will reduce the extent of the basic cash inflow/outflow imbalance and meet remaining imbalances. If a longer range projection of the business shows that earnings will not meet debt and family living commitments, consider the options discussed in the previous segment on improving profitability. Improved earnings and careful management of living expenses will **help** solve longer term liquidity problems. Restructuring debts to reduce repayment demands can also help meet longer term obligations in a more timely fashion.

Since cash reserves seldom meet longer term cash imbalances, conversion of assets and obtaining funds from individuals or lending institutions outside the business, are the basic ways of maintaining longer term liquidity. Converting liquid and even fixed assets to cash can, in some instances, get a business back on a sound financial footing. This is particularly true of businesses that have grown too fast or have attempted to go the land ownership route at the wrong time. Don't go to extremes, though, by converting so many assets to cash that the longer term earning power of the business is seriously reduced. In those instances, liquidating the business may be the only long-term course.

In some instances, obtaining additional outside funds may be the route to go. To make this approach work, however, the returns from the added capital must be high enough to meet its own repayment demands, with enough excess earnings left over to reduce and/or eliminate existing cash flow imbalances. Otherwise the effect is "pouring good money after bad."

Improving financial solvency

To address solvency problems (high debt/asset ratios and/or declining net worth), first look for ways of increasing business profits. Over time a profitable business will tend to improve its solvency position. So unless the present solvency position is unacceptable to the lender, concentrate on ensuring continued and/or increased business profits. Good tax management and careful management of family living expenditures will also improve the

solvency position over time. Also, check to see if all assets are accounted for and whether they were properly valued.

A severe solvency problem will require consultation and cooperation with lenders and other financial advisors to see if bankruptcy and/or asset liquidation can be avoided. This will require careful business and money management. If additional strategies are needed, consider selling selected assets, restructuring debt with possible debt forgiveness, as well as a possible lengthening of repayment terms and/or a reduction in the interest rate. See Chapter 5 Part I for a further discussion of these options for a financially stressed business.

Improving financial soundness through better risk management

The whole area of risk brings a lot of gray into the financial management picture. In this case: (1) evaluate the present business situation in terms of the kinds and amounts of risks being assumed relative to the business' ability to withstand such risks; and (2) evaluate the kinds and amounts of risks in terms of the manager's attitude toward risk and stage of career. For example, farmers nearing retirement age need to be more conservative than younger persons who have much more time to recover from financial set backs.

The following are some possible ways of reducing the risks associated with a business, and thus for improving financial soundness.

- **Production and yield risks** can be reduced by selecting lower risk production practices or enterprises, diversification, crop insurance, extra machine capacity, and maintenance of feed reserves.
- **Marketing and price risks** can be reduced through hedging, forward contracting, spreading sales, and selecting enterprises with less price fluctuation.
- **Business and financial risks** can be reduced by maintaining adequate cash or credit reserves, keeping loan payments in line with expected earnings, and possibly using leasing arrangements in place of ownership.

- **Casualty and legal risks** normally can be best managed with an adequate property and liability insurance program, and in some cases, through the form of business organization used, particularly through the use of a corporation or limited partnership.
- **Human risks** can be reduced by providing safe working conditions; training backup labor and management (spouse, child, hired worker); adequate health, disability, and life insurance; and a good estate plan.

Strategies that buffer or reduce the effects of risk always come at a cost as they reduce the chances of making a “killing” when investment returns and leverage use are high. However, they may provide the basis for the longer term survival, and successful development of many farm businesses. See Chapters 2 and 3 Part III for a more detailed discussion of production and marketing-related risk management. See also Chapter 6 Part II which discusses the use of insurance in managing business- and family-related risks.

Analyzing selected business adjustments

After identifying several possible business adjustments that might improve the profitability and/or financial soundness of the present business, analyze them with these three steps.

1. Select the most promising alternatives to be analyzed.
2. Analyze these alternatives.
3. Interpret the results and select a tentative longer range plan.

Select the most promising alternatives

If there are only a select few adjustment possibilities, go directly to the FINLRB Computer Program as discussed in the next portion of this segment. However, if there are several possible adjustments or alternatives involved, subject them to the following tests. If there are still too many options, make an analysis of these options using the partial budget or capital budgeting procedures, as described in Chapter 1 Part III.

Some general tests for selecting feasible alternatives

After identifying some possible alternatives, eliminate those that are clearly unattractive or infeasible, leaving only a select few for detailed analysis. Use the following three tests to select the most promising alternatives.

- **Test 1.** Is the adjustment alternative consistent with the financial problems and their causes as shown in the analysis of the past performance of the business (see Chapter 2)? For instance, if the business is unsound because of a high level of indebtedness, then alternatives that call for large additional borrowings would not be feasible or relevant. Similarly, if the business has good levels of production efficiency, then alternatives calling for improved efficiency to improve profits may be unrealistic because they do not address the underlying causes of the problem.
- **Test 2.** Is the alternative adjustment consistent with the aspirations and attitudes of the parties involved? This involves the size and complexity of the endeavor. For instance, labor demands should be consistent with the effort the operator is willing to devote to the business or is willing to manage in the form of hired labor. Production and financial risk characteristics of various alternatives should be consistent with the manager’s attitude toward risk as well.
- **Test 3.** Is the adjustment consistent with the realities of present managerial skills, financial position, and the competitive demands of the industry? Because of the wide differences in managerial skills and financial

positions among farmers, the range of development options open to any given group of farmers varies considerably. A brief review of portions of Chapter 1 illustrates the importance of this third test on the selection of alternatives.

Options for labor-oriented managers

As noted in Chapter 1, labor-oriented farm managers can generally be categorized into two broad economic groups: low resource farmers, and skilled-labor farmers. The **low resource** farmer is faced with three options: get better, get out of farming, or obtain outside income. To avoid leaving farming, a farmer in this situation needs to explore ways of improving production efficiency and/or increasing their level of employment without incurring considerable debt.

The range of options open to the **skilled-labor** farmer are considerably broader. If the unit is large and productive, the manager can maintain the status quo, particularly if age and family demands are right. Perhaps an improvement in present status may be achieved in the labor-oriented league, or by moving into the capital-oriented league. In some cases, an exit from farming is possible. However, if a person leaves farming, part of the farm earnings will need to be replaced through employment of labor skills, rather than depending solely on earnings from the redeployment of a generally limited capital resource base.

Options for capital-oriented managers

Capital-oriented managers can also be divided into two broad categories: the **creditor's nightmare** group, and the **skilled farmer-manager** group. The creditor's nightmare farmer is a capital-oriented, "minor league player" who is trying to play in the "majors." Positive and immediate action is necessary to remedy the situation. A combination of retrenchment and getting better at the current enterprise(s) is probably the only option short of a partial or total liquidation of assets.

The successful **capital-oriented** farm manager on the other hand, generally has a broad range of options: maintain the status quo, get better, bigger, or both. A capital-oriented

farmer can also retrench, lower their status in the capital-oriented league, join the labor-oriented league, or leave farming and invest skills and capital resources elsewhere.

Using FINLRB¹ to analyze alternatives

After selecting various business adjustments, the next step is to analyze them. Some key terms and concepts are discussed and then the use of the FINLRB computer program in analyzing various alternatives is described.

Some key terms and concepts

There are three key terms or concepts to be understood before beginning this analysis process:

- The typical year concept.
- The base plan concept.
- Key points in developing alternatives to be analyzed.

