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RESTORING PROFITABILITY TO AGRICULTURE

by

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Introduction

The financial stress facing many farmers is severe and some will find it difficult to continue to operate. For some farms, the focus has to be on short-run survival strategies and restructuring of the business to alleviate financial stress. For other firms as well as the industry as a whole, a fundamental issue is how to improve or restore long-run profitability. The focus of this discussion will be on that issue--adjustments that are required in agriculture to restore profitability and financial stability. The discussion will initially identify the adjustments required of the agricultural industry and the policies that impact it to obtain a financially stable and sound sector. Then we will turn to management practices that individual producers can adopt to restore profitability to their farming operations.

Macro-Industry Adjustments

Five major long-run adjustments seem necessary to reduce stress and obtain a more financially stable agricultural sector: 1) reduced interest

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rates to obtain lower production costs and improve exports through a lower valued dollar, 2) mothball excess production capacity, maybe by grainland conversion to grass, 3) reduction in assets values, particularly farmland, 4) a lower total debt load for agriculture and a redistribution of debt away from over leveraged farmers, and 5) restructured ownership of agricultural land, machinery and buildings toward those with little debt.

1) Reduce interest rates: There is wide acceptance that interest rates in real and nominal terms are too high and that the dollar is overvalued. A one percent decline in interest rates would result in an approximate two billion dollar increase in net farm income from reduced expenditures; this would increase net income for the farming sector by about 10 percent. A decline in interest rates would also result in a lower valued dollar, increased foreign demand for agricultural commodities, and somewhat higher prices which would enhance farmers' incomes even more. We are in an unstable situation and economic forces tend to move back to stability. Interest rates will decline and the dollar will weaken in time.

2) Mothball excess capacity: It has been estimated that the U.S. agricultural sector currently has approximately 5 percent excess production capacity. This is a significant contributing factor to the current low rate of return on farm assets. At the same time, part of the productive capacity of agriculture is deteriorating because of soil erosion. Consequently, conversion of 20 to 50 million acres of steep, erosive and low producing grainland to grass or nonuse is needed to eliminate excess production, and reduce soil erosion. Supply control would appear to be an appropriate action under current conditions.

3) Lower resource values: In a period of excess capacity, a normal economic response is lower resource earnings and lower asset values. Land values are 40 percent below the peak of the late 1970s and early 1980s. Given the product price prospects, interest cost, and input price structure of the 1980s, farm asset values may fall further. U.S. agriculture has become dependent on foreign demand in recent years--our currency and our cost structure has risen, eroding our competitive and comparative advantage.

4) Reduce debt: The total debt load of agriculture is concentrated on too few assets and exceeds the debt carrying capacity of those assets given current interest rates and profit margins. One-third of the farmers hold two-thirds of the debt. Highly leveraged farmers encounter impossible debt servicing problems, but some of the their neighbors carry very little debt and do not feel financial stress. The debt load will be redistributed. Part of the debt will be repaid; part of it will be discharged but unpaid.

5) Restructure asset ownership: The final adjustment required is the sale of assets and their purchase by others--asset restructuring. Those with very high debt loads cannot hold on to all their assets and assets must be sold. The secured indebtedness will be repaid or discharged. Some assets will be inventoried by the lender and the asset held in lieu of the note or mortgage. Lenders will eventually place those assets on the market. There must be some restructuring of the ownership pattern to obtain financial stability in agriculture. However, it is not clear who will buy the assets which must be sold to achieve financial stability.

Mirco Adjustments

Individual farmers should consider various changes in their operations to restore farm profitability. Some of these changes include the following.

1. Efficiency vs. volume: During the 1970s agriculture worshipped at the alter of volume. The goal was to produce the highest yields per acre--regardless of costs. Farmers followed the strategy that if the addition of more inputs to an acre of corn "might" increase yield--do it. The export market for grain gave credence to this objective. The market seemed virtually insatiable and the country that produced the most grain for export had the biggest share of the market. The volume mentality carried over into other farm management decisions. The objective of the grain farmer was to farm the most acres. The objective of the hog farmer was to produce the most hogs. The focus was on output, not thruput.

Efficiency will be the key in the 1980s. The objective will be to produce the cheapest bushel of corn. In today's export market, increased market share will go to the country that can produce grain the cheapest. Contests are held where a prize is given to the producer with the highest corn yield. Prizes should also be given to those farmers that can produce the cheapest bushel of corn.

