

House of Commons Canada

THE \$22 BILLION PROBLEM: OPTIONS FOR THE FINANCIAL RESTRUCTURING OF FARM DEBT

Report of the Standing Committee on Agriculture

July 1988

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## OPTIONS FOR THE FINANCIAL RESTRUCTURING OF FARM DEBT

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July 1988

## HOUSE OF COMMONS

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## CHAMBRE DES COMMUNES

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Le mardi 31 mai 1988
Le jeudi 2 juin 1988
Le jeudi 9 juin 1988
Le mardi 21 juin 1988
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Le mardi 28 juin 1988
Le jeudi 14 juillet 1988
Président: Geoff Wilson

Minutes of Proceedings and Evidence of the Standing Committee on

## Agriculture

## RESPECTING:

Pursuant to Standing Order 96(2), a study of Options for Financial Restructuring of Farm Debt and Future business

## INCLUDING:

Ninth Report to the House

Procès-verbaux et témoignages du Comité permanent de

## l'Agriculture

## CONCERNANT:

Conformément à l'article 96(2) du Règlement, étude des solutions possibles de restructuration de la dette agricole

## Y COMPRIS:

Neuvième rapport à la Chambre

Second Session of the Thirty-third Parliament, 1986-87-88

Deuxième session de la trente-troisième législature, 1986-1987-1988

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The Standing Committee on Agriculture has the honour to present its

## NINTH REPORT

In accordance with its mandate under Standing Order 96(2), the Committee has carried out a thorough examination of mechanisms to accommodate structural adjustments resulting from excess debt within the agricultural industry. In its study, the Committee considered existing and new tools such as equity financing, the farm debt review process and property management alternatives of the Farm Credit Corporation and has agreed to report the following.

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## CHAIRMAN'S REMARKS

This study is concerned with the magnitude and impact on farmers of the $\$ 22$ billion of farm debt in Canadian agriculture. At the present time, given today's economic circumstances, about $\$ 6$ billion of this appears unrepayable.

Fortunately, two-thirds of Canada's farmers are financially secure. It is to the other third of producers that the study is primarily directed. It does not claim to have all the answers but it does approach the problem from a new direction with the most recent data and varied debt remedies. It investigates the financial stress of farmers at different stages of their development and tries to recommend solutions to fit their particular circumstances.

Many farm organizations were concerned that financial solutions to reduce farm debt would take funds from programs to maintain income. Virtually all farm groups supported these universal programs, such as the deficiency payments provided to grain farmers for the past two years. The Committee agrees that income assistance must be kept separate from debt remedies.

Indeed, the Committee's analysis of debt capacity verifies that traditional solutions such as debt moratoria or deficiency payments will do little to help farmers in severe stress. Options are limited for these farmers but the Committee does suggest ways of restructuring their debt or helping them leave agriculture if that is their only solution.

In this review, the Committee remains aware that government resources are not unlimited and programs must strive to be fair and at the same time cost effective. The Committee contends that some structural adjustments to the sector will have to occur and if these changes are made now they may reduce future expenditures.

Innovative financing instruments and the cooperation of the private sector and both levels of government will be required to resolve and prevent a recurrence of the present debt crisis.

Between April 1, 1987 and May 19, 1988, the Committee listened to the views of farm organizations and others and gave a great deal of thought to its causes and solutions. Members who participated in these extensive discussions shared the experience of their diverse agricultural backgrounds to help the Committee find workable solutions to the serious issues before it. These included from the Liberal Party, Maurice Foster, M.P. for Algoma, a veterinarian in general farm practice in Saskatchewan and Ontario before being elected and now Agriculture Critic and Critic for Grains and Oilseeds for the Official Opposition; and Don Boudria, M.P. for Glengarry-Prescott-Russell, a dairy riding. The NDP were represented by two long-standing Saskatchewan members with practical farming experience. Vic Althouse, M.P. for Humboldt-Lake Centre is NDP Agriculture Critic and Stan Hovdebo, M.P. for Prince Albert is that party's Critic for Grains and Oilseeds.

From the P.C. Party, the Committee was represented by Harry Brightwell, Vice-Chairman of the Committee, a veterinarian, who represents Perth, an area of concentrated dairy, swine and bean production; Sid Fraleigh, M.P. for Lambton-Middlesex, a corn, soybean and hog farmer; Bill Gottselig, M.P. for Moose Jaw, who is a Saskatchewan farmer and businessman; Arnold Malone, M.P. for Crowfoot, an Alberta farm operator; Fred McCain, a farmer, M.P. for Carleton-Charlotte in New Brunswick; and Jean-Guy Guilbault, a businessman representing Drummond in the Province of Quebec. Jack Scowen, M.P. for Mackenzie, a Saskatchewan oilseed producer, also made a useful contribution as an alternate member of the Committee.

The Standing Committee on Agriculture would like to acknowledge all the assistance graciously provided in the preparation of this report, including the participants at the hearings and those who submitted briefs. The Committee is much obliged to Dr. Michael Wolfson, Dr. Ray Bollman and Ms. Monica Tomiak of Statistics Canada for their technical advice and programming of farm census data. The Committee takes full responsibility for the interpretation of these data.

The Committee would also like to thank Dr. Ralph Ashmead, its Economic Consultant, for designing the data programs and offering his economic expertise to assist the Committee in the difficult task of recommending programs that are at the same time innovative and practical.

The Committee is appreciative of the efficient administrative support of the Clerk of the Committee, Carol Chafe, and of Parliamentary Translation and Centralized Support and Publications Directorates. The Committee recognizes, too, the dedication of its research staff Len Christie, Research Officer, June Dewetering, Research Officer, and Sonya Dakers, Research Coordinator.

Geoff Wilson<br>Chairman<br>Standing Committee on Agriculture



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## HIGHLIGHTS AND RECOMMENDATIONS

## A. INTRODUCTION

The Committee has identified that the agricultural industry is facing excess debt in the magnitude of $\$ 6$ billion. It is increasingly apparent that until the excess debt problems of farmers are addressed, the effectiveness of other program initiatives will be limited. Farmers will continue to experience rising levels of financial stress in spite of massive government involvement, and parts of the sector will gradually be less able to compete.