The typical year concept

FINLRB compares alternative farm plans for a typical year in the future. A typical year plan should be based on average expected production levels for the specific farm and average expected prices and costs. For plans that involve major new investment, a typical year plan depicts the farm when all proposed changes in the alternative plans are fully operational. This means that the transition to the alternative has been accomplished, with full production levels being obtained and no more transitional costs being incurred.

A typical year does not represent a specific three or five or even 10 year period after the plan has been developed. Instead it reflects the average financial situation when the operation is running at normal future capacity. A typical year will likely never occur—that is, a year when the farm's finances will be exactly what FINLRB projected they would be. However, if a number of future years were averaged together, these average values should approximate the FINLRB output for a typical year.

1. For a more detailed discussion of the FINLRB program see Richard O. Hawkins, et al, *FINPACK User's Manual, Version 8.0*, Center for Farm Financial Management, University of Minnesota, 1993, pp. 175-280.

FINLRB uses a typical year approach because the short-term impact of a major change is often adverse. Using FINLRB, alternative farm plans are compared *after* these short term effects have occurred. The typical year results should indicate if an alternative:

- Will ever be profitable.
- Will service the farm debt load.
- Will lead to future growth in net worth once the plan is fully implemented.

The results should also give some insights into the riskiness of each alternative.

Base plan alternative (adjustment Route 1)

The base plan is a longer range look at a farm or ranch business as it is currently operated. The results of this plan should indicate the longer range financial viability of a current operation. Compare the base plan results with alternative plans in terms of projected profitability, liquidity, and solvency. In most cases, it will make little sense to consider alternatives that do not offer better financial results than the base plan.

The base plan should be the best estimate of a typical year of operation, assuming continued operation with current resources. The output from the base plan should be similar to the average production, income, and expenses the farm or ranch has experienced during the past several years.

Key points in developing alternatives to be analyzed

Up to 15 alternative plans plus the base plan (the current situation) can be compared in one FINLRB plan. When entering data for the alternative plans, observe the following key points:

- Use average production levels and prices that realistically can be obtained over the long run. Don't be overly optimistic or overly conservative. Consider the average yields and prices received for the past several years combined with what the outlook could be for the next several years. Only realistic plans are of value to the producer and the lender.

- Be as consistent as possible among alternatives. Do not use data that "slant" the result toward a particular alternative. For example, do not enter optimistic hog prices and pessimistic beef prices. Do not enter different family living expenses in different alternatives unless an alternative would logically cause a change, e.g. additional families become involved in the operation.

- Try not to combine multiple changes into one alternative. Doing so makes it difficult to determine the effects of an individual change. To evaluate a number of changes, make a single change in the first alternative, make the next change in the second alternative, etc. Then begin combining alternatives. This progressive analysis is easy to accomplish in FINLRB by copying an alternative and then changing several entries.

- Beginning with the base plan (see discussion above), make alternative changes involving improvements in the present business operation (adjustment Route 2). Then analyze alternatives involving more substantial changes in the size and organization of the business if necessary (adjustment Route 3 Figure 3-1).

- Realize that longer range plans are not going to be perfect. It is worthwhile to gather as much planning information as possible, but do not agonize about an individual input item too long. It is easy to change the data and rerun the analysis.

Data needed to analyze adjustment alternatives

FINLRB compares the longer range profitability, debt repayment ability, and potential for growth in net worth of alternative farm plans. The financial strength of the current farming operation can be compared with alternative plans involving new enterprises, new resources, different sizes or combinations of current enterprises, changes in efficiency, or changes in debt structure.

The types of data needed to make an analysis include the following:

- A balance sheet upon which a longer range plan will be built.
- Data banks and proposed crop and livestock plans.
- New investments and capital sales involved with each alternative.
- Liabilities, including new borrowings and changes in existing loans.
- Related operating expenses.
- Other information including depreciation and replacement costs, other farm and nonfarm income, family living expenses, and taxes.

The FINLRB output; its interpretation

The FINLRB output contains seven major sections:

- Plan description.
- Profitability.
- Liquidity.
- Solvency.
- Financial guideline measures.
- Crop and Livestock production.
- Sensitivity analysis.

This output is designed to compare the financial potential of each alternative longer range farm plan. The first column always pertains to the base plan. It describes the longer range profitability and financial soundness of continuing with the present operation. The other columns can then be used to compare the base plan with several alternatives. The financial analysis describes the financial soundness of each alternative with various measures of profitability, liquidity and solvency. The following illustrates the kinds of output provided by FINLRB and its interpretation.

FINLRB Output: The plan description

The **plan description** information, Table 3-2, is the first FINLRB output provided. It includes a general description of the plan at the top of each column of alternatives. Next, are the crop acres and labor hours involved, as well as changes in farm assets and liabilities. Then more detailed descriptions of the cropping and livestock plans are provided, including feed balances.

FINLRB Output: Profitability measures and interpretation

Profitability is usually the major factor considered when making most longer range farm financial decisions. Over time, profits **generally** drive the liquidity and solvency of a business. The FINLRB output provides an annual income statement for each alternative plan. This statement is like the **income statement** described earlier in Chapter 2, the bottom line being the **net farm income**. Then a series of profitability measures is provided, Table 3-3. For a detailed discussion of these measures, see Chapter 2.

When evaluating these results, begin by comparing the relative profitability of each alternative. For example, labor and management earnings on a labor-oriented farm indicate which alternative will provide the highest returns for these important resources. For a capital-intensive farm, the rate of return on farm assets, and the rate of return on farm equity are important profitability measures to consider. If a major increase in investment is involved, compare the rate of return on the added investment.

If none of the alternatives appears sufficiently profitable, analyze other alternatives. But, if projected profits are acceptable, next ask "What will happen to the financial soundness of the business?"

FINLRB Output: Financial soundness measures and interpretation

The FINLRB output next provides a series of statements and measures relating to the liquidity and solvency characteristics of each alternative plan.

Liquidity statements and measures

Liquidity is the ability of a farm business to generate cash for the payment of family living, taxes and debt payments in a timely manner. Healthy longer range profitability does not always guarantee longer range liquidity. For example, a profitable farm business with high levels of short-term debt commitments often has trouble paying debts on time. On the other hand, a farm with little debt may easily make debt payments even with relatively modest profits.

FINLRB projects an annual cash flow statement to compare the debt servicing

Table 3-2. Example of plan description from FINLRB.

			Base plan Finish 1200 Hogs	Alt. 1 Finish 5000 Hogs	Alt. 2 Farrow to Finish 130 Sows
Total crop acres			830	830	830
Total labor hours			3,323	5,223	5,747
Change in farm assets			-	\$175,000	\$254,250
Change in farm liabilities			-	\$192,000	\$261,440
Crop plan	Yield/acre	Share			
Feed corn, home farm	130.0 bu.	100%	350.0	-	150.0
Feed corn, rented land	125.0 bu.	100%	200.0	200.0	200.0
Feed corn, home farm	130.0 bu.	100%	-	350.0	200.0
Soybeans	40.0 bu.	100%	280.0	280.0	280.0
Livestock plan	Unit	Sales/unit			
Finish feeder pigs	Head	240 lb.	1,200	5,000	-
Farrow to finish	Litter	8.00 head	-	-	252
Corn equivalents (bu.)					
Produced			70,500	70,500	70,500
Fed			12,000	50,000	27,720
Balance			58,500	20,5000	42,780

Table 3-3. Example of profitability measures from FINLRB.

