THE COST-PRICE SQUEEZE:
PROBLEMS OF AND MANAGEMENT STRATEGIES FOR ESTABLISHED FARMERS

B. R. McManus[1]

Dr. Robinson has set forth very well the economic climate surrounding the cost-price squeeze faced by farmers. The agricultural sector has gone through a major boom in capital expenditures and land prices involving a relatively high level of debt financing (Melichar, p. 2). Following such a situation, financial shocks occur if income flows fall significantly from the levels that triggered and fed the boom (Melichar, p. 2). Dr. Robinson has shown that net farm income increased substantially and this increased income generated expectations that contributed to capital expenditures and land price increases. These events were then followed by lower net incomes while purchased input prices continued to increase.

Problem

We have often heard that any person should be able to farm if he wants to do so. All he has to do is find some land and get located thereon. If difficulty develops, the individual often contends that society owes him appropriate means to increase his income or increase his farm opportunities (Krause and Williams, p. 6). During cost-price squeeze periods, poor managers and those operating nonoptimum units are the ones who will be squeezed most

---

[1]Professor, Department of Agricultural Economics and Rural Sociology, The University of Tennessee/Knoxville. Paper prepared for delivery at a Symposium on the "Cost-Price Squeeze: Problems of and Management Strategies for Beginning and Established Farmers," AAEA Summer Meetings, Blacksburg, Virginia, August 6-9, 1978.

severely and they may face bankruptcy. Based on 1977 levels of performance, many farmers would lose their equity in less than four years, without land appreciation (Production Credit Association, p. 104).

Those farmers who recently purchased land at high prices that is highly leveraged may be in difficulty (Cotton Summary, p. 7). Those farmers who made long-term cash rental agreements or share agreements that did not include a provision concerning the price of purchased inputs are being squeezed. Please let me briefly comment on one other factor, structural disequilibrium, which contributes to the problem for individual farmers.

The heterogeneous size structure of farms contributes to the apparent cost-price squeeze. Those farms which are near the optimum size and those which will be that size through acquisition can pay the highest prices for factors of production (Tweeten, p. 182). A firm expanding from less than optimum size to optimum size can pay for the additional factors based on returns from those factors as well as the additional gains from the previously owned resources. This situation is particularly true in the case of land.

Technology has been primarily responsible for increasing the optimum size of farm units. Profits earned from adopting new technology propel Cochrane's treadmill. However, those farmers who cannot or choose not to adopt the technology experience lower incomes. Most net savings through greater efficiency have been bid into the price of the land factor rather than the human factor.

If land prices continue to increase during periods of cost-price squeeze, how can we say that a cost-price squeeze exists? Incomes are being embodied into land values rather than being received as cash flow. Cash flow can be used for whatever the farmer needs whereas increased land prices serve only as a borrowing base for those farmers previously owning land. Only a part of the increased value of the land is accessible. Furthermore, borrowers must make interest and principal payments from future income; i.e., a final settlement still has to be made. As long as technology increases the optimum size farm unit creating structural disequilibrium and part of the farm income is embodied in land prices, many farmers will continue to experience ~~cost~~ cash flow difficulties, particularly during cost-price squeezes

The simple short-run solution to our problem is to raise prices received for the commodities produced. How could the solution be so easy? Higher prices would give temporary relief until those product prices were reflected back into the factors of production. In the longer run, attention would have to be directed to competing producers outside the United States. Allowing trade without interference would require that American producers possess the capability of producing competitively. Needless to say each farmer as an individual lacks the capability of raising the general level of prices received.

Let us turn our attention to goals and management strategies which can be effectuated internally by the farm manager. We will operate on the premise that different farmers have different internal problems and a particular strategy for improvement may apply for a given individual case.