Through its interpretation of the 1986 Census of Agriculture, the Committee has developed an original analysis of the industry. The analysis is directed at the financial problems and needs of farmers on the basis of their development stages, namely beginning, established and retiring or exiting from the industry. Against this backdrop, the Committee has considered the potential roles of the Farm Debt Review Boards (FDRB), the Farm Credit Corporation (FCC) and management of its properties, Equity Financing and other financial mechanisms in the restructuring of farm debt. The thrust of the recommendations of the Committee is to propose options which will set the stage for long-term financial adjustment and stability, rather than postpone adjustment to a later period.

Agriculture, like other resource sectors, has fundamental income and capital characteristics which have profound influences on its financial risk. A large proportion of the wealth is derived from capital appreciation. Capital costs are high, income to capital ratios are low, and there is a wide variability in farm cash receipts. These fluctuations impact on farmers differently depending on their relative cost and equity ratios, managerial ability, and degree of enterprise diversification. A mismatch between the financing tools and the income and investment characteristics of the industry can lead to excess risk.

## B. FARM DEBT REVIEW BOARDS

A central focus of the Committee's study has been to carry out its legislative mandate to evaluate the effectiveness of the Farm Debt Review Act as a mechanism to deal with the debt restructuring requirements of farmers. In their testimony, witnesses concentrated their comments on the process, procedures and powers of the Farm Debt Review Boards.

Witnesses expressed varying opinions on the operations and efficiency of the Boards. There was general agreement on the need for a process such as the FDRB to assist in the mediation of debt restructuring decisions. Confidence in the mechanism has grown since the Committee first heard testimony on the operation of the Boards as the Boards themselves have felt more comfortable with the mediation process.

Support was evident to continue the program. Witnesses stated that it sometimes provided the first opportunity for a farmer to take stock of his financial circumstances and helped communication with his creditor. The evidence of the witnesses varied depending on their experience with the particular Board in question. Some Boards appeared to act more as a farmer advocate than others and there were other differences relating to the level of financial management expertise and counselling. It is possible the balance between advocacy and mediation is affected by the availability of people in an advocacy role in other programs.

In the longer term, the measure of the Boards' effectiveness will be in terms of how well Board decisions and settlements have permanently resolved the financial difficulties of Canadian farmers.

The Committee is concerned about the viability of farm businesses after the FDRB process. It is believed that leaving farmers in financially vulnerable situations with little or no equity will result in continued deterioration of the business and a high probability of failure within a few years. Without off-farm income or subsidies, agricultural businesses have only a moderate capacity to repay debt. While the Committee appreciates the desire of the farmer to remain on the land, it is the responsibility of the FDRBs and their advisors to understand the requirements of financial viability and arrange for financially stable solutions.

The majority of Committee members were supportive of the mediating role of the Boards in debt restructuring and felt this role would be compromised by giving the Boards powers to enforce agreements. This was not the view of the NDP members of the Committee who favoured giving the Boards more legislative authority to enforce the implementation of Board recommendations.

The Liberal members were in agreement that the Boards should not have powers to enforce agreements. They felt, however, that a new procedure
should be considered to assist farmers where an agreement is not reached in the FDRB process so that they would be able to make a proposal to a court to restructure their debts, based on a report prepared by the Board.

The Committee agreed that, in cases where no agreement was reached, the Boards should provide a report with their recommendations for use by farmers. The Committee also felt better information, financial expertise, follow-up and consistency were required Canada-wide.

To correct these deficiencies, the Committee recommends that the federal government institute the following:
(i) a process of continued upgrading of the qualifications and skills of Farm Debt Review Board panel members and field personnel, including the provision of training programs where necessary;
(ii) more uniform and equitable guidelines to be used by all Boards in mediation, determination of farm viability, and recommendations for debt restructuring.
(iii) with competent advisors from the farm and private sectors, a counselling and management service for applicants during the FDRB process and for longer-term follow-up;
(iv) a better information data base system to support the operations of the Boards;
(v) other restructuring options, such as shared-appreciation mortgages; and
(vi) a procedure whereby the FDRB in each case where no agreement is reached, shall make available to the farmer a report outlining their recommendations. (Chapter Three, p. 60)

## C. EQUITY FINANCING AND ALTERNATIVE RESTRUCTURING MECHANISMS

Equity financing in various forms may offer advantages to beginning farmers, farmers with excess debt and retiring farmers to restructure their
businesses. As discussed in Chapter Five, this may become an effective alternative means of reducing debt.

From the testimony of witnesses, it became evident that many did not see how this financing technique could be structured to apply to agriculture. A major concern was that equity financing would result in less ownership of farmland by farmers. Their perception was that farmers would be selling owned equity in their operation, and would have difficulty in buying it back.

In the application of equity financing studied by the Committee (see Appendix A), ownership is not taken and the potential for future ownership may be enhanced. The concept allows for equity to be held in shares of the equity financing vehicle. Because debt is exchanged for equity capital, the reduction in debt servicing costs would allow a better cash flow. Any surplus funds could be used to purchase additional shares that could eventually be used to repurchase the land.

Equity financing could be a mechanism allowing farmers to sell a portion of their assets to a third party investor, the funds so generated used to reduce debt or for other purposes, and the property leased back on a long-term flexible basis with repurchase options. The original equity position of the operator can be preserved and the cash flow can be improved since debt financing costs at market interest rates are substituted by lease rates. With this restructuring, the business may be less exposed to financial risk, has a higher level of cash flow to reinvest in the business, and should have a greater likelihood of long-term viability.

A study by Ellinger and Barry of Illinois farms indicates that farmers who began farming on leased land and gradually acquired ownership were more successful. Equity financing as a financial option could work particularly well for farmers with debt above 20 to 30 percent of assets.

Investors would include retiring farmers who could leave their money in farming with greater security. Lenders who have large holdings of foreclosed land and cannot sell it because it would reduce land values, and investment funds and individuals looking for long-term investments would also be likely candidates. Long-term investment in land could produce returns about equal to an equity investment through a stock exchange. Suitably structured, an equity financing scheme could produce for investors dividends and capital gains with their inherent tax advantages.

The Committee believes that equity financing needs to be considered by farmers to augment traditional debt financing. Further, it sees the private sector as being instrumental in developing the concept. The provinces, by virtue of their control of land ownership legislation, have an important role. To test the acceptability and practicality of equity financing as a mechanism to restructure debt, it is suggested that a pilot project or other limited-scale approach be undertaken by private industry in cooperation with interested provinces. The federal government should be prepared to support this initiative in the provision of technical assistance and in the partial offset of start-up costs. The federal government's role should be to ensure consistency of process and an equitable sharing of risks and benefits between farmers and investors.