			Base plan	Alt. 1	Alt. 2
D	Net farm income		\$43,387	\$54,918	\$64,842
	Labor and management earnings	(D-E)	1,177	13,728	23,063
	Rate of return on farm assets	(H/I)	3.1%	4.6%	5.3%
	Rate of return on farm equity	(J/K)	2.0%	3.1%	4.4%
	Rate of return on added investment	(L/M)		14.1%	15.5%
	Operating profit margin	(H/N)	16.1%	20.7%	23.7%
	Asset turnover	(N/I)	19.4%	22.5%	22.3%
E	Interest on farm net worth	(K*6%)	\$42,210	\$41,190	\$41,779
F	Farm interest paid		25,345	44,688	49,018
G	Operator's labor and management		29,617	33,500	34,281
H	Return on farm assets	(D+F-G)	39,115	66,106	79,579
I	Total farm assets		1,250,345	1,425,345	1,504,595
J	Return on farm equity	(D-G)	13,770	21,418	30,561
K	Total farm net worth		703,503	686,503	696,313
L	Added return to added investment			26,991	40,463
M	Added capital invested			192,000	261,440
N	Value of farm production		\$242,342	\$319,996	\$335,624

capabilities of each alternative plan, the bottom line being the cash surplus or deficit for each alternative. In addition, a series of liquidity measures is provided.

The **cash surplus** or deficit as indicated by the cash flow statement, and the estimated **years to turn over farm intermediate debt**, Table 3-4, help determine the effects of a change on the ability of the farm business to service its debts. Measures such as the **cash farm expense as a percent of income** and **interest expense as a percent of the value of production** provide an indication as to their drain on cash flow. Similarly, as **farm debt payments as a percent of value of production** increase, the more likely there will be liquidity problems down the road.

Solvency measures and net worth change

The solvency section of FINLRB output deals with the overall levels of assets and liabilities involved in each alternative, the debt structure and the projected future net worth

growth. The output includes a **balance sheet** for each alternative: A series of **solvency measures** and the **projected net worth changes**, are also provided, Table 3-5.

The solvency measures include a comparison of various types of debts with assets—the percent in debt. The output also includes a projected change in net worth for each alternative. These measures, along with liquidity measures, indicate whether future borrowing capacity will likely increase or decrease as a result of a change.

FINLRB Output: A sensitivity analysis

If projected profitability, liquidity and solvency do improve under a given alternative, the next question is, “Will the farm business be more at risk?” The FINLRB output provides a sensitivity analysis showing the effect of a decrease in production or price on various financial measures, Table 3-6.

The sensitivity analysis helps assess whether financial risks will likely increase or decrease with each possible alternative and by how much.

Selecting a tentative longer range plan

Having gathered and analyzed information regarding the various measurable factors associated with each of the alternatives, weigh the evidence and make a choice. Begin the process by comparing alternatives relative to their measurable factors and how well they meet personal goals and resource limitations. Add to this a careful appraisal of the unmeasurable, subjective factors.

It is important to remember three things when weighing the evidence and making a tentative decision. First, it is **easy to underestimate the importance of the unmeasurable factors**. In reality, one unmeasurable negative factor could override a whole page of favorable measures. Expanding the business to make room for a farming son or daughter who hasn't really committed to farming, is a case in point. Second the **number of arguments** for or against a given proposal is not as important as the **weight or importance** of each argument.

Third, despite the uncertainties surrounding any situation, **the manager should finally make a decision**. Postponing action is the same as

deciding to perpetuate the existing situation, which may well be the worst possible solution. Decide to either stay with the present business plan, make a change to one of the alternatives, or to consider other alternatives that may better fit previous or revised aspirations.

If at least one of the alternatives analyzed will help achieve the longer term goals, then proceed to Chapter 4. It covers the process of:

- Developing a workable cash flow plan for the coming year or years.
- Gaining acceptance of the plan and finalizing it.
- Getting prepared to implement the plan.

If, on the other hand, the results of these projections are not satisfactory:

- Stay with the present base plan.
- Make other changes.
- Develop other alternative adjustments to be analyzed, using FINLRB.
- Consider leaving farming.

Table 3-4. Example of liquidity measures from FINLRB.

<u>Liquidity measures</u>		<u>Base plan</u>	<u>Alt. 1</u>	<u>Alt 2.</u>
Cash available for principal payments	(R)	\$30,416	\$41,713	\$62,090
Annual farm longer term principal payments	(-)	7,986	12,445	13,146
Nonfarm debt payments (P&I)	(-)	2,526	2,526	2,526
V Cash available for farm intermed. debt	(=)	\$19,904	\$26,742	\$46,418
W Farm intermediate debt to be served		\$55,011	\$55,011	\$94,261
Years to turn over farm intermed. debt	(W/V)	2.8	2.1	2.0
Surplus as a percent of payments	(U/(S+T))	3.5%	4.5%	10.3%
Cash farm expense as percent of income	(B/A)	79.4%	86.43%	71.3%
Farm interest as percent of value of prod.	(F/N)	10.5%	14.0%	14.6%
Farm debt payments as pct. of value of prod.		17.7%	20.9%	23.2%

Table 3-5. Example of solvency measures from FINLRB.

<u>Solvency measures</u>		<u>Base plan</u>	<u>Alt. 1</u>	<u>Alt. 2</u>
Current percent in debt		37.9%	40.0%	43.9%
Current & intermediate percent in debt		32.5%	33.5%	40.5%
Longer term percent in debt		22.6%	36.4%	37.7%
Nonfarm percent in debt		16.9%	16.9%	16.9%
Total percent in debt		43.0%	51.0%	52.9%
<u>Net worth change (typical year)</u>				
Net farm income		\$43,387	\$54,918	\$64,842
Nonfarm income	(+)	12,000	-	-
Family living	(-)	32,000	32,000	32,000
Income taxes and social security	(-)	16,971	17,205	20,752
Nonfarm loan interest	(-)	285	285	285
Net worth change per year	(=)	\$6,131	\$5,428	\$11,805

Table 3-6. Example of sensitivity analysis from FINLRB.

<u>Effect of a 2% decrease in all enterprises</u>		<u>Base plan</u>	<u>Alt. 1</u>	<u>Alt 2.</u>
Net farm income		\$36,332	\$39,318	\$55,625
Cash surplus		\$-1,879	\$-5,818	\$5,595
Net worth change per year		\$2,348	\$-4,132	\$6,981
<u>Effect of a 10% decrease in all enterprises</u>				
Net farm income		\$8,113	\$-23,082	\$18,755
Cash surplus or deficit		\$-19,590	\$-57,053	\$-16,880
Net worth change per year		\$-15,363	\$-55,367	\$-15,493

Developing a workable transition plan

4

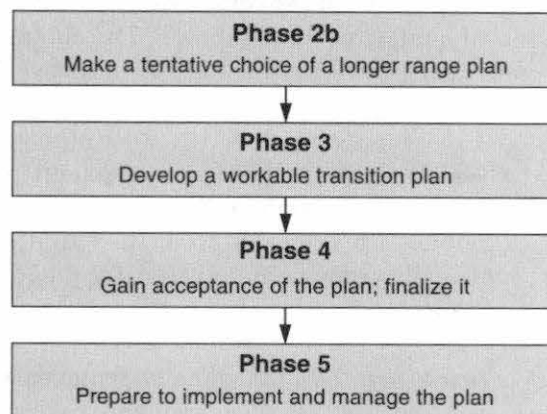
- Phase 3: Developing a workable transition plan
- Phase 4: Gaining acceptance of the plan; finalizing it
- Phase 5: Preparing to implement the transition plan—a checklist



Having made a tentative decision as to a longer range plan (Chapter 3), the next step involves deciding “how best to get there from here.” This is a three phase process, Figure 4-1.