Efficiency means farmers should add inputs only if there is a good probability that output will be increased by at least enough to offset the cost of the added input. If an input costs \$1,000 but will return only \$500--don't add it. But if the addition of the input will return \$1,500--add it.

Increasing efficiency means controlling costs. Farmers should scrutinize their farm businesses for unnecessary expenses. By applying large amounts of plow-down fertilizer to their soils, many farmers built their soil fertility to very high levels in the 1970s. Building up fertility levels was logical during the high inflation years of the 70s. If you waited until next year, fertilizer prices would be higher. But today many farmers should apply less plow-down fertilizer and use more of the fertility they stockpiled during the 1970s. Chemicals were used "just in case" during the 1970s; today we cannot afford to waste money without "scouting" to see if the chemical is needed.

The largest factor in feed efficiency in many swine herds is feed wastage. Studies have shown that feed wastage in swine enterprises ranges from 1 to 23 percent. If you can see feed on the floor you are wasting 20 percent of your feed. These are only examples of where farmers will learn to control costs.

Many producers cannot continue to overlook efficiency as a way of increasing income. For example, studies have shown that many dairy enterprises can increase net income by reducing the herd size through culling unproductive cows rather than by increasing herd size.

Under the inflationary mentality of the 1970s, farmer's only proposed solution to low profit margins was to increase selling prices. However, in today's environment, narrow profit margins will have to be solved, at least in part, though lower costs and improved efficiency.

2. Buying right: Profit margins can be increased in agriculture by producing more output per unit of input (increased efficiency), by

generating higher prices for the product, or by reducing cost. The common method of reducing cost is to use fewer inputs; a second and equally important method for reducing cost is that of paying less for the same input.

Most discussions of marketing and marketing strategies focus on procedures and techniques of selling the product for a higher price, yet there may be as much if not more opportunity to make wise marketing decisions in the purchasing of inputs. The first important marketing decision made in any agricultural enterprise is buying the inputs right, whether it be the rent paid for the land, the price of the fertilizer, seed and chemicals, the price paid for feeder livestock, or the price paid for capital assets such as land, machinery and equipment. Buying right can have a significant and dramatic impact on profit margins, and increased emphasis on smart purchasing decisions may significantly enhance the bottom line.

3. Lower debt load: During the 1970s low interest rates combined with high rates of inflation suggested that debt financed expansion was the best strategy and that there was little risk in borrowing. The painful lesson that there is a risk-reward ratio with borrowed money, and that with increased leverage the risks increase more rapidly than the rewards, is now apparent. Once the adjustments have occurred, farmers will use credit in a more judicious fashion. Farmers will not be able to eliminate the use of borrowed funds in their operation, but they will borrow smarter. They will recognize that credit is a valuable resource which can be either converted into debt or used as a reserve to handle

difficult times. They will be more aware of repayment capacity and safe debt loads tied to income and cash flow generating ability rather than collateral and asset values.

Although refinancing is not as viable an alternative as it was a few years ago, it will still help some farmers. Due to negative profit margins, many farmers have accumulated substantial amounts of operating debt in recent years. Usually these accumulated losses cannot be paid off in one year.

The goal in one year should be to make adequate progress in paying off the debt. One method of managing debt repayment is by restructuring debt on the net worth statement, placing it against fixed assets such as land or machinery and scheduling a reasonable number of years to pay off the debt. By spreading out the number of years required to pay debt, the annual principal payment becomes smaller resulting in less pressure on the cash flow while also making progress on debt repayment. Consequently, many businesses have been able to project a positive cash flow while also reducing debt. But for many farmers, positive cash flows are not possible even if only interest payments are due. Many of these farmers will have to consider reducing debt in other ways.

4. Equity infusions and restructured asset ownership Many farms in financial difficulty are well organized, of adequate size and use appropriate technology, but have excessive leverage. In a few cases, recapitalization may be possible and appropriate. This can be accomplished by adding equity from an outside source. In some cases, family members may be willing to provide such an equity infusion to protect the

integrity of the family business. An expected future inheritance of non-business assets could be converted into current cash through sale to other family members. A nonfamily investor might be willing to contribute capital for a larger-than-proportionate share of the ownership of the farm. Some investors may be attracted by the tax shelter available from operating losses; under certain conditions an operating loss is in reality, an asset for high tax bracket investors. And unused tax credits may be available to make the equity infusion more attractive for the investor.