Established farmers will be considered as those who have sufficient net worth so they are able to finance their operations from commercial credit sources. In general, the established farmers will be considered fortyish or older. Goals and strategies should be related to the human life cycle for decision making. The farmers most likely will fit into three basic categories: expansion, status quo, and liquidation. We will discuss general strategies and later devote time to expansion and liquidation strategies.

Goals

An individual's goal complex is multivariate; he seldom strives to accomplish only a single goal. Most likely, an individual seeks fulfillment of several goals simultaneously. The intensity with which an individual pursues any given goal will depend on how the individual perceives the importance of that goal at that particular stage in his life cycle. The mix of the goal set will change as some goals are accomplished and new ones set. In general, farmers have goals of organizing the business for stable, high profits, and avoiding being forced out of business, in order to provide the family a good standard of living (Capstick and Smith, p. 12). Further, farmers seek financial security by moving from tenant to owner, building net worth, reducing debts and controlling an economically efficient farming operation (Patrick and Eisgruber, p. 494).

The established farmer has been able to achieve some of his goals--at least the goal of becoming established. During cost-price squeezes, he reassesses his goals, expectations, and plans for achieving his lifetime aspirations. He may have been so involved in the pursuit of becoming established that he may have spent only limited time thinking of how he will cope with cost-price squeeze situations and putting life itself in perspective. In some ways, he may view the challenge of fulfilling his goals as a race against time; how many more productive years remain for accomplishing his goals and how many more opportune times for achieving his goals are expected to occur within his lifetime.

Assessment of Managerial Capability

Importance of good management increases as the size of the operation increases, as leverage increases, as the profit margin in farming declines, and during cost-price squeezes. During cost-price squeeze periods increased emphasis is placed on the ability of managers to cope with both financial and mental stress. The farmer needs to evaluate his managerial capability and mental toughness to ascertain his competitive ability over the long run. Analyses of Agrifax Data indicates that a given farmer tends to remain at the same relative position among all farmers from a profitability standpoint (Production Credit Association, p. 101). Farmers in the top third usually stay in the top third while those in the lowest third tend to remain in the lowest third over time. If an individual consistently finds himself in the lowest third, perhaps he should re-evaluate the merits of remaining a farmer. Instead of trying to stay on the farm, he should consider other employment alternatives where his opportunities and productivity may be superior (Krause and Williams, p. 6). Krause and Williams suggested that it may be appropriate to ask a psychologist for an evaluation to ascertain if the individual possesses the mental characteristics conducive to successful farming (Krause and Williams, p. 51). The spouse should be included in the total evaluation process because strong management talents of the spouse may offset weakness of the farm manager (Krause and Williams, p. 53). Personal problems should be separated from economic problems and resolved systematically. If difficulties are being caused by relationships other than farm problems, then appropriate assessments and solutions should be undertaken.

Farmers experiencing difficulties need to reflect on how they became farmers in the first place. The selection process may have been no more than an inheritance or lack of other opportunities at a particular time in that person's life. The managerial selection process in farming, most often, is much different from what is found in the nonfarm sector. Advancement of managers in nonfarm businesses is often an outgrowth of nontechnical analysis of personnel in lower echelons based on performance and biography information (Gilbert, et al, p. 8). The farmer is evaluated in the marketplace after he has made long-term financial and personal commitments. When the managerial capability re-evaluation is completed, a decision needs to be made as to how farming and/or other employment fits best in fulfilling the individual's lifetime aspirations.

Production Strategies

When prices of products and inputs change, the economic mix of both may need adjusting so that returns can be maximized. The technical transformation functions must be evaluated continuously and adjustments made where needed. At the same time procedures and techniques should be sought which will improve technical efficiency. Is there a way to produce the goods more economically than under the previous cost function? During this process, the manager should seek better use of existing resources such as fixed buildings, land, labor and/or machinery (Patrick, p. 5). Typically, at least one of these resources can be better utilized to increase returns.