First, assess alternative development routes and come up with a transition plan that is technically feasible, and compatible with available managerial capacity and present financial situation (phase 3). Second, check the plan with resource suppliers and other affected parties, and make changes as needed (phase 4). Third, prepare to implement and manage the new longer range strategic plan (phase 5).

Figure 4-1. Phases 3, 4 and 5—transition planning, acceptance, implementation.



Phase 3: Developing a workable transition plan

The following discussion provides an overview of some basics of transition planning and discusses the use of the FINFLO computer program, noting the input requirements and the output it provides.

Some basics

Transition planning involves making relatively detailed production and financial projections for use in deciding **how best to achieve the longer range plan**. The main purpose of such projections is to force the manager to think through the production and financial

details of a new undertaking. Projections also help determine if the goals are attainable. Making more than one projection tests the impact of timing on the outcome. Once plans have been finalized and implementation has begun, the projections can also provide a standard for judging progress—a control mechanism.

Selecting the type of transition planning needed

Procedures for making **multi-year** projections can be complex and time consuming, but they are not needed in every situation. For example,

if only minor adjustments are needed in the present business, then monthly or quarterly cash flow projections and a projected income statement and balance sheet for the year should suffice. In this case, proceed to the discussion of FINFLO.

If, however, more substantial changes are in order, multi-year as well as within-the-year projections are needed. In developing a workable transition plan for this situation, first select a development path to be considered.

Selecting a development path—some tests

Normally, there are several development paths that could be followed in implementing a longer range plan. Therefore, first make a “windshield” appraisal of these alternative paths by asking such questions as: “Can the longer range plan be implemented all at the same time?” If not, “What is a reasonable development rate?” And, “What is the best development path to follow?” The following four tests should prove helpful in answering these questions?

- **Test 1.** Is the proposed development path technically feasible and desirable? For example, is it desirable from the standpoint of facility development and frequency of changes in machinery lines?
- **Test 2** Are the management requirements of the proposed development path consistent with available management capabilities? For example, does it fit within management capacity in terms of rate of development, efficiency levels to be attained?
- **Test 3.** Will the proposed development path exhibit reasonable profit and repayment potentials, particularly during the early development stages? A development plan that exhibits early profit and cash flow potentials is normally favored over one that requires a large inventory buildup or investment in excess facilities in the short-run.
- **Test 4.** Are the risks of the proposed plan consistent with the risk-bearing ability of the business and the manager’s (and other interested parties’) psychological risk-bearing

capacity? If the business is in a weak financial position, then avoid development plans involving considerable production and financial risks.

Developing a workable transition plan using FINFLO¹

Normally, the first step in the transition planning process involves developing a technically feasible production, investment and personnel plan. With this done, analyze the selected development path(s) using the FINFLO program.

The FINFLO program—an overview

The FINFLO program allows farm or ranch managers and their lenders to take an in-depth look at the farm business during the projected planning period. While FINLRB answers the long term question “Where do I want to be?”, FINFLO helps address the shorter term question “How can I best get there?”

Profitability, liquidity, and solvency are all important in longer range planning. In short-term planning, the main concern is whether bills can be paid on time. In the long term, profitability generally drives a business’s liquidity, but in a particular year a profitable farm may not be liquid. High debt payments, unusually high family living expenses, or unexpected machinery replacement needs, may mean cash flow is insufficient for a farm to be liquid in a given year.

FINFLO projects cash inflows and outflows for each month of the planning year based on the farm manager’s production, marketing, and financial plans. In months with projected cash shortages, FINFLO assumes that the deficit will be borrowed on an annual operating loan. If a cash surplus is projected, that amount is used to pay any outstanding interest or principal on the annual operating loan. Thus, FINFLO projects the amount of annual operating loan funds outstanding during each month. This approach allows an accurate projection of the timing and amount of the peak operating loan balance.

1. For a detailed discussion of the FINFLO program, see *FINPACK Users Manual, Version 8.0*, Center for Farm Financial Management, University of Minnesota, 1993, pp. 283-418.

In addition to cash inflows and outflows, FINFLO projects:

- Crop and livestock production.
- Changes in current inventories.
- Net worth change.
- Ending balance sheet.
- Ending income statement.

FINFLO: Input requirements

There are 18 sections of input in the cash flow component of FINPACK. However, there is rarely need to enter data into all of these sections for a single cash flow plan. Like the FINLRB program, FINFLO uses the data bank budget information along with crop and livestock plans to project crop and livestock production and expenses. Much of the loan repayment information comes from the balance sheet. Other monthly inflows and outflows are scheduled directly by the user.

Initially project only the first year of the plan, and then later years. With this approach, one can determine whether the first year is financially viable. If it is not, a projection of year 5 is relatively meaningless.

FINFLO Output: Projected cash flow aspects

The cash flow output begins with a projected cash flow statement. This first includes monthly cash inflows and outflows, the difference being reported as an **operating surplus**. This operating surplus indicates the projected cash available before loan payments, capital purchases, and new credit are considered. After making these adjustments, the residual

amount is noted as a cash surplus or deficit. An abbreviated example of these calculations is shown in Table 4-1.

With this information, the FINFLO computer program then projects the timing of annual operating loan transactions (borrowings, principal and interest payments) as well as the peak operating loan balances, Table 4-2.

Here, the peak annual operating debt level is projected to be \$65,300 in September. The **total** operating credit increased from \$23,158 in January to \$36,056 in December, a \$12,898 increase. This reflects the \$10,363 deficit shown in Table 4-1, **plus** accrued interest charges.

Sometimes a **multi-year cash flow plan** is necessary to accurately reflect the liquidity of a farm business. For example, the first several years of a major expansion are usually a transition phase during which cash expenditures are high, but full income potential has not yet been achieved. In this situation, a cash flow plan that covers two to three years helps determine

Table 4-1. Example of generalized cash flow statement from FINFLO.

	Total for Year
Cash inflows	\$341,018
Less cash outflows	- 277,054
Operating surplus	= \$63,964
Less capital purchases	- 269,000
Plus new credit	+ 269,000
Less total loan payments	- 74,327
Surplus or (deficit)	\$(10,363)

Table 4-2. Example of annual operating loan transactions and balances from FINFLO.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Beg AO bal	23,158	-	-	-	-	-	36,460	41,008	62,948	65,300	43,680	20,546	23,158
AO borrowing	-	-	-	-	-	36,460	4,548	21,939	2,352	-	-	15,511	80,811
AO int. pay	454	-	-	-	-	-	-	-	-	1,586	337	158	2,535
AO prin. pay	23,158	-	-	-	-	-	-	-	-	21,620	23,135	-	67,912
End AO bal	-	-	-	-	-	36,460	41,008	62,948	65,300	43,680	20,546	36,056	36,056
Accrued int.	-	-	-	-	-	-	281	597	1,082	-	-	-	-
End cash bal	6,284	5,666	66,485	59,208	8,715	1,000	1,000	1,000	1,000	1,000	1,000	1,000	

the ability of the operation to generate enough cash to justify the expansion.