The third source of an equity infusion is the lender. In some cases, the financial condition of the firm is such that the lender will incur a significant loss if the note is called, foreclosure occurs, or the operator takes advantage of the bankruptcy procedures. If the firm has current cash flow problems because of high leverage and aggressive growth, but strong management and the potential for reasonable future earnings, the lender may minimize losses or increase the chances of recovery by converting debt obligations into equity. This conversion reduces the current cash flow burden of excessive debt servicing and releases resources (both funds and management) to use in more productive activity that will enhance current and future income. A similar arrangement may occur using a sale-leaseback arrangement. In this case debt would be repaid with the proceeds of the sale and the size of the business would remain unchanged if the assets were leased back. Again, tax shelter considerations should not be ignored in such arrangements. Convertible debt instruments (such as convertible corporate bonds) or subordinated debentures may accomplish similar goals of giving the firm the financial flexibility to reorganize and improve the chances of survival.

Limited partnership arrangements may also provide a way for highly leveraged firms to recapitalize and continue operation. Such an arrangement can be used to combine funds from several investors into a larger pool much like a mutual fund, and the pooled funds would then be used to buy financial interests in farming operations. Again such arrangements would be structured to take advantage of tax shelter provisions, but would involve the pooling of funds from many investors and investing those funds in a variety of farms to reduce the financial risks that would be involved if a single farm were acquired by a single investor.

An important and fundamental issue related to nonfarm equity capital is that of the property rights of owners (landlords) and users (tenants). Increased separation of ownership and control of real estate will have different implications depending upon the legal rights and institutional structure used in the farm real estate rental market. Changing the balance of property rights of tenants versus landlords, including the potential for longer term leases and compensation to the tenant for improvements made, may have a significant impact on the economic and social attractiveness of renting versus ownership of farmland. The institutional structure surrounding rental of farmland is a significant function of property laws and public policy in general. If "reasonable" terms of trade are maintained between owners and users, the perceived negative social consequences of "outside equity" may be partially offset, and substitution of nonfarm equity for debt may improve the financial resiliency of the agricultural sector.

5. Adjust land rental arrangements Many cash rental rates for the 1985 crop have declined from 1984. Typical decreases are from \$10 to \$20

per acre. Some rates have dropped \$30 or more. If profit margins continue to tighten through 1985, we can expect to see additional downward pressure on rental rates.

Land is the residual claimant of all production costs. If income rises faster than nonland production costs, land rental will claim the increased residual of income over costs. Conversely, if income decreases while nonland production costs increase, the reduced residual of income over costs means that land rental will be less. Rental rates moved upward rapidly in the 1970s due to increased profitability in farming. Consequently, we should expect to see them adjust downward in the 80s due to decreased profitability in farming.

During much of the 1970s the landowner was in the driver's seat when it came to rental rates. If the tenant did not want to pay the rate, the farmer down the road often would. However, at the present time, the farmer down the road may not want to pay that rate either.

Tenants should consider switching from a cash rent lease to a crop share lease. The tenant bears all of the price and yield risk under a cash rent lease. But under a 50-50 crop share lease, the risk is shared equally between tenant and landlord.

If the owner is not interested in a 50-50 share lease, he/she may be interested in a variable lease where the rental rate changes with changes in price and yield. One option is a percentage share lease where the owner pays none of the production expenses but receives a share of the crop or a rental equal to the value of a share of the crop. The share of the crop often runs from 30 to 40 percent. With this arrangement, the

owner shares a portion of the yield risk. Another option is a guaranteed bushel lease. Under this arrangement, the owner receives as rent a guaranteed number of bushels or the value of a guaranteed number of bushels of grain.

6. Labor vs capital substitution During the 1950s, 60s and 70s, farmers substituted capital for labor. Farmers purchased larger machines that cost more, but can cover an acre of land faster. Livestock farmers erected confinement livestock buildings that required more capital but less labor. The whole trend of substituting capital for labor became almost automatic for farmers. Whenever farmers were faced with an alternative that required more capital but less labor, they chose to go with the trend.

Some analysts believe farmers have gone to the point of substituting capital for management. Farmers chose the high capital option in crop and livestock production to not only decrease labor required but to also make management easier.