Government and private lenders may be faced with managing large blocks of foreclosed land because of future land market conditions. Participation in an equity mechanism may prove to be a suitable alternative. The use of investor incentives, such as private sector guarantees, should not exceed the level of incentives now given in debt financing.

> The Committee recommends that the federal government send a positive signal to the farm sector, investment community and the provinces that it would support the private sector development of an intermediation process for equity financing. (Chapter Seven, p. 129)

In a favourable economic climate, established farmers have gradually accumulated equity through retained earnings and appreciation of assets. They have acquired management skills and experience which may encourage them to seek expansion, diversification or value-added activities in order to enhance their operations. By this phase, a more balanced distribution in the business between earning capacity and financing costs would normally prevail.

Because of the investment conditions prevalent when these farmers became established, the statistics portray a very different set of circumstances from that traditionally expected. On some farms, equity gain is stagnant or eroding and earnings are being consumed by debt servicing. Although economic conditions in certain sectors are quite conducive to expansion, these farmers do not have the financial capability to embark on development plans.

The debt which these farmers are facing is obscuring their inherent management skills and capacity to remain viable. Theirs is perhaps the most difficult debt adjustment problem to solve. They are farmers who are in mid-career, have a full-sized farm unit under their control, are quite productive, but suffer from a serious debt problem.

Interest rates play a vital role in both capitalizing or deflating asset values. A primary conclusion is that widely variable costs of debt capital have played a major role in destabilizing the agriculture industry.

It is apparent there is a need to stabilize the real costs of borrowed money. Real interest rates are normally defined as the nominal or stated rate less the inflation rate as measured by the Consumer Price Index. The traditional inflation rate is not totally applicable to the agricultural sector. A more realistic measure of the cost of borrowing is to compare the nominal cost of borrowing to the income return on the asset being financed. This is termed a Real Agricultural Interest Rate (RAIR) defined as the nominal rate less the rate of return on investment.

Witnesses have in some instances suggested that the sector requires stable interest rates but have usually not clarified if they are recommending stable real or nominal rates. Stabilizing nominal rates for most agricultural enterprises would result in increased volatility in the repayment ability of the farmer. For example, locking in farmers' interest rates at a fixed nominal rate would lead to artificially low costs when returns rose or to excessive high costs when agricultural returns dropped. This leads to either excessive borrowing and inflation, or to high levels of financial stress.

It is suggested that efforts be made to develop a mechanism which would, as much as possible, stabilize real agricultural interest rates. Between 1971 and 1976, RAIRs were low and credit reserves could then have been established. Between 1980 and 1987, however, there was a period of extended deficiencies, where any credit reserves would have been used to help stabilize financing costs.

An Interest Stabilization Plan could be developed which would allow a credit reserve fund to be created, perhaps modelled after some of the commodity stabilization plans. Farmers, and both levels of government could contribute to the fund.

In the longer term, the establishment of a credit fund would allow building of credit reserves when RAIRs were low and for a draw-down of reserves when these were high.


#### Abstract

The Committee recommends that the federal government research and evaluate the possibility of developing an Interest Stabilization Plan for farmers. It is suggested that such a plan be analyzed from the perspective of sharing costs among farmers and both levels of government. (Chapter Seven, p. 118)


In addition to the interest stabilization plan, there is the potential to design a Variable Rate Mortgage which would help to stabilize the financing costs for farmers by correlating the rate with some measure of profitability. One mechanism for accomplishing this is to adjust the financing costs to the relative change in output and input prices. The principle is for the mortgage to be issued at market rates and for the scheduled payments to fluctuate around this level.

This mechanism would allow financing costs to be stabilized around market interest rates and better correlate payment with ability to pay.

The Committee recommends that a Variable Rate Mortgage be considered for implementation. This program would allow nominal interest rates to vary with market conditions, reflecting relative changes in costs and prices. (Chapter Seven, p. 119)

Another form of debt restructuring is a mortgage repayment plan applicable to situations where a significant proportion of total income is derived from capital appreciation of assets. Such a plan is the Shared-Appreciation Mortgage (SAM). SAMs are generally offered at an interest rate of some fixed proportion to market interest rates, and with the balance of the lender's return being derived from participation in either gross income, net income, asset appreciation, or some combination of the former. Such mortgages have been commonly used in the real estate market to finance apartments, hotels and condominiums.

The advantage of this mortgage instrument is that it clearly matches payment to both the levels and the two types of income - current and capital - which the industry receives. Such a program is self-targeting, as financial
need will dictate the structure of the SAM or the overall requirement for assistance.

The Committee recommends that the federal government consider the advisability of developing an alternative form of farm financing based on the principles of the Shared-Appreciation Mortgage concept including:
(i) the use of this financing tool to increase the effectiveness of the Farm Debt Review Board process;
(ii) its usefulness for restructuring high risk FCC accounts; and
(iii) the treatment of appreciation in the mortgage value as a capital gain for taxation purposes. (Chapter Seven, p. 121-2)

One option for people in financial difficulty is to leave farming, and take advantage of assistance from the Canadian Rural Transition Program (CRTP).

The recent enhancements to the CRTP have increased the financial assistance to help farmers leave farming by acquiring new skills and eventually moving into a different career. The CRTP is not designed to help farmers with low equity to become re-established in agriculture. In another part of this report, the Committee recommends lease-purchase options as a financing alternative. While lease-purchase options with the FCC may help solve the short-term cash flow problems of low equity farmers, it will not necessarily secure their long-term survival. These farmers also need access to suitable existing or specially designed farm management programs that will enchance their business skills in agriculture and provide support to diversify and to take advantage of other technology.

The Committee recommends that the CRTP should support training which could be integrated with lease-purchase or equity financing programs offered by the FCC or the private sector. (Chapter Eight, p. 136)

Central to the resolution of the debt problem, particularly in the prairie region of Canada, is land resource management. Throughout the

1970s, in response to high grain prices and high income rates of return to assets, large areas were intensively farmed and areas of grasslands were converted to grain production. The short-run economic returns, coupled with above average growing and harvesting conditions, resulted in land-use modifications unsustainable over the long run.

The problems of the debt and land resource management are directly related. It is unlikely that much of the debt can be reduced until the marginal crop production areas of the prairies are converted to uses such as forage, pasture, reforestation or recreation. Incentives may be required to change these land-use patterns.