Developing plans for orchard or tree farms is an example in which a multiple year cash flow is needed. In these cases, several years may be necessary before full production is reached. It is a good idea to examine a multiple year cash flow when considering a longer term contract to finish livestock. Many contracts are written for three or more years. **To accommodate these situations, FINFLO can develop a cash flow plan for up to 10 years.**

FINFLO Output: Other information and options

FINFLO also provides:

- Crop and livestock summary information.
- Projected changes in current inventories, projected net farm income, and projected net worth.
- A beginning of the year balance sheet and a projected end of year balance sheet.

Similar output information can be developed on a multi-year basis.

The **crop and livestock summary** includes a monthly projection of crop and livestock production, sales, purchases, feed needs, and inventories. This information allows a manager to quickly note additions to and depletions from inventories during the year, and is useful for identifying possible changes in marketing plans that may improve cash flow. It also helps identify input errors.

The **change in current inventories** is essential for developing an accurate cash flow plan. A cash flow that only considers cash transactions without inventory changes can grossly misrepresent the actual farm financial situation. For example, if two years of crop production are sold in one year, the cash flow will look excellent, but the change in current inventories would adjust for the reduction in crop held in storage. Another example is a livestock expansion in which inventories are built up during the first year but no cash sales occur.

The **projected balance sheet, income statement, and net worth change** are all designed to project the financial position of a business if the cash flow is implemented according to the plan.

Phase 4: Gaining acceptance of the plan; finalizing it

After developing a detailed transition plan, check with the lender(s) and other affected parties. If the plan primarily involves improvements in the current operation, the “gaining acceptance” phase would tend to be a matter of just “touching base.”

Major changes in the business, however, often require a more formalized approach to the “gaining acceptance” process. This often involves the lender(s) and other resource providers, the tax consultant and attorney, family members and work force, and others as appropriate. **Before proceeding with this process, review Chapter 1 Part II, which focuses on communication and negotiating skills.**

Gaining acceptance from lenders and other resource suppliers

Since a major change often requires additional outside resources, a lender must be in agreement with the plan. The same basic techniques used in selling a plan to the lender also applies to communications with landlords and other resource suppliers.

Three basic questions for a manager are: when, where and how to sell the plan to the lender. In deciding *when* to contact the lender, **remember to plan ahead.** First, the plan should be well developed and documented. Then the lender must have time to reflect on the proposal and to make necessary investigations and arrangements. For sizeable loans, as occur

in expansion programs, start the request well in advance of signing a purchase order.

Where and how to sell the plan? If possible, invite the lender to visit the farm to review the proposal. If the lender does come to the farm, begin with a thumbnail summary of the plan, and follow it with a tour of the facilities showing how the new plan will fit into the ongoing business. After the farm tour, details of the plan and the loan request can be discussed.

In discussing the details, be prepared to provide a summary of past production and financial performance as well as a detailed plan of the proposal. These plans and the manager's ability to explain reasons for wanting the loan may determine the lender's decision. Be prepared to explain how the loan will help achieve goals, the length of loan desired, the source of the payment, and the timing of payments.

Once the loan is made and the plan is implemented, keep the lender informed. Be punctual with payments. If there is difficulty, let the lender know immediately. Discuss any changes in the farm plan with lenders; keep them up to date on plans and accomplishments. Meet with them at least once a year for a credit review, showing them the year's results and plans for next year's credit needs.

Sometimes a present lender is unwilling or unable to service the credit needs. In selecting another lender, keep the following questions in mind:

- Is the lender knowledgeable about farm-related financial matters?
- Is the lender knowledgeable about agriculture, possessing a good understanding of the peculiar characteristics of farming?
- Does the lending institution that this lender represents extend the type of credit needed, and have loan policies consistent with the present financial position and future financial needs?

Checking plans with other outside parties

Major changes in a business also often have tax, legal, and family implications.

Therefore, review the situation with a tax accountant or attorney, and other consultants. These advisers can be helpful in reviewing the tax implications—income, estate, and gift—of any acquisition or transfer of assets. When adding resources, questions as to who should own them should be explored. If assets are being transferred, the questions are at what price? How? If a change in business organization is being considered, carefully explore the implications of a partnership, corporation, or a combination of arrangements.

This is often a good time to revisit or revise personal estate plans. Is there need to change the will(s)? Is a trust recommended? How should new property be titled? Should property be sold or given away? Is more insurance required? Both the tax consultant and attorney need to be involved in these discussions. The attorney should also be involved in reviewing other transactions with legal considerations such as buying or leasing property or setting up a partnership or corporation.

Informing/involving family members, other affected parties

Major changes in a business plan can put considerable stress on family relationships as well as relationships with other affected parties such as business partners and work force. Thus, in gaining acceptance of the plan, it is important to review it with all interested parties, or better still involve them during other portions of the planning process.

If done properly, they will feel much more a part of the eventual longer term plan and will likely be much more supportive of changes as they are implemented. Of course, the manager decides how involved various parties are to be in this planning and review process.

Finalizing plans

After touching base with the above parties, make any needed adjustments in the proposed plan. But, within limits, it is still the manager's call as to the best longer term plan and how it should be implemented.

Phase 5: Preparing to implement the transition plan—a checklist

With the transition plan in place, prepare to implement it (phase 5, Figure 4-1). This task involves taking a look at a number of aspects relative to implementing and managing the plan. Generally, the larger the change relative to the current situation, the more time and effort will be needed to prepare to implement it. A checklist of things to be done in preparing to implement the revised plan will be discussed next. A note is also made as to where selected topics are treated more fully in other parts of this series.

Securing funding; signing agreements

Most business adjustments, particularly those involving a substantial change, require that one be able to secure funding from outside sources. As this process begins, it is important to first recognize the legal relationship between lender and borrower.

The **lender-borrower relationship** is considered to be a formal business relationship. If the lender gives financial advice to the borrower or otherwise consults with the borrower, the lender is presumed to be acting to further **the institution's best interests**. As a result, the lender is not legally obligated if the manager takes actions resulting from the lender's advice. Therefore, a manager should not necessarily take action based on the lender's advice or encouragement, as that may lead to a bad decision. Rather, a manager should have a well thought out plan and seek funding based on that plan.

There are three broad types of loans used in farm lending:

- The longer term real estate loan.
- The intermediate loan.
- The operating loan.

The intermediate and operating loans and the legal ramifications of the security interests typically involved with these loans are discussed in more detail in Chapter 4 Part II. Real estate loans are discussed in Chapter 2 Part IV.

It is important to obtain the type of funding that fits the situation and that the manager fully understands the security interests being

provided to the lender to secure the loan. Check with an attorney and/or financial consultant about any questions or concerns about a contract and/or its impact on future dealings with lenders.

Sorting out roles and tasks; meeting staffing needs

Defining the roles family members will play in the farm household/business complex is an important task of management. Major changes in the business often puts stress on family relationships because adequate attention was not placed on redefining family roles at the time of change. Therefore, take the time to sort things out and decide who is responsible for what and to whom.

If hired workers are involved, careful planning and supervision are needed. Manpower planning involves the following four-step process:

1. Assess personnel needs.
2. Develop job descriptions for work to be done.
3. Match present staff with the jobs available.
4. Hire new people as needed to fill remaining jobs.

Once a staff is in place, provide for:

- Training and development.
- Supervision and motivation.
- Wages and benefits.
- Evaluation.

A record system that adequately meets business management, tax, and regulatory requirements also will be needed. See Chapters 4 and 5 Part IV for a discussion of personnel planning, staffing, and management aspects.

Developing/updating business contracts

When organizing and running a farm business today, it is common for the operator/manager to enter into numerous contractual arrangements. As implementation of a strategic plan begins, consider the need to revise existing contracts and/or enter into new ones.