We may see this trend stop or even reverse in the 1980s. Farmers must carefully evaluate labor and capital alternatives and not automatically go with the high capital-low labor option. Choosing the high capital option may not be the most economical considering the high cost of capital. It may be feasible to substitute family labor for borrowed capital.

Due to high inflation, low interest rates and optimistic financial expectations of the future, large capital expenditures were made with little financial analysis in the 70s. Many farmers simply made financial

investments and waited for inflation to make the investment profitable. In the 80s, capital expenditures for land, machinery, etc. must be made with much more caution. High interest rates, tight profit margins and an uncertain financial future mean that costs and returns for capital expenditures must be carefully evaluated.

During the 70s, many farmers purchased new machinery as a substitute for proper maintenance. Instead of doing preventative maintenance on their present combine or tractor, they purchased reliability by trading in the old machine for a new one. This option is no longer available to most farmers. They will have to continue to fix the old combine or tractor.

Farmers may be surprised at how long they can continue to keep their present machinery line functioning. Many will keep it operating because they will have no other alternative. But proper maintenance does not mean fixing it after it has broken. Proper maintenance--preventative maintenance--means fixing it before it is broken.

Many farmers will look increasingly at either doing custom work for others or hiring custom help. More farmers will consider owning "big ticket" items such as a combine with another farmer. We may be past the day when each farmer can afford the luxury of owning a complete line of machinery. Efficiency may dictate that farmers will have to develop co-ownership or custom arrangements with neighboring farmers.

7. Specialization vs diversification Specialization that is accompanied by capital-intensive production results in increased risk, higher fixed costs, and less flexibility. It reduces the ability of the farmer to adjust to the changing economic times. This ability to adjust

to change--to adapt--has been part of the historical success of agriculture and individual farmers and will become increasingly important in the agriculture of the future. Although specialization has its advantages, there are costs as well; and we may have underestimated the costs in terms of the fundamental and essential ability of the industry to adjust to a changing environment. Diversification in farm and nonfarm sources of income may be important for many farmers to reduce risk and maintain flexibility to adjust to a changing future.

8. Income generation vs wealth maximization During a large part of the 1960s and 1970s, many purchases of capital assets by farmers, particularly the acquisition of land, were significantly impacted by the capital gains and wealth contributions of those assets. Land in particular generated a significant portion of its economic return in the form of capital gain, and cash flow problems were relatively easy to solve by refinancing techniques that converted capital gain into cash. Much of the cash flow in agriculture during the 1970s was generated by adding to the debt load supported by rising collateral values rather than from cash earnings. In the current economic environment of limited capital gains (and in many cases capital losses), assets are priced to generate higher cash rates of return that can be used to service indebtedness incurred in the purchasing process. Furthermore, farmers are more conscious of the need for cash flow and income and place less emphasis on capital gains and wealth accumulation. The combination of decreased emphasis on capital gains compared to cash income on the part of producers and the pricing of assets to generate more competitive cash incomes will result in more

economically and financially sound purchasing decisions as well as an industry and firms in that industry that generate more cash flow per dollar of assets. The result will not only be increased profitability, but reduced vulnerability to financial stress.

9. Financial innovaton Significant innovation is occurring in the financial arrangements to alleviate financial stress and solve financial problems. Contracts are being renegotiated with new terms and arrangements including equity kickers, delayed principal payments, unpaid interest added to the principal outstanding, rental equivalent payments in lieu of principal and interest, etc. New lease agreements including flexible cash leases and even barter payments (providing services to the landlord in lieu of cash) are being negotiated. Lenders are taking back collateral in lieu of debt and leasing the assets back to the original owner, something which they claimed was impossible even as recently as a year ago. The innovations in arrangements and agreements in the financial markets are mind-boggling, and some of them will not work. But out of this "induced innovation" will come some new ideas on how to finance agriculture, and maybe even some new institutions. Institutional innovation is frequently a result of economic and financial stress. The opportunity to evaluate the potential of new leasing and tenure arrangements, new financing alternatives including the appropriate role of equity, debt and lease capital, and new ways of organizing production including contracting should be exploited. Each of these innovations will have problems and costs, but we should clearly recognize that the traditional institutions and arrangements have costs as well. Now is the time to evaluate the

costs and benefits of some of these new compared to the traditional approaches to organizing, financing and managing agriculture.