Most often in the past farmers have used output increasing technology embodied with additional capital outlay when seeking increased income. However, in most cases the increased output in the aggregate tended to depress prices received, thereby reducing total revenue in the case of inelastic demand. On the other hand, use of cost reducing technology can serve to increase profits. For example, Parks, et al, in evaluating hill drop planting of soybeans found that yields could be maintained with approximately half the seed used under present practices (Parks, et al, pp. 8-9). In a similar way farmers can use the most current and applicable pest management strategies that will reduce costs more than enough to compensate a trained entomologist. As the costs of insecticides have increased, it has become more important to apply only the needed amounts rather than making applications "just to be sure." At the same time society is getting a bonus because of improved environmental conditions.

Farmers may reduce operating costs by entering into a joint operation with common machinery and equipment. The land could be rented to the operation but owned separately for simplicity. Certain pieces of equipment could be eliminated. The joint operation could be near the optimum size for economic efficiency.

Marketing Strategies

When it comes to making a profit, a good market can often mean more than having a good product for sale. Each farmer prefers a high price over a low price and would like to receive the highest prices possible for all the products he sells. With a crystal ball and two tons of luck, an individual may be able to sell at the highest price. However, I have not found any strategy based on research which consistently beats the market nor do I know any individual who has done so. Strategies have been derived which would have been "best" in retrospect, but a farmer gets to sell the commodity only once. If a person develops this unique ability, he has found a mousetrap better than farming. When a person follows a strategy that offers the opportunity of being right by a large margin, he usually takes the risk of being wrong by a large margin.

If the farmer cannot follow a strategy that fetches the highest price all the time, then he may be pleased with a strategy that makes him least wrong. Spreading sales over the marketing year at times when different factors have exerted influences in the market will have a tendency to give the farmer an average price which usually is slightly higher than a weighted average reflecting aggregate market sales volume. Early market intelligence may give the farmer an edge in taking advantage of price changes. However, the farmer usually receives most market intelligence after the impact has been reflected in the market.

Group selling and buying may be a strategy to follow to obtain some of the advantages of handling large volumes. The family farmer should be able to gain enough to be competitive with those large operations which can obtain purchasing discounts or selling premiums. The grouping can be by several farmers in a particular community or they may wish to secure these advantages through cooperative type organizations which reflect prices based on volume and costs of doing business.

In following his marketing strategies, the farmer can obtain good prices if he is willing to accept moderate risk. Being too conservative can reduce income substantially. Following strategies that involve high risk may give only slightly more income than following moderate risk strategies. High risk strategies could force the farmer out of business and preclude the opportunity for the potential high income in a later period.

Financial Management Strategies

In order to reduce price and cost and production risk of the operator, the farmer may shift from cash rent to share rent. The share rent may cost more than cash rent but the rental arrangements can be constructed so that marginal costs and marginal returns would be equal for both tenant and owner in most of the operations. The share rental arrangement could lead to a sufficiently better allocation of resources so that more could be earned by the tenant than the increase in rent. The tenant could reduce his risk while the landowner could increase income. As economic relationships change, the share rental agreement would more nearly be self-adjusting than would the cash rental. Share agreements could be entered into for longer time periods and maintain fairness because of the self-adjusting feature.

Decisions made on the basis of ranges of prices and yields with associated probabilities rather than on a single price and yield estimate would give recognition to the possibility of low income. The individual could make contingency plans for the low income to occur early in the planning horizon. Decisions made on this basis could temper the tendency to be overly optimistic when a new or expanded venture is undertaken and avoid entrapment later. In essence, good planning requires adequate evaluation of possible circumstances and the alternatives before making major decisions.

When a management strategy involves land acquisition, an attempt should be made to purchase land from an operation that is undercapitalized, underutilized and undermanaged. The purchaser needs to put the acquired resource into more productive use in order to make a sufficiently higher profit to pay a price high enough for the seller to be better off by selling the asset rather than retaining the asset.