When leasing land, buildings, and/or machinery, refer to Chapters 1 and 3 Part IV. There may be production and/or marketing contracts involved, then see Chapters 2, 3 and 4 Part III. Contracts involving employees or independent contractors are discussed in Chapters 4 and 5 of Part IV.

Chapter 2 Part II contains a discussion of important features necessary for a contract to be valid, as well as other contract-related issues.

Developing/updating business arrangements

To begin developing and/or updating business arrangements, first review the present arrangement. Does the present arrangement fit the new longer term plan? Or does a different form of business organization, such as a partnership, corporation, or limited partnership need to be considered? The process of selecting a business arrangement is discussed in Chapter 7 Part II.

Once the business arrangement is selected, work out all the details and put them in writing. The process for establishing a corporation is discussed in Chapter 7 Part II; for a partnership, see Chapter 3 Part V.

Updating the accounting/information system

Before implementing the transition plan, evaluate the present accounting/information system relative to anticipated informational needs. This evaluation should include records that deal with the overall business, such as financial records, as well as production and marketing records, labor, machinery and other resource records. Chapter 3 Part II contains a discussion of the development of an accounting system for the overall business, as well as the development of an effective and efficient business center.

Developing/updating insurance programs

Changes in the personal/family situation or the overall business plan, necessitate a review

of current insurance coverages to determine whether there is adequate protection for business and family. There are four major types of insurance to be considered:

1. Life (including credit life or mortgage insurance).
2. Health and income.
3. Property.
4. Liability insurance.

These are discussed in Chapter 6 Part II.

When buying insurance, decide whether to transfer risks to another business or to carry it personally. A good rule of thumb is to insure against losses that might well lead to major financial loss or disaster. But don't insure against anything that can be easily replaced or covered personally.

Developing/updating retirement and estate plans

It is also important to develop and/or update retirement and estate plans at this time. The mid-career years from about 40 to 55 years old, represent a period during which one should continue the preparation for retirement—financially, lifestyle and health-wise. A wise manager will also continue building and protecting the estate. Concern for children includes determining what is desired and/or feasible to do for them in terms of their career preparation and establishment years.

It is also a time when one should periodically “test” their personal situation. Even when approaching retirement years, one still has time to make at least some needed adjustments. Therefore, evaluate the adequacy of retirement preparation and estate building efforts to date. Because this is such an important, pivotal time, discuss the process and basic issues relative to retirement and estate plans with a tax accountant, financial consultant and attorney.

These topics are discussed in some detail in Chapter 8 Part II, and again in Chapters 3 and 4 Part VI.

Managing the financially stressed farm business

5

- Document and analyze the financial situation
- Tax considerations when making adjustments outside of bankruptcy
- The role of bankruptcy when making financial adjustments
- Negotiating with lenders
- Conclusions: The need for good help



The analysis of the present business situation (Chapter 2) may have revealed financial difficulty. Undoubtedly, the lender has also indicated that something has to be done. This “something” may include: (1) rescheduling or restructuring the debt, and/or (2) the partial or complete liquidation of business assets.

This chapter first focuses on getting a better grasp of the present financial situation and understanding what selected restructuring options might do to the financial and tax situations. It then discusses the adjustment alternatives available under bankruptcy. The chapter closes with a brief discussion of negotiating with a lender and the importance of seeking good help early in the adjustment process.

Document and analyze the financial situation

First: (1) document the financial situation and (2) make an analysis of restructuring options that may be available.

Step 1: Document the present financial situation

The first step in this evaluation process is to carefully document the nature and severity of the present financial situation. With the completed business analysis procedure described in Chapter 2, one should be in a good position to analyze options. Also check for any **unencumbered property** (e.g. free of liens or security interests) that might be used to support current

debt/equity requirements or be exempted from any taking by the lender.

Step 2: Identify and analyze restructuring options

Next, review the present situation to identify possible restructuring options. In analyzing restructuring options it is important to determine both the financial and tax implications of each option. This segment describes briefly the general types of options to explore. The next segment discusses the income tax ramifications of these options outside of bankruptcy.

Option 1. Increase income or reduce expenses

This option is similar to adjustment route 2 (Chapter 3) that focused on making improvements in the present business operations. The focus in this case is on improving the profitability and debt servicing ability of the business. There are four alternatives that might be considered:

- Eliminate unprofitable enterprises while improving the efficiency of remaining enterprises.
- Reduce labor and machinery costs and other overhead expenses.
- Reduce outlays for family living and exercise better income tax management.
- Modestly expand the business. Be careful that this option does not “pour in good money after bad.”

Carefully analyze each of these adjustments to determine their potential impact on the profitability and financial soundness of the business. Use the planning tools described in Chapters 3 and 4. If there is considerable financial difficulty, it is unlikely that these adjustments will solve the problem. But one or more of them may reduce the financial stress sufficiently that less drastic restructuring options will work.

Option 2. Rescheduling/restructuring debts; tax impacts

If principal and interest payments still cannot be met in a timely fashion, explore the possibility of rescheduling or restructuring the debt. **Rescheduling** involves changing the terms of the loan. Usually this means lengthening the number of years over which to repay the loan. On occasion, it may also involve a reduction in the interest rate charged. Such adjustments will reduce the level of payments due within any given year, thus easing existing cash flow problems.

Restructuring involves reaching an agreement between borrower and lender to reduce the total principal and/or interest to be paid. In this case the borrower would be able to erase some debt, while the lender incurs a financial loss. Consequently, the borrower is likely to favor restructuring while the lender will favor rescheduling. In either case, the objectives are to: (1) bring total annual principal and interest payments into better balance with repayment capacity; and (2) keep current, intermediate, and longer term liabilities in balance with their associated assets.

Next, analyze the impact of selected changes in the rescheduling of current principal and interest payments, and the restructuring of debt involving debt forgiveness, on the profitability and repayment capacity of the business. Then combine both options 1 and 2 to determine whether more drastic actions will be necessary, such as asset liquidation. **Also consider tax impacts because debt forgiveness will likely represent a taxable event for the borrower.** This could result in further cash flow problems.

Option 3. Partial or complete liquidation of business assets

For financial, or other reasons, a partial or complete liquidation of business assets may need to be considered. Again, first consider the less drastic action, that of partial liquidation of business assets, with complete liquidation being a last resort.

With the partial liquidation option, it is important to analyze carefully the financial consequences of such a move, both in the short- and long-term. Converting too many resources to cash may so reduce the earning power of the business that remaining earnings will not even meet the reduced financial commitments and family living needs. Such a case will only hasten the demise of the business. Carefully consider tax implications as well.

Tax considerations when making adjustments outside of bankruptcy¹

Generally, when a business is experiencing extreme financial distress, income tax liability is not viewed as a major concern. However, the restructuring of debt and the sale or transfer of assets are laced with possible adverse tax consequences. The discussion here focuses on the tax ramifications of such adjustments made outside of bankruptcy proceedings. A key issue is whether the business is solvent or insolvent before the adjustments are made.

Debt forgiveness and asset liquidations: Business solvent

If debt is forgiven or assets are liquidated while the business is still solvent, there are likely to be important tax ramifications. This tax liability is solely the responsibility of the borrower as a taxpayer, and represents a permanent lien until paid.