10. Manage risk The typical farm business of today encounters high levels of risk. Due to our dependence on the export market, commodity prices have become more volatile. Yield variability also contributes to farmer's risk. Farmers have switched from crop share rental arrangements where yield and price risk are shared between tenant and owner to cash rental arrangements where all of the risk burden is placed on the tenant. We have switched from fixed to variable interest rates and thereby shifted the risk of interest rate changes from the lender to the farmer-borrower. Also, labor returns and profit margins have become a smaller portion of the total cost structure, thereby magnifying the financial consequences of a change in price or production.

During the 1970s, we paid little attention to the increased amount of risk in farming. When farmers "rolled the dice", the dice often came up "winners" due to inflation, relatively good weather and a strong export demand. However, in the 80s, low inflation, poor weather and a faltering export demand have caused the dice to come up "losers" much more often.

The move towards reducing costs in the 1980s will create additional risk. Decisions to decrease costs by banding herbicides must be weighted against the additional risk associated with not having suitable weather for cultivation. Decisions to decrease investments by reducing machinery size must be weighed against the increased possibility of reduced yields due to planting delays from unfavorable spring weather.

Controlling risk means using the traditional risk management tools such as insurance. But effective risk management must also incorporate tools that are not normally used for reducing risk. For example, the 1985 Feed Grain Program is an excellent example of a way to reduce price risk in corn. The forfeit option of the nine month loan plus the deficiency payment guarantees a minimum price. And participating producers can take advantage of high prices.

Another risk management tool is to maintain a portion of the farm assets as liquid assets that can easily be converted to cash to cover losses in years of low prices or yields. In 1950 liquid assets made up 27 percent of total farm assets. By 1980 the portion had dropped to 11 percent. During the 70s, many farmers converted liquid assets into fixed assets such as machinery and land. Due to declining fixed asset values, increasing liquid assets will be difficult for many farmers.

11. Marketing - profit vs speculation During the decade of the 1970s, commodity price volatility increased due to the emergence of the world grain market. Consequently, the payoff from better marketing increased. However, most of the emphasis was directed towards trying to "out-guess" the market and hit the highest price. Most farmers were "home run" hitters when it came to playing the marketing game. If they "struck out" when up at bat, it became all the more important to hit a "home run" the next time up. The new environment fostered the development of a group of analysts giving advice on helping farmers outguess the market. But by the 1980s, most farmers had learned that the crystal ball of most of these "market prognosticators" was rather cloudy at best, and that their track

record on predicting the markets often left something to be desired. Also, farmers found that many times they got caught up in the psychology of the market, and "greed" for ever higher prices forced them to make unwise marketing decisions. In other words farmers learned what the baseball fans already knew--that most "home run" hitters were also famous for their high proportion of "strike outs."

During the 1980s farmers will focus more on "getting on base" with a "single" or a "double". Their goal will be "winning the game" rather than hitting "home runs" every time at bat. Farmers will continue to rely on market prognosticators but to a lesser degree. Additional factors will enter into marketing decisions. Concerns will be directed more towards reducing risk as well as making profits. Farmers will become aware of the profit and loss margins available at different price levels--especially those farmers with relatively high break-even prices due to substantial amounts of debt or rented land. Farmers will also become more cognizant of whether the current price is a "good" or "poor" price based on historic price levels. Marketing decisions will be based on selling at a "good" price rather than on whether the current price is the "high" price.

12. Control family living expenditures Most farm families increased their living standards during the 1970s. In contrast, the 80s dictate that many of these families will have to reduce their living standard. Increasing living standards is easy--reducing living standards is difficult. But for many, controlling family living expenditures will be vital to survival.

Many farm families have not adjusted their living standard downward. In fact, many farm families do not know what they spend for family living. Living expenditures come out of the same bank account as the business expenditures. If the account comes up short, they simply increase their short term debt with the lender.

Conversely, a number of farm families closely monitor what they spend on family living and have been successful in reducing living expenditures substantially. But many of these families may leave farming because they are becoming disillusioned with the low living standard required to remain in business.

Many farm families are obtaining income for family living needs by one or both of the parents working off the farm. A trend is emerging in agriculture where the number of medium sized family farms is decreasing, but the large commercial farms and the small farms dependent on off-farm income are increasing in number. Many families on medium sized operations may either have to get bigger or depend more on off-farm employment. The success of farmers seeking off-farm employment depends upon Iowa's ability to create jobs and the farmer's willingness to obtain the educational and training needs to develop marketable skills.