Since much of the debt is beyond the capacity to be repaid, one possibility might involve setting aside or permanently reducing the debt on marginal land if long-term resource management practices are followed. A debt reduction program could be considered where investment by the farmer in converting land to forage, or other similar uses would be matched with a corresponding reduction of debt.

The Committee recommends that the federal government building on work already done on land-use management, evaluate the most effective mechanisms and incentives for converting marginal land to its highest and best long-term use, with appropriate treatment of the debt on this land. (Chapter Eight, p. 138)

In the Committee hearings, several witnesses referred to the necessity of having established business standards for people wishing to enter the industry. In addition to few identifiable standards, there is no well-developed facility or service whereby individuals can receive information, counselling, investment and financial support to become established in agriculture as a career. A fragmented service is offered primarily in the form of extension services by provincial governments. The partial involvement of government in this area has meant that the private sector has not played a significant role.

The Committee supports improving farm management and recommends that the federal government in cooperation with the provinces encourage the industry to:
(i) develop consistent farm management definitions, concepts and accounting systems;
(ii) work toward the development of farm-level information systems for use by all parts of the agriculture sector, including farmers, government, financial institutions, suppliers, marketing agents and educators; and
(iii) encourage a private sector farm management service. (Chapter Six, p. 109)

## D. FINANCIAL INSTITUTIONS AND THE FARM CREDIT CORPORATION

Based on the income and expense conditions of the day, in 1973 a farm business could have been financed 100 percent with debt and at least in the short run have repaid it. As late as 1984, lenders were extending debt capital to farmers on the basis of inflated land values though income returns had been dropping for almost 10 years. This suggests that the industry was being financed not in response to falling income, but in response to rising land prices.

The credit market, particularly in the late 1970 s, ignored the signals that debt capacity was rapidly declining and allowed debt financing to increase significantly.

This anomaly is partially explained by aggressive market penetration by both the private sector and government lending institutions as well as by credit policy design. Credit devices were used as policy instruments to help establish new farmers, or to help correct income or cost imbalances. Mortgage instruments demanding fixed regular payments proved inappropriate for the variability and the composition of income and capital returns. The risk of debt financing was not well understood.

Financial institutions in Canadian agriculture are undergoing considerable stress. In general, government lenders have absorbed the greatest degree of risk through programs targeted at developing farmers in precarious financial circumstances, or because of programs which have transferred high risk loans from the private to the public sector.

The increasing uncertainties as to the future structure of the agricultural financial market includes the Farm Credit Corporation. It is possible that some of the existing institutions will not continue to provide
financial services. Others will specialize within market segments which afford the greatest potential for profit with the least risk. There is a concern that government lenders may be unable to continue to offer the same type of services they have in the past.

Up until the end of the 1970s, the FCC was a residual lender supplying credit not forthcoming from the private sector and was the dominant lender. The role of a residual lender took on its full significance with the entry of private financial institutions in the market in 1977.

Changes in government policy in the early 1980s directed the FCC to obtain a positive return on the government's investment. The problems involved in making high risk loans to farmers with declining income returns and debt capacity and being obligated to achieve a positive return on capital have lately become obvious.

Recently, the FCC's ability to lend has deteriorated. It is now technically bankrupt with its debts greater than the value of loan assets. Its debt costs are increasing and its level of productive loan assets is declining. Lending rates have risen in an effort to begin recovering losses. As rates rise, more creditworthy clients find private sector loans more attractive and the corporation's portfolio retains an increasing proportion of high risk farmers.

It is the view of the Committee that the FCC cannot continue to operate within its present conflicting mandate, considering the inconsistency between offering a service and concurrently attempting to provide a positive return on capital. More importantly, the role of the FCC and the potential resolution of its problems should be examined from the perspective of the needs and characteristics of farmers. The role of the FCC must change to meet the needs of farmers in this period of capital contraction. The Committee does not believe that solely a cash or equity injection will put the FCC in a stable future financial position. A new approach is necessary.

The overall conflict between the FCC being a policy arm of government and a commercial lender must be resolved if the function of the FCC as a government lender is to be successfully rationalized. A compromise solution is for the FCC to compartmentalize its functions into "commercial" and "policy" roles. If it is to be a truly commercial lender, it would have to compete with private lenders, perhaps through becoming a deposit-taking financial intermediary. If it is to remain a public policy agency, then it must define what programs it wishes to carry out, identify their costs and be
compensated annually by the Government of Canada for them. All members of the Committee support the FCC's policy role, including that of residual lender as necessary.

To the extent that the private sector is prepared to continue to meet the long-term lending requirements of farmers, there may be less need to have a government institution competing in this market. While the role of providing traditional financial services in a residual capacity in the agricultural sector is risky and costly, the FCC must assume this role if financial markets become unstable and/or private lending institutions retreat from the market. The role of the FCC should also be to provide leadership and innovation in the development of new financing tools which promote risk management and cost stability, and in the provision of other financial services targeted to the special needs of farmers at various stages of farming.

Within this perspective, the Committee recommends that:
(i) the Farm Credit Corporation's current financial losses be supported by the government;
(ii) the FCC play an innovative role in developing and providing financial services targeted to the needs of beginning farmers for better tools to build equity and managerial capacity, on farmers' needs for stable financing costs, and on the special needs of exiting farmers;
(iii) the federal government recognize the need for a policy role for the FCC, and compensate the FCC annually for the costs of these policies; and
(iv) as part of its commercial role, the FCC make available long-term farm mortgages. (Chapter Three, p. 54)

In consideration of the needs of new entrants to agriculture, a refocusing of the roles of the credit system and debt financing is necessary. The use of debt as a financing mechanism to acquire ownership of farm assets results in a level of speculative risk that this group of farmers cannot bear.

The Committee found that beginning farmers need access to flexible investment opportunities which could include a mix of debt, equity and
leasing options. They also need access to adequate training in marketing, investment, and financial and risk management.

