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GUEST COLUMN



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In this issue emphasis is given to social and economic change that has been occurring in North Dakota. All of us who live in the state and many who live outside the state but who in one way or another are linked to North Dakota are affected by the dynamics of the social and economic forces described in the following articles.

The changes that have and are occurring generally happen slowly so that day-to-day change is not detectable. Social and economic change is like watching a slow motion replay of a sporting event or completing a jigsaw puzzle. Each move or action taken by itself may seem rather insignificant, but it is important in contributing to the eventual outcome. From day to day we know that change is occurring in our social and economic environment but we cannot appreciate its significance unless we stop and reflect back over a decade or two of happenings to see how each has helped to bring us to the present.

Social and economic change benefits some while creating hardship or stress for other members of society. For example, the number of farms in North Dakota has been declining while average farm size has increased. Some farm operators have benefited from the opportunity to grow larger while others who have been forced out of farming or young people who cannot afford to enter farming and be competitive have been adversely affected. In the articles that follow we do not judge the benefit or cost of change. Rather, we try to describe what has occurred and what the implications may be for the future.

In 1980 the state's population reached its highest level in 50 years, reflecting a significant reduction in outmigration of residents. Energy development in western counties has been an important factor; another force that some may find surprising is a continued pattern of urbanization in some eastern countries.

Agriculture continues to be the most important sector of the state's economy, but our reliance on agriculture is declining somewhat. We are seeing more economic diversification with greater reliance on energy-related industries, processing of agricultural products, miscellaneous manufacturing, and tourism and outdoor

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On the Cover: Dawn breaks over a small town in North Dakota, bringing with it changes and new challenges. This issue examines social and economic trends in North Dakota. Photo by James Berg.



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A BIMONTHLY progress report published by the Agricultural Experiment Station,

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EDITOR Gary Moran periencing moderate-to-severe financial stress. The remaining 8 percent of the indebted operators in the region are in severe financial trouble. If the survey results for the West North Central region are indicative of the financial situation among North Dakota's indebted operator group, about 28 percent are in moderate-to-severe financial difficulty. This translates into 18 percent of all operators in the state, or approximately 7,000 farmers. A disturbing aspect of this financial situation is that a relative minority of operators carry a major share of total farm debt in North Dakota. Failure of a significant number of these farms could have widespread repercussions in the state.

Conclusions and Implications

During the 1979-84 period, the farm sector's financial condition deteriorated due to lower net farm income, increased dependency on borrowed money, and higher interest rates. These developments contributed to the cash flow problems of farm operators in the state. Erosion of equity in the post-1979 period has made farmers financially more vulnerable to future instability in commodity prices and interest rates.

Financial stress among heavily indebted farm operators is most acute. Operators with debt/asset ratios exceeding 40 percent have experienced moderate-to-serious cash flow problems simultaneous with a significant loss of equity capital. The result has been reduced ability to service or expand existing debt. These farm operators carry a significant proportion of total farm sector debt.

There are several implications for the agricultural economy in North Dakota. First, farm attrition through foreclosure or voluntary liquidation will likely increase, especially among the indebted operator group, if 1979-84 economic conditions continue. Second, farm lenders will realize the financial impacts of expanded delinquency and insolvency. Both trends reduce the profitability of farm loans. Third, forced liquidations place farm assets (land and machinery) on markets which are already weak. Fourth, rural communities and businesses will continue to experience the secondary effects of reduced farm profitability. Potential impacts include lower retail sales, reduced provision of public services, and out-migration of rural residents.

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recreation as important sources of income and employment. This trend also helps to explain the reduction in out-migration as more jobs are available to our young people in the state.

Farms have grown larger over the past 15 years to take advantage of size economies. The average size farm is getting closer to the economically efficient size farm. Productivity gains on North Dakota farms continue to increase at an amazing rate.

While our farm operators strive for greater efficiency, there is increasing financial stress in North Dakota agriculture. The financial position of most farmers in the state remains strong; but in recent years the combination of higher farm debt, increasing interest rates, higher prices of purchased inputs, and low commodity prices have created financial stress for some operators.