Disaster loans can be obtained in cases where the farmer qualifies. If a disaster loan will provide time for good management to rejuvenate the operation, then a disaster loan would be wise. However, if business death is only being prolonged, then the failure may be less painful today than tomorrow.

Asset-creating, self-liquidating, fast turnover projects which will improve income generating ability can be used during cost-price squeeze periods. Projects of this nature should aid in the speed at which the farmer can recover from periods of adversity. These type projects should be easier to finance during adverse times than would long-term projects.

Somewhat on the conservative side, an established farmer may wish to restrict a properly structured debt load to approximately 60 percent of total assets. Usually high quality management will be able to service high debt loads during average farm economic times but the poor manager will have difficulty with the 60 percent. The 60 percent debt load would permit some reserve borrowing capacity in the event of adversity.

When planning the farm operation under average conditions, the farmer should consider using 80 percent of the income to meet the cash flow obligations. The 20 percent reserve permits some flexibility to meet obligations during low income years. In those years when income is above average a cash reserve could be established or prepayments could be made to guard against low income in later years.

High quality managers can gain time by refinancing the debt load. The debt could be restructured by shifting short-term debt into long-term obligations in order to survive the current cost-price squeeze. Of course, this strategy is predicated on the supposition that there will be better economic times in farming.

During the cost-price squeeze, postpone machinery and equipment replacement. My inclination is that machinery and equipment should be replaced only when it is worn out or obsolete rather than replaced for mere convenience or conspicuous consumption.

If a bad decision has been made, usually the best remedy is to reverse the decision and take the loss. Hope seldom makes a bad decision turn into the right one.

Do not forget to use income tax averaging for reducing taxes in future good income years that can include the poor years in the averaging process. These tax savings can be used to aid the farmer in overcoming the previous low income years.

Strategies for Expanding

A farmer would like to expand his operation as early as his management and finances permit and ideally by simply acquiring the neighbor's farm. However, expansion may occur due to unexpected opportunities to enlarge rather than conscious pursuit of such a goal. Also, the neighbor may attend his funeral. Rather than waiting for the opportunity of buying the adjoining farm, consideration should be given to trading, directly or indirectly, a small farm on a larger farm in a different location. In expanding, he may follow a strategy of paying cash, maximum debt or enlargement in phases.

Pay Cash Strategy

Some farmers desire to pay cash for a purchase except for limited amounts of operating capital. Of course, these farmers can take advantage of an opportunity only after the cash is accumulated in sufficient quantity to handle the particular opportunity. A strategy of this nature most often permits expansion slowly but safely; that is, safely if we are only considering overindebtedness. On the other hand, a farmer following this strategy may be unable to acquire adequate resources to fully utilize his managerial capabilities during the most productive years of his life. A pay cash strategy may let excellent opportunities slip by when the farmer can profitably manage the resources. Accumulating cash for opportunities puts him in an idle resource position or in a saver's position which earns less income than the normal borrower's position.

As time goes by, a pay cash strategy lets the farmer build up his cash flow position because he has no interest costs and is relieved of principal payments, but it does have the braking effect of income tax payments. During inflationary periods the pay cash farmer can get left behind, but during periods of price declines he has staying power when his highly leveraged neighbors may be faced with a sellout.

A pay cash farmer may have some bargaining strength compared to a purchaser who is dependent upon decisons of the lenders. Psychologically the pay cash farmer may bargain hard in order to make his available cash sufficient to complete the deal. The seller knows that he can receive his cash immediately and this is often an important factor in deciding to sell. For some reason the seller may be disarrayed temporarily and he completes the transaction because the cash is transferred without the involvement of long waiting periods and without general knowledge in the community. However, we economists would encourage a more deliberate, wide market approach to making the sale. In each deal there are critical moments for the agreement to be made. When the critical moment occurs, the pay cash buyer can move with dispatch and clinch the opportunity.