If farm assets are sold, tax liabilities may take several forms:

- Taxable ordinary income will result from the sale of assets such as grain or livestock held for resale.
- Taxable ordinary income will result from the recapture of certain previously claimed tax benefits such as depreciation, soil and water conservation expenses, land clearing expenses, and government cost sharing payments excluded from income previously.
- If capital assets such as real estate are sold to pay debts, a capital gains tax may result from the sale.
- An alternative minimum tax may be imposed on preference income.

If, rather than selling assets, the taxpayer turns the assets over to the lender in partial or total satisfaction of the underlying debt, or

if the lender exercises foreclosure rights on the property, there are potential tax ramifications as well. They include:

- Possible capital gains on property transferred to the extent that the fair market value of the property exceeds the income tax basis in the property.
- An ordinary income tax situation exists if the debt forgiveness exceeds the value of the underlying assets.

Debt forgiveness and asset liquidations: Business insolvent

The first step is to make certain the business is insolvent; check with a tax consultant and attorney. For tax purposes, insolvency is generally defined as follows:

- For entities other than a partnership or municipality, insolvency represents a financial condition such that the sum of such entity's debts is greater than the value of all such entity's property, at fair market valuation.
- For general partnerships, any excess of value of each general partner's nonpartnership property over such partner's nonpartnership debt must also be considered in determining if a partnership is insolvent.

If the business or owner is insolvent at the time of sale or transfer of property, any gain realized will be exempt from income taxation, provided the proceeds of the sale are used solely to discharge indebtedness secured by a mortgage, lien or other security interest agreement.

If the business is insolvent and debt is forgiven as part of a restructuring plan, the debt amount would not be recognized as income. Though such debt discharge income is not recognized, the debtor's tax attributes will be reduced to the extent of the discharge.

This might include reducing: (1) net operating loss and capital loss carry overs and (2) the tax basis of the property of the taxpayer.

1. Adapted from *Tax Considerations In Liquidations and Reorganizations*, by Phillip L. Kunkel and Brian F. Bidwell, AG-FS-2601, Minnesota Extension Service, University of Minnesota, Revised 1989.

The role of bankruptcy when making financial adjustments¹

Over time, many farmers face financial difficulties. As a result, many face pressure from their lenders. This pressure eventually may take the form of legal action. One way a farmer can respond to the pressure of lenders is to seek the protection of the Bankruptcy Code. Farmers should understand bankruptcy procedures and understand their rights and the rights of their lenders during bankruptcy. However, bankruptcy should be considered a last resort. Three important aspects of bankruptcy will now be discussed:

- The bankruptcy types available to farmers.
- Some key provisions available under bankruptcy.
- Income tax planning under bankruptcy.

Bankruptcy types—a brief look

Three bankruptcy types are available to commercial farmers. One is used when the business is to be liquidated, i.e. Chapter 7. The other two types—Chapters 11 and 12—are used when a business reorganization is contemplated.

- **Chapter 7 Bankruptcy.** The borrower's nonexempt property is collected by a trustee and sold. The proceeds are distributed to lenders according to priorities established in the Bankruptcy Code. Thus, Chapter 7 Bankruptcy is a **liquidation**, or straight bankruptcy.
- **Chapter 11 Bankruptcy.** A farm operator can attempt reorganization of the business operation as an alternative to liquidation. In Chapter 11, a plan is proposed whereby all or part of the farming operation would continue and business debts are repaid. With the enactment of Chapter 12 Bankruptcy in 1986, Chapter 11 is generally selected as the bankruptcy reorganization option only by farmers who do not qualify for reorganization under Chapter 12.

- **Chapter 12 Bankruptcy.** This reorganization option was specifically designed for the adjustment of debts of family farmers with annual income which is sufficiently stable and regular to fund payments under a plan of reorganization. For individuals, partnerships or corporations that qualify, the proceedings can enable the family farmer to restructure indebtedness with secured lenders and discard certain unsecured debt so as to permit continuation of the farming operation. To qualify for Chapter 12, the family farmer's debt cannot exceed \$1,500,000, and 80% of gross income must come from farming.

Bankruptcy: Some key provisions for the farmer/borrower

Several provisions of the bankruptcy code operate to protect the farmer/borrower. These include:

- Voluntary bankruptcy.
- Automatic stay provisions.
- Discharge of debts.

Voluntary bankruptcy

Farmers, among others, are exempt from the involuntary bankruptcy provisions and cannot be forced into bankruptcy by creditors. Farm operators are also exempt from the involuntary conversion of a Chapter 11 case to a Chapter 7 case. However, a Chapter 12 case may be involuntarily dismissed or converted to a Chapter 7 case, if the borrower committed fraud in connection with the case. Similarly, if a farm operator were to undertake a voluntary bankruptcy proceeding under Chapter 11, and then prove unable or unwilling to file a plan of reorganization, a lender may propose a liquidation plan with the same result as a Chapter 7 liquidation.

For purposes of the Bankruptcy Code, generally, a farm operator is defined as a person who, during the tax year immediately preceding the year in which the bankruptcy petition was filed, received more than 80% of his/her gross income from a farming operation. A farming operation is defined very broadly under the Bankruptcy Code. It is not necessary

1. Adapted from *Bankruptcy The Last Resort*, by Phillip L. Kunkel and Brian F. Bidwell, AG-FS-2598, Minnesota Extension Service, University of Minnesota, Revised 1989.

for the borrower to be involved in farming at the time a bankruptcy petition filed. It is only necessary to meet the income test established by the Bankruptcy Code, which is based on the preceding year's income. It has been held that an individual who has sold the farm and is not currently involved in farming is, nonetheless, a farmer under the Bankruptcy Code.

Unfortunately, not all individuals who consider themselves farm operators are entitled to this special protection. A farm operator who depends on off-farm income will not be considered a farm operator if more than 20% of the gross income comes from off-farm activities. Likewise, there is a special definition of family farmer in the Bankruptcy Code for purposes of qualifying to be a borrower under Chapter 12. For Chapter 12 purposes, a family farmer's aggregate debt may not exceed \$1,500,000, and 80% of the noncontingent, liquidated debt (excluding separate debt for a principal residence, where applicable), must arise out of the farming operation. In addition, 50% of gross income in the taxable year preceding the bankruptcy filing must derive from the farming operation. For family farm partnerships and corporations, in addition to the same debt limitations applicable to individuals, there are family restrictions on the ownership of stock or equity, and a requirement that 80% of the value of the entity's assets consist of assets related to the farming operation.

Automatic stay provisions

The initiation of a Chapter 7, 11, or 12 form of bankruptcy (voluntary) operates as a court order to halt, at least temporarily, a wide range of conduct for collecting a claim or debt against the borrower. In other words, the filing of any bankruptcy petition stops all collection efforts, all harassment, and all foreclosure actions. This automatic stay is one of the fundamental debtor protections provided by our bankruptcy laws. It permits borrowers to attempt a repayment or reorganization plan in the case of a Chapter 11 or 12 bankruptcy, and it relieves them of the financial pressures that drove them into bankruptcy. The automatic stay is broad in scope. It is intended to prohibit lenders from taking any action against the borrowers that disorganizes

their efforts to deal with the financial problems or that interferes with their attempt to reorganize the business operation.

Although the provisions of the automatic stay law are broad, they are not absolute. The automatic stay does not suspend the clock. For example, the automatic stay does not stop the running of a redemption period following a mortgage foreclosure sale, or the running of the time period under state law to reinstate a contract for deed. In addition, lenders may seek court approval to obtain relief from the stay in certain cases. So the automatic stay is by no means either absolute or permanent.