The Committee recommends that the federal government support the development of a complementary set of beginning farmer services initiated and possibly coordinated by the Farm Credit Corporation and with the involvement of private industry, and provincial governments. The specific elements of the program would include:
(i) a needs analysis of beginning farmers and of the services they require to establish careers as agricultural producers;
(ii) a set of standards for the management skills and experience requirements for beginning farmers;
(iii) using recovered FCC properties, opportunities for beginning or other farmers to establish themselves through lease-purchase options; and
(iv) the extension of the right by the FCC to own property beyond five years to allow it to enter into long-term leases. (Chapter Six, p. 107)

Declining asset values over much of the 1980s have created problems for retiring farmers whose real estate is worth less than was anticipated at the beginning of the decade. In some parts of Canada, retiring farmers are experiencing a "liquidity trap" for, though many desire to leave the industry, few buyers are available and they find themselves competing with financial institutions in the sale of their assets. The traditional mechanism of accumulating equity primarily through land as a retirement pension plan, has proven for many farmers to be a high risk venture, totally dependent on being able to reach retirement age with the peak of inflationary cycle in the value of the assets.

Traditionally, farmers who are retiring, once the assets are disposed of, invest the net equity in deposits and other savings instruments of financial institutions. While, in some cases, retiring farmers will take back mortgages from purchasers of their farms, for the most part the funds to refinance the next generation must be re-lent to the sector through traditional financial intermediation.

In this context, there is a role for the federal government, possibly through the FCC, to design mechanisms to facilitate the retirement of such farmers.

The Committee recommends that the federal government, possibly through the FCC, in consideration of the needs of retiring farmers:
(i) perform an assessment of the needs of retiring farmers;
(ii) consider a process to provide guarantees both of debt and equity instruments between retiring farmers and new entrants;
(iii) evaluate the need and the design of an investment instrument to help recycle savings of farmers more directly back into the agricultural sector; and
(iv) assess the potential for retiring farmers to participate in an equity financing body. (Chapter Eight, p. 133-4)

The future supply and demand for debt capital by farmers remains uncertain. While there has been no extensive evaluation of the demand for and the supply of debt financing in the agricultural capital market over the past 10 to 15 years, there is considerable evidence that much of the demand was influenced by non-market factors.

Demand for credit will continue to depend on the usual market influences such as farm income and the expected inflation of assets, and the availability of government subsidies. It is expected that the credit market will contract.

The Committee, in recognition of the uncertainties facing farmers regarding the future availability of credit, recommends that the federal government undertake an evaluation of the market that would include:
(i) an analysis of the current structure of the agricultural credit market, the current role of its participants, their financial capacity and their willingness to continue in this role;
(ii) an evaluation of the demand and need for debt financing by farmers over the next 10 years and the demand for complementary and alternative services;
(iii) an assessment with a view to rationalizing the relative roles of provincial, federal and private lenders in farm financing;
(iv) an evaluation of the potential for the establishment of a secondary mortgage and equity market for agriculture; and
(v) an analysis of credit arrangements available to farmers in countries with whom Canadian producers compete in agricultural commodities traded in international markets. (Chapter Three, p. 48-9)


## CHAPTER ONE

## INTRODUCTION

## A. STUDY OBJECTIVES

This study is concerned with the excess debt in the farm sector. How much is it? Where did it originate? Who holds it? What can be done about it? The depth of concern about this serious problem is obvious from the numerous studies that have been released on its various facets. The latest was in April 1988, when the Senate Committee on Agriculture and Forestry described the state of the family farm in its report Financing the Family Farm to the Year 2000. The Standing Committee itself has issued a number of reports since November 1984 containing recommendations to alleviate the present farm financial crisis. In last year's Farm Input Costs study, debt servicing emerged as a major cost. The present investigation follows up on that finding by defining more comprehensively the parameters of the farm debt issue in Canada and analyzing how it can be managed.

Searching for mechanisms to restructure this excess debt, the Committee considers the potential roles of the Farm Debt Review Boards (FDRB), the Farm Credit Corporation (FCC), Equity Financing and other financial mechanisms in the financial restructuring of farm debt.

The problems of farm debt paradoxically appear to have increased even as levels of government assistance have risen to historical highs. While income levels on a per farm basis are at or near such highs both in nominal and real terms, financial stress remains stubbornly at unacceptable levels.

The Committee attempts in this study to identify correctly the nature and causes of the debt problem, thereby inviting self-targeted rather thar imposed solutions. The study questions how we customarily go about assessing financial risk, given the unique structure of the industry. Without good assessment tools we are likely to repeat the financial management errors at the policy, institutional, and farm level made in the late 1970 s and early 1980s.

As late as 1984, lenders were extending debt capital to farmers on the basis of inflated land values though income returns had been dropping for almost 10 years. Lenders continued to rely on balance-sheet information, lending on the basis of collateral rather than applying performance-based criteria which could have shown borrowers were not generating sufficient income to cover their loan payments. We are now more aware that one of the commonly used measures of solvency, the debt-to-asset ratio, often fails to indicate where cash flow problems are leading to insolvency. This study hopes to provide more accurate analytical tools with which to analyze the excess debt problem, evaluate how various policies may act upon that problem, and make recommendations on appropriate courses of action.

## B. STUDY ORGANIZATION

The study will trace the origin and extent of the debt problems facing Canadian farmers, and from this base of understanding, develop appropriate options and recommendations.

The methodology employed follows two logical constructs. First, a profile of the industry is sketched on the basis of farmers' economic stage of development. By separating the industry into stages representing beginning farmers, established farmers and retirement-aged farmers, it is possible to identify the individual needs and characteristics of each phase and propose complementary and consistent alternatives. Second, for each development stage, there are alternatives which either achieve the objectives of restructuring the business and provide for the long-term support of the farm family, or recognize the inability of some farmers to continue in agriculture.

Chapter Two will open the study with a view of the industry from the perspective of its past financial, investment and income characteristics and their relationships. The changes in income returns, and declining debt capacity will be examined in relation to concurrent accelerating inflation in asset value and growth of credit.

The role of Canada's major financial intermediaries in the credit market and their impacts on the capital structure of the industry will be reviewed in Chapter Three. A look at the government and private sector lenders will reveal how the financial stress of farmers has affected these financial institutions, and the part they may play in the future financing of Canadian farmers.

Chapter Four presents a comprehensive analysis of the industry's financial structure by region and commodity, current levels of stress, and measures of excess debt. This Chapter will use the most recent information available to develop a profile of the three respective stages of the economic development of farmers. The analysis will provide insights into the financial risks, the levels of excess debt, and the investment, credit, equity and managerial needs of farmers at each stage.