In some ways a pay cash person is basically a super conservative who deliberates over relatively long periods of time before reaching a decision. When he deliberates too long, the train may have already run when he decides to buy his ticket. An individual with decisive, solid judgment can seize the opportunity at the proper moment and place himself in a position to continue moving forward. At the same time the purchaser has to wait until the seller has reached the threshold of being ready to consumate the deal. Reversing the positions of the buyer and seller is equally logical.

Maximum Debt Load Strategy

The person who follows the maximum debt load strategy of borrowing until restricted by external capital rationing is betting a large part of his future on good economic times with continued rising values of his assets. This person usually wants repayment spread over as many years as possible and he refinances whenever his lenders will permit. For some reason, many of these individuals exhibit an image of being successful if they can just get that next asset purchased. These persons sometimes fall into the trap of letting the lender make decisions rather than retaining that prerogative for themselves. They feel that if the lender will finance "it," "it" must be a good deal. Also, the borrower may say "what do I have to lose?" When a person follows this strategy, he may get so involved in making the loans mesh in such a way that the deal can be made that he often relaxes his business judgment and pays too much, which is regrettable later. The heavy debt often hampers the building of net worth needed for future expansion.

Phased Expansion Strategy

A third individual may follow the strategy of expanding, consolidating his position and expanding again. Many of these individuals are above average managers because they repay the debt in such a fashion that they have the capability of taking on new resources with an associated debt. These individuals may follow a strategy of expanding approximately every three to six years. My experience has been that it takes about three years to reorient an operation, get the new resources meshed with the existing assets and get the new management capability applied for accomplishing improvements. A strategy of this nature is based on the premise that the entrepreneur is generating cash flow fast enough to make frequent expansions. Of course, the difference in the maximum debt load strategy and phased expansion strategy is that the maximum debt load strategy may have started out as a phased expansion strategy but relapsed when management was unable to fulfill expectations. The phased expansion strategy probably uses a more conservative debt load than the second strategy thereby accomplishing debt reduction rather than requiring a high portion of the cash flow for interest costs.

Now what does the phased expansion strategy have to do with farmers who are having a cost-price squeeze problem? In evaluating long-term goals this strategy fits well with the roller coaster nature of high profit times and squeeze times in farming. A farmer following the phased expansion strategy can expand during the squeeze periods and reap the benefits of being in business on a larger scale for the following good income periods. Based on the premise that a manager is usually age 40 by the time he is an established, successful farmer, he will have three or four more potential opportunities before decompressing and thinking more about being debt free, fishing, and grandchildren. All in all those individuals who are able to follow and execute the phased expansion strategy have a tendency to be financially successful. However, part of the success is because they generate sufficient cash flow to expand periodically. Use of borrowed funds from reserve borrowing power serves as a cash equivalent to expedite taking advantage of those opportunities.

Some individuals view the cost-price squeeze as doom and the end. This may be true for those who are weak managers and who are highly leveraged. Those who are strong, high quality managers with moderate debt and reserve borrowing power sufficient to continue operation and who possess a potential for expansion see opportunity in change and adversity. Needless to say, this is not a time for weak stomachs or unsteady nerves. The strong managers view these times as a cleansing process which removes part of the excess production which had been acting as a depressant on market prices. Better markets give the strong an opportunity to make profits and get ready for the next period of adversity and the next round of acquisition.

Liquidation Strategies

A farmer may decide to liquidate for any number of reasons. He may have reached the appropriate point in life to let a younger person operate the farm. He may liquidate because it appears to be in the best interests of all concerned. A different occupation may better suit his capabilities. Nevertheless, a methodical strategy should be developed and followed. The liquidation process could consist of the operator selling livestock, followed by selling machinery and equipment and renting-out the land and finally selling the land. If he has a choice, these sales could be made during peaks of the livestock cycles and during good farm income times. Sales can best be made when "everybody" wants to buy and "nobody" wants to sell. The land could be sold in tracts to farmers needing land to enlarge their operations to the optimum size. If the farmer plans to continue employment or to retire in the community, he may wish to retain the home because the home most likely would have a higher use value to him than to another farmer who is purchasing the land for expansion. During liquidation the farmer needs to make the mental adjustments to cope with the change and to maintain solid, deliberate, well reasoned judgment. After liquidation is completed, the farmer can turn to his new endeavors with vigor.