During the latter part of the 1970s some farm operators increased the size of their farm/ranch operation through land acquisition. They were encouraged by an average annual rate of increase in farmland values of 15 percent that they expected to continue and relatively high commodity prices. Some operators became highly

leveraged and now face serious cash flow problems. Asset devaluation in recent years (land values decreased at an average annual rate of 2.4 percent between 1981 and 1984) has further compounded their financial problems.

In looking to the future, our farmers will be operating with smaller margins of error. They will continue to rely on borrowed capital for farm expansion; because of this fact, growth in farm size will probably not match the growth rate of the 1970s.

Sale of crops and livestock and government payments represent the primary sources of farm income in the state. Although the value of livestock receipts has increased over time, crop revenues have increased more rapidly and they are growing in importance as a source of farm income. Farm program payments to North Dakota farmers have varied significantly; in 1983 the payment-in-kind program accounted for 8 percent of total agricultural cash receipts.

One of the most dynamic industries in the state is the grain handling and transportation industry. Rapid

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careful about expanding and becoming too highly leveraged within their operations. This becomes apparent after a closer investigation of projected production expenses.

The underlying model assumes technology will increase production efficiency and output about 14 percent by 1995. Increased efficiency decreases real production costs at approximately the same rate. Expenses, however, are projected to decline only 8 percent rather than 14 percent as suggested. This discrepancy indicates another component of production expenses must be projected to increase. Debt servicing appears to be the culprit.

The debt to asset ratio is projected to increase; that is, farmers are expected to continue increasing their reliance upon borrowed capital to expand their operations. This will result in increased obligation to debt servicing even without higher interest rates. Debt service is a fixed expense and is projected to increase relative to net farm income.

Relative increases of fixed costs multiply the farm operator's risk. The opportunity to rapidly reduce production costs after a decrease in commodity prices is drastically diminished. Farmers will be operating with smaller margins for error since a significant crop failure without insurance coverage can radically change the equity position of any farm. It appears there will be substantially more downside risk in future years than there has been in the past.

Higher debt to asset ratios indicate that greater gains will be enjoyed if commodity prices increase dramatically, but the opportunities for such windfalls also may be on the decline. Temporary increases in commodity prices in excess of increases in production costs may be eliminated through an improved and more efficient market place which will react more quickly to future price changes. Variable interest rate and deregulation of the overall financial industry are examples of recent changes which remove market rigidity and facilitate more rapid adjustments. Opportunities for rapid farm growth such as experienced during the 1970s are unlikely to arise again. Consequently, the opportunity to reap

extra benefits from a leveraged position is realtively less than the chance of suffering devastating losses.

Reduction in opportunities for windfall gains to offset downside income risk indicates that a farmer with a significant loss in one year may find it nearly impossible to recover. As a result, risk averse farmers may again be the survivors in the next decade.

SUMMARY

This may be the time to cease rapid growth through use of borrowed capital if the farm owner has not already done so. Farm income and production costs are expected to decrease over the next years, but increased leverage and debt repayment obligations also increase downside income risk. Farmers who maintain an equity to total asset ratio currently experienced will find themselves increasingly squeezed by debt repayment needs and any reduced net farm income will make survival more difficult.

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change is occurring with the trend being toward fewer and larger elevators to take advantage of economies associated with high throughput. As elevators become more efficient and are able to take advantage of multiple-car rates, cost savings will be shared throughout the grain marketing system. One danger in the rapid changes occurring in the grain marketing system is that we overbuild (or expand too rapidly). This occurred in Iowa and Nebraska; important lessons can

be learned from the expansion process observed in those two states.

The analysis represented in the set of articles appearing on the following pages provides an important benchmark for conducting a similar exercise again in the future. Social and economic change is a dynamic process; it impacts differently on various segments of society. There is no reason to believe that the next 10 years will be any less dynamic than the last decade.

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