Chapter Five will apply a series of possible policy scenarios to farmers as represented by the 1986 Census of Agriculture. This policy analysis will begin to determine the relative effectiveness of deficiency payments, debt set asides, interest subsidies, or equity financing programs in the resolution of the farm debt problem.

Based on the findings of Chapters Four and Five, alternatives and recommendations will be developed in Chapters Six, Seven and Eight to accommodate the characteristics, needs and special problems of farmers at beginning, established and retirement (or exiting) stages of farming respectively.

The emphasis throughout this study will be to relate possible solutions and recommendations to a knowledge of the problem and its causes.


## CHAPTER TWO

## HISTORICAL REVIEW AND ANALYSIS

The first step in identifying future options for addressing the excess debt problem is to conduct a historical review and analysis of the factors which have led to the current situation. This involves an evaluation of the returns to agricultural investment, the debt capacity of farmers and the influence of the credit market upon investment and financing decisions. Useful comparisons are made of conditions in Canada and in the U.S.

## A. RETURNS TO AGRICULTURE

An analysis of the agricultural sector over a 34 -year period between 1953 and 1987 shows annual average cash income returns of 5 percent plus 7 percent returns from capital appreciation or growth (Table 2.1). Over the shorter period (1971-87), income returns averaged just under 4 percent and capital returns about 9 percent. Income returns in 1986 and 1987 reached the average of the past 10 years. The proportion of agricultural total returns which are derived from income has generally been less than one-half of that from capital growth. This fundamental income characteristic has had a profound influence on the investment financial risk of the sector.

The rates of return to farmers vary significantly as is clearly visible in Table 2.1. Studies of Alberta farmers showed rates of return on investment varying from - 2.3 percent for low income producers to over 10 percent for high income producers (Government of Alberta, Options and Opportunities, 1987). A graphical representation is given in Figure 2.1 of income and capital returns.

These returns reflect the variability of income within each commodity sector and between farmers within different investment categories. The fluctuations in farm cash receipts for selected commodity sectors are seen below in Table 2.2.

Table 2.1
Rates of Return to Agricultural Investment Canada, 1953-1987
$\left.\begin{array}{|lccccc|}\hline \text { Year } & \begin{array}{c}\text { Income } \\ \text { Return }\end{array} & \begin{array}{c}\text { Capital } \\ \text { Ret }\end{array} & \begin{array}{c}\text { Total } \\ \text { Returns }\end{array} & \begin{array}{c}\text { Income Return } \\ \text { as Proportion } \\ \text { of Total } \\ \text { Returns }\end{array} & \begin{array}{c}\text { Capital Return } \\ \text { as Proportion } \\ \text { of Total } \\ \text { Returns }\end{array} \\ \hline & & & \text { - percent - }\end{array}\right]$
(1) Income rate of return is defined as annual farm cash receipts less operating expenses (excluding interest), less depreciation and an 18 percent charge against cash receipts to represent a return to management and unpaid family labour, expressed as a percentage of total farm assets at the beginning of the year.
(2) Capital return is defined as the change in capital values over the year, adjusted for building repairs and expressed as a percentage of the beginning value of total farm assets.

Source: AgriTrends Research Inc., Special Analysis, Calgary, 1988.

Figure 2.1
Rates of Return to Agricultural Investment Canada, 1953-1987


Source: Agri'Trends Research Inc., Special Analysis, Calgary, 1988.

Table 2.2
Variability of Farm Cash Receipts by Selected Commodity Group Canada, 1968-1987

| Commodity | $\begin{array}{c}\text { Annual Average } \\ \text { Cash Receipts } \\ \text { 1968-77 }\end{array}$ |  | $\mathbf{1 9 7 8 - 8 7}$ | $\begin{array}{c}\text { Standard } \\ \text { Deviation } \\ \text { 1968-77 }\end{array}$ |  | $\mathbf{1 9 7 8 - 8 7}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |$)$

(1) Includes only market receipts and payments made to producers by the Canadian Wheat Board or Ontario Wheat Producers' Marketing Board.
(2) Standard deviation is a specific measure of the degree that annual receipts of a commodity vary from the average. It indicates that about two-thirds of the annual receipts are clustered within one standard deviation of the average.
(3) Coefficient of variation expresses the standard deviation as a percentage of the average. A small percentage indicates a less variable average.

Source: Statistics Canada, Agriculture Economic Statistics (21-603), Ottawa, January 1988.

The higher the coefficient of variation, the greater is the variability of income. The cash receipts over the past 10 years for many commodities have become less variable. This has largely been a consequence of the greater proportion of total receipts which have been transfer payments from the government. This masks the variability of market returns.

The impact of this variability will be more severe as the ratio of cash expenses to cash receipts rises and the asset to equity ratio falls. Prices provide another measure of variability. The significant price variations of selected commodities are summarized below in Table 2.3.

In summary, three points can be made with respect to returns in agriculture. One, income returns over the long run comprise less than half of total returns. Two, income returns over the past 10 to 12 years have been in the range of between 1 and 5 percent, with the returns for 1986 and 1987 returning to near the average for the period. Three, there exists a high level
of variability of returns, which impacts on farmers differently depending on their relative financial positions.

Table 2.3
Price Variability of Selected Commodities
Canada, 1973-1987

| Commodity | Units | Average ${ }^{(1)}$ Price | Standard ${ }^{(2)}$ <br> Deviation | Coefficient ${ }^{(3)}$ of Variation |
| :---: | :---: | :---: | :---: | :---: |
| Wheat, 1 CWRS Realized Price | tonne | $\begin{gathered} 1981 \\ - \text { constant } \$- \\ 189.59 \end{gathered}$ | 56.37 | $\begin{gathered} \text { - percent - } \\ 29.74 \end{gathered}$ |
| Canola, 1 Canada, Winnipeg Commodity Exchange Cash Price | tonne | 351.77 | 96.17 | 27.34 |
| Hogs, Index 100, Ontario | 100 pounds | 79.67 | 20.15 | 25.30 |
| Steers, A1, 2 , 1000 lbs. +, Toronto | 100 pounds | 77.25 | 12.67 | 16.40 |
| Fluid Milk, National Average Net Farm Price | hectolitre | 39.85 | 2.10 | 5.27 |

(1) These values are in 1981 constant dollars, obtained by deflating current dollar values with the Consumer Price Index.
(2) Standard deviation is a specific measure of the degree that annual prices of a commodity vary from the average. It indicates that about two-thirds of the annual prices are clustered within one standard deviation of the average.
(3) Coefficient of variation expresses the standard deviation as a percentage of the average. A small percentage indicates a less variable average.