An Observation

In many instances, a person reviews an alternative and asks himself if he is able to carry out that particular venture. If he answers yes, then he proceeds. In my opinion this analysis is too limited. Naturally a person cannot do that which he cannot, but to engage in a given venture just because the individual can is inadequate economic rationale. The individual should analyze the contributions which alternative ventures will make toward fulfilling his goals. Analyses also should be made concerning the economic and human sacrifices that the individual and family will make during the process.

In real life it appears that those individuals who seek alternatives, wisely evaluate the alternatives, and pursue well defined goals are successful in due time. Those individuals who evaluate ventures in terms of the contribution that the ventures will make to their improved situations make more progress than those individuals who undertake ventures just because they can. In other words, a distinction should be made between those ventures which have average profitability versus those which are highly profitable. Usually the good ventures will fully utilize an individual's financial and managerial resources.

Those individuals who make decisions which will enable them to internalize control of influencing events appear to make more progress than those individuals who accept events as being beyond their control.

Individuals who possess the unique ability to create deals and actively pursue endeavors appear to be more successful than those persons who merely wait for someone else to make the golden offer. Determination and commitment to a given goal plays a major role in success.

Conclusion

"Possibilities of lower prices, production failures, and/or higher costs, with consequent slimmer profit margins, along with the ever present threat of casualty losses all require the most efficient management practices in order for the business to survive and provide an adequate return on investment" (Nelson, et al, Chapter 6, p. 1).

References

Capstick, Daniel F., and Donnie Smith. "Ranking Multiple Goals in Farm Planning." Arkansas Farm Research. Vol. 25, No. 2, March-April, 1975, p. 12.

Cotton Research and Educational Foundation. "Caution Flag." Cotton Summary. Raleigh, North Carolina. Vol. 5, No. 7, July, 1978, p. 7.

Gilbert, Howard A., Kenneth R. Krause, and Paul L. Williams. Recognizing Personality Characteristics Related to Managerial Potential in Agriculture. South Dakota State University Agricultural Experiment Station, Brookings. Bulletin 584, August, 1971.

Krause, Kenneth R., and Paul L. Williams. Personality Characteristics Related to Managerial Success. Agricultural Experiment Station, South Dakota State University, Brookings. Technical Bulletin 30, March, 1971.

Melichar, Emanuel. "Rural Banking and Farm Credit Conditions." Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D. C. Agricultural Finance Commentary, April, 1978.

Nelson, A. Gene, George L. Casler, and Odell L. Walker. "Making Farm Decisions in a Risky World: A Guidebook." Oregon State University Extension Service. July, 1978.

Parks, W. L., John Connell, Reid Evans, Tom McCutchen, and Lawson Safley. "Hill Drop Soybeans." Tennessee Farm and Home Science. Agricultural Experiment Station, University of Tennessee, Knoxville. Progress Report 105, January-February-March, 1978, pp. 8-9.

Patrick, George F. "How Much Should I Borrow?" Cooperative Extension Service, Purdue University, West Lafayette, Indiana. EC-467, October, 1977.

Patrick, George F., and Ludwig M. Eisgruber. "The Impact of Managerial Ability and Capital Structure on Growth of the Farm Firm." American Journal of Agricultural Economics. Vol. 50, No. 3, August, 1968, pp. 491-506.

Production Credit Association. 1977 AGRIFAX--Comparative Farm Business Analyses. Pp. 19-34 and 35-44.

Tweeten, Luther. Foundations of Farm Policy. University of Nebraska Press, Lincoln. P. 182.