Discharge of debts

One of the most important features of bankruptcy, regardless of which alternative is chosen, is the opportunity for discharging debts. In general, debts that arose prior to the filing of the bankruptcy petition are dischargeable in bankruptcy. But not all borrowers are entitled to a discharge and not all debts are dischargeable. As a general rule, only individuals are entitled to a discharge. Partnerships and corporations may not obtain a discharge in bankruptcy, except under Chapter 12.

Under the Bankruptcy Code, certain debts are not dischargeable. Obligations such as alimony, child support, claims based upon fraud, student loans obtained through a government program, certain taxes, and fines or penalties are not eligible for discharge. In addition, the conduct of the borrower prior to the filing of the bankruptcy petition may prohibit the discharge of certain debts. If, for example, a borrower engaged in fraudulent transactions; concealed, destroyed, or falsified records; or failed to explain the loss of property, certain or perhaps all of the debts might not be dischargeable.

Lenders must object to the discharge ability of a particular debt or all of the borrower's debts within a time period established by the bankruptcy rules. If they fail to do so, all of the borrower's debts eligible for discharge will be discharged upon the termination of the bankruptcy case.

A discharge cannot be obtained if the borrower received a discharge under a Chapter 7 or Chapter 11 case initiated within six years of the filing of the petition in the current

bankruptcy case. An earlier discharge under Chapter 12, in a case initiated within six years of the filing of the current case, does not bar a subsequent discharge within six years if the borrower paid all the unsecured claims in the earlier case or if the borrower paid 70% of the unsecured claim and if the plan was proposed in good faith and was the borrower's best effort.

Income taxes and liquidations under bankruptcy protection

In the event that the borrower seeks protection under the Bankruptcy Code, additional results and tax planning opportunities follow. If an individual borrower files bankruptcy under either Chapter 7 or 11, **a new taxable entity is created**. This, however, is not true if the borrower files bankruptcy under Chapter 12. In a Chapter 12, no new taxable entity is created.

The bankruptcy estate and income taxation (Chapters 7 and 11)

The bankruptcy estate (interest right or ownership in real and personal property) in a Chapter 7 or 11 **bankruptcy is a taxable entity that is separate and distinct from the borrower**. All property owned by the borrower at the time the bankruptcy case is initiated passes by operation of the Bankruptcy Code to the bankruptcy estate. The transfer of assets by the borrower to the bankruptcy estate is not treated as a taxable disposition. Thus, the transfer does not require income tax to be paid on the gain in the assets involved. Nor does the transfer trigger income tax liability from the recapture of depreciation, recapture of soil and water conservation or land clearing expenses, recapture of government cost sharing payments excluded from income, or recapture of investment tax credit. **The estate is treated as the borrower would have been treated had he/she not filed for bankruptcy.**

After the bankruptcy case has been initiated, income generated from assets included in a bankruptcy estate is included in the bankruptcy estate's income. Thus, if the bankruptcy estate in a Chapter 7 or 11 bankruptcy disposes of assets and triggers income tax liability in the process, the income tax liability is a priority claim in the estate as an

administrative expense. As a result, the tax due is paid ahead of general unsecured creditors. **Any income tax liability remaining does not pass back to the borrower, however.**

Besides automatically transferring all the borrower's property to the estate, the initiation of a bankruptcy case gives an individual borrower one significant choice. The borrower may elect a **short tax year**, ending the day before the bankruptcy filing. Thus two short tax years are created. The income tax liability in the first short year becomes a priority claim against assets in the bankruptcy estate. That is because the bankruptcy estate is responsible for all the borrower's liabilities at the time of bankruptcy, including income taxes that accrue before the date of bankruptcy. **As a result, electing to end a tax year before the day of bankruptcy causes the tax on the income earned to that date to become a debt of the bankruptcy estate.** If there are insufficient assets to pay the income tax, the remaining liability is nondischargeable. Any remaining income tax liability for the first short year returns to the borrower and can be collected later.

In the event the borrower does not elect a short tax year, the tax on the income earned during the tax year in which bankruptcy occurs will accrue after the date of bankruptcy and will therefore not become a debt of the estate. As a result, none of the borrower's income tax liability can be collected for the year of bankruptcy filing for the bankruptcy estate. To illustrate, assume that a farmer who is a calendar year taxpayer is in financial difficulty and sells some assets in January to **pay debts**. On the 1st of May, bankruptcy is filed. If two short tax years are not elected, the gain realized on the sale of the assets will be included on the return filed for the full year. Those taxes will not be a debt of the bankruptcy estate. If two short years are elected, the income taxes on the gain from the sale of the assets will accrue before the bankruptcy was filed. Therefore, the taxes on the gain will become a debt of the bankruptcy estate and will be properly payable out of the estate assets.

The borrower's selection of a single tax year or two short years also affects the amount of tax attributes that pass from the borrower to

the bankruptcy estate. The bankruptcy estate receives the tax attributes of the borrower as of the beginning of the tax year in which the bankruptcy was initiated. Therefore, if the borrower chooses a single tax year, the attributes at the beginning of that year will pass to the bankruptcy estate and cannot be used by the borrower on the tax return for that year. If the borrower chooses two short tax years, the attributes do not pass to the bankruptcy estate until the beginning of the second short year. Therefore, the borrower can apply the tax attributes on the return for the first short year.

In most cases, if the borrower has income before the date the bankruptcy was initiated, **it is usually advantageous to choose two short tax years.** By doing so, the borrower not only makes the taxes on that income a debt of the estate, but also reduces the amount of taxes owed on that income.

Income taxation under a Chapter 12 bankruptcy

In a Chapter 12 bankruptcy, no new taxable entity is created. Thus, if the debtor files under Chapter 12 bankruptcy, any asset dispositions during the pending of the bankruptcy are taxed to the borrower.

Negotiating with lenders

Once restructuring options have been evaluated in terms of their impact on the financial position of the business and related tax impacts, review these options carefully with an attorney and tax consultant, and arrive at a restructuring plan to present to the lender(s). Once a desired plan is chosen, it is time to negotiate with the lender. The attorney and tax consultant should be available as this negotiation process begins.

If the lender is not willing to go along with the plan, determine whether a workable plan can be found, short of a formal mediation process or other legal proceedings. Some states

(like Minnesota) require mediation. A mediator helps the borrower and lender find a solution to the present financial situation. The participants must negotiate in good faith and honor the negotiated settlement. If negotiation is unsuccessful, then the borrower and/or lender will have to pursue remedies through the legal system.

If a settlement is reached, establish a cash flow plan for the coming years and put in place an accounting system to control the plan; keep the lender(s) informed. (See discussion of cash flow in Chapter 4.)

Conclusions: The need for good help

Reorganizing or liquidating a financially-stressed business is complex. Therefore, seek out competent financial and tax consultants, as well as an experienced attorney to assist in making the best adjustment possible. They can help document the situation and analyze reorganization options. Tax planning is as important for farmers in financial distress as for those making a profit. Potential income tax consequences are triggered by the sale of assets, foreclosures, and the forgiveness of debt.

The difference in income tax treatment for the liquidation of assets provides a strong motivation

to file for bankruptcy. Filing any bankruptcy petition should be undertaken only after careful consideration of all the other options available. If bankruptcy is the only remaining option available, consider bankruptcy alternatives carefully. Regardless of the type of bankruptcy protection sought, protection of the automatic stay and the ability to discharge debt obligations are included. Bankruptcy can thus enable a fresh start or relieve many financial burdens.

Remember: A manager's goal is to find options that serve his/her best longer term interests, yet are reasonable to the lender.

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