Source: Statistics Canada; Agriculture Canada.

Both the level and the relative variability of income affect the financial risk, the debt capacity and the design of financial instruments appropriate for the industry. A mismatch between the financing tools and the income and investment characteristics of the industry, can lead to excess risk for farmers. Some aspects of this risk will be discussed in the following sections.

## B. DEBT CAPACITY

The debt capacity of a business is a function of its ability to generate disposable income and the cost and terms of debt financing. Disposable income is net cash income including off-farm income less living costs. A simple way of measuring debt capacity is to determine the ratio of the current return to assets to the interest rate, as demonstrated in the following example.

A farm earning a 5 percent return on a capital investment of $\$ 400,000$ would be able to generate $\$ 20,000$ for debt service. In an interest rate environment of 11 percent, this income would support $\$ 182,000$ in debt or allow a debt-to-asset ratio (measure of debt capacity) of 0.45 . Correspondingly, the ratio of return to the interest rate $(5 \div 11)$ would result in the same 0.45 level of debt capacity, leading to an equity requirement of 0.55 . For every dollar of investment, the business could be financed in the short run (before considering the long-term debt capacity and risk) with 45 cents of debt and 55 cents of equity. This example ignores repayment of debt principal which would further lower the debt capacity ratio.

Figure 2.2 plots the estimated debt capacity of farmers at two levels of return, high and low, which might represent the long-term returns of a grain and dairy farm respectively. Within the recent interest rate environment, the zone of relevant debt capacity will normally vary between 20 percent to 50 percent of total investment.

Table 2.4 illustrates on a Canada-wide basis how over time the average debt capacity of farmers has varied. Over the period 1970-1987, farm debt capacity peaked at 1.12 in 1973, declined to a low of 0.15 in 1980 and has been restored to a level of 0.35 by 1987. Based on the income and expense conditions of the day, in 1973 a business could have been financed 100 percent with debt and, at least in the short run, have repaid it. To the extent lenders reacted to these short-term conditions, credit supply increased. Their responses to the conditions of the period are considered in the next section.

Figure 2.2
Debt Capacity of High and Low Return Enterprises


[^0]Table 2.4
Debt Capacity and Equity Requirements
Canada, 1970-1987

| Year | Income Return to Assets | Prime Interest Rate | Debt ${ }^{(1)}$ Capacity | Equity ${ }^{(2)}$ Requirement |
| :---: | :---: | :---: | :---: | :---: |
|  | - percent - |  | - ratio - |  |
| 1970 | 3.5 | 8.17 | 0.43 | 0.57 |
| 1971 | 3.9 | 6.48 | 0.60 | 0.40 |
| 1972 | 4.5 | 6.00 | 0.75 | 0.25 |
| 1973 | 8.6 | 7.65 | 1.12 | -- |
| 1974 | 7.8 | 10.75 | 0.73 | 0.27 |
| 1975 | 7.1 | 9.42 | 0.75 | 0.25 |
| 1976 | 4.5 | 10.04 | 0.45 | 0.55 |
| 1977 | 2.9 | 8.50 | 0.34 | 0.66 |
| 1978 | 3.4 | 9.69 | 0.35 | 0.65 |
| 1979 | 3.2 | 12.90 | 0.25 | 0.75 |
| 1980 | 2.2 | 14.25 | 0.15 | 0.85 |
| 1981 | 3.1 | 19.29 | 0.16 | 0.84 |
| 1982 | 2.0 | 15.81 | 0.13 | 0.87 |
| 1983 | 1.2 | 11.17 | 0.11 | 0.89 |
| 1984 | 1.6 | 12.06 | 0.13 | 0.87 |
| 1985 | 2.2 | 10.58 | 0.21 | 0.79 |
| 1986 | 3.2 | 10.52 | 0.30 | 0.70 |
| 1987 | 3.3 | 9.52 | 0.35 | 0.65 |
| Average | 3.8 | 10.71 | 0.35 | 0.65 |

(1) Debt capacity is represented by the ratio of income return to the prime interest rate.
(2) Equity requirement is the difference between total investment, expressed as 1.00 , and debt capacity.

Sources: AgriTrends Research Inc.; Bank of Canada.

A long-term debt capacity measure can be based on the average debt capacity ratio over the 18 -year period of $1970-87$, which was about 0.41 . Removing the aberrant 1973 figure, the average falls to about 0.36. In general, businesses which were financed with debt capacity ratios in excess of that value exposed their owned equity to considerable financial risk. Obviously, farm businesses which had higher and more stable incomes such as the supply-managed sectors, had the ability to sustain a higher debt level. Subsidizing the farm business with off-farm employment also allows this level to be exceeded.

The equity requirement of farm businesses is essentially the difference between the total investment requirements and the debt capacity of the business. In the mid-1970s, the equity requirement was relatively low. In fact, a beginning farmer could have become established in the industry using primarily borrowed money and with minimal personally-owned or gifted equity. This was possible because of the short-term income and interest rate conditions, and the availability of credit. Toward the end of the decade, the equity requirement for a farmer to become established or to remain viable in the industry increased to the order of 70 to 80 percent of total capital. As will be shown in the next section, debt was used as a substitute for the equity deficiencies of operators. This led to an overuse of debt and contributed to the excess debt of many farmers.

## C. CREDIT MARKET STRUCTURAL ADJUSTMENTS

The previous analysis of returns, interest rates and debt capacity sheds light on how the agricultural credit markets reacted to economic signals. Table 2.5 analyzes the credit market response to selected economic variables. In reaction to rising income rates of return to assets, the inflation of farm real estate values began to accelerate in 1972 and peaked at 28 percent in 1974. Income returns began to fall in 1976, and by 1977 was one-third the peak levels of 1973. These declines in rates of return and the gradual rises in interest rates in the late 1970s reduced debt capacity significantly. Land and building price inflation dropped to less than 8 percent in 1977, but began to accelerate again in the late 1970s and reached 21 and 20 percent in 1979 and 1980, respectively.

The phenomena of declining income rates of return and declining debt capacity, concurrent with rising asset appreciation require explanation. Much of the divergence between repayment ability and inflation can be explained by changes occurring in the credit markets.

The credit market, particularly the long-term segment, has a strong influence on investment and financial decision-making. Up until the late 1970s, the long-term credit market was dominated by government lenders, particularly the Farm Credit Corporation as shown in Tables 2.5. and 2.6.

Table 2.5

## Agricultural Credit Market Response to Debt Capacity and Inflation Canada, 1967-1987

| Year | Income Returns | Debt Capacity | Land \& Bldgs Values per Acre $1971=100$ | Annual Rate of Increase in Long-Term Credit Extended | Ratio of ${ }^{(1)}$ Government to Non-Government Long-Term Credit Extended | Ratio of ${ }^{(2)}$ Government Credit Extended to All Long-Term Credit Extended |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - percent - | - ratio - | - pe | ent change - |  |  |
| 1967 | 4.7 | 0.79 | +11.0 | +9.97 | 10.68 | 0.91 |
| 1968 | 5.4 | 0.78 | + 8.2 | - 16.30 | 9.22 | 0.90 |
| 1969 | 4.6 | 0.58 | + 1.6 | - 22.44 | 8.10 | 0.89 |
| 1970 | 3.5 | 0.43 | - 5.8 | - 18.52 | 5.50 | 0.85 |
| 1971 | 3.9 | 0.60 | 0 | + 2.70 | 6.37 | 0.86 |
| 1972 | 4.5 | 0.75 | + 2.8 | + 13.04 | 7.27 | 0.88 |
| 1973 | 8.6 | 1.12 | +16.5 | +106.97 | 9.88 | 0.91 |
| 1974 | 7.8 | 0.73 | +27.8 | + 49.11 | 5.47 | 0.85 |
| 1975 | 7.1 | 0.75 | +23.6 | + 6.44 | 3.68 | 0.79 |
| 1976 | 4.5 | 0.45 | +15.7 | + 11.63 | 1.87 | 0.65 |
| 1977 | 2.9 | 0.34 | + 7.6 | + 37.83 | 1.26 | 0.56 |
| 1978 | 3.4 | 0.35 | +12.5 | + 38.50 | 0.58 | 0.37 |
| 1979 | 3.2 | 0.25 | +21.0 | + 19.39 | 0.64 | 0.39 |
| 1980 | 2.2 | 0.15 | +20.0 | + 2.50 | 0.64 | 0.39 |
| 1981 | 3.1 | 0.16 | +11.1 | + 15.54 | 0.54 | 0.35 |
| 1982 | 2.0 | 0.13 | + 0.7 | - 2.94 | 0.42 | 0.29 |
| 1983 | 1.2 | 0.11 | - 4.3 | + 19.70 | 0.65 | 0.40 |
| 1984 | 1.6 | 0.13 | - 4.1 | - 22.96 | 0.27 | 0.21 |
| 1985 | 2.2 | 0.21 | - 7.5 | - 3.09 | 0.23 | 0.18 |
| 1986 | 3.2 | 0.30 | - 7.1 | + 13.58 | 0.22 | 0.18 |
| 1987 | 3.3 | 0.35 | -10.1 | -- | -- |  |

(1) The ratio of long-term credit extended by the Farm Credit Corporation and provincial government credit agencies to long-term credit extended by insurance,
trust and loan companies, chartered banks, credit unions and private individuals.
(2) The ratio of long-term credit extended by the Farm Credit Corporation and provincial government credit agencies to long-term credit extended by all lenders. Sources: AgriTrends Research Inc.; Statistics Canada; Agriculture Canada.

The changing role of government in the extension of long-term credit is best described in Table 2.5. In the early 1970s, there was $\$ 5$ to $\$ 10$ of government credit for every dollar of private sector credit. This ratio continued to fall until 1987 when $22 ¢$ of government funds were extended for every dollar from the private sector. The same Table shows that the ratio of government debt outstanding to all credit has dropped from over 90 percent in 1967 to 18 percent in 1987. Gradually, governments have allowed themselves to be overtaken in direct provision of loans to the farming sector and, particularly at the provincial government level, have switched to the indirect role of guaranteeing private sector loans.

Land prices responded to the rising income returns which more than doubled between 1970 and 1973. Long-term credit extended increased over 100 percent in 1973. Considerable pressures were put on the credit markets to respond because the short-term acceleration of income returns had enhanced the debt servicing capacity of the industry. Farm organizations, farmers, financial institutions, and the government alike lamented the lack of sufficient debt financing for farmers. The Farm Credit Corporation was criticized for its conservatism, its lack of risk-taking and its insistence on lending based on productive value in preference to lending on market values.

The impact of short-term high income returns to the sector brought about several significant changes over the last half of the 1970s. One of the most important of these was the amendment of the Bank Act of 1977 to allow the chartered banks to make long-term mortgage loans to farmers. Prior to 1977, the chartered banks were not permitted to lend on the basis of mortgage security. With the banks commencing their long-term financing programs in 1977, and significant market development by the Credit Unions, the debt market expanded (Tables 2.5 and 2.6). Amendments were also made to the Farm Credit Act in 1975 to allow the Farm Credit Corporation to lend on market value and also to provide legislative authority to lend up to 100 percent of this value.

Several provincial lending programs were also introduced or amended in the 1970s, such as the Alberta Development Corporation's Beginning Farmer Program, which through interest subsidies, further induced the use of debt capital to establish and expand farms.

Table 2.6
Long-Term Credit Market, Proportion of Debt Outstanding by Lender Canada, 1970-1986

| Year | Federal ${ }^{(1)}$ Government | Provincial Governments | Banks and Credit Unions | Private Individuals | Others ${ }^{(2)}$ | Total LongTerm Debt Outstanding |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - percent - |  |  |  |  | -\$ millions - |
| 1970 | 56.8 | 19.6 | -- | 12.4 | 11.2 | 2,031.9 |
| 1971 | 57.3 | 19.2 | -- | 12.9 | 10.6 | 2,062.9 |
| 1972 | 57.8 | 19.0 | -- | 13.3 | 10.0 | 2,127.9 |
| 1973 | 60.4 | 17.4 | -- | 14.3 | 8.0 | 2,391.4 |
| 1974 | 60.7 | 18.7 | -- | 14.2 | 6.4 | 2,773.4 |
| 1975 | 60.7 | 17.7 | -- | 16.1 | 5.5 | 3,180.9 |
| 1976 | 59.7 | 16.3 | 4.6 | 15.0 | 4.4 | 3,813.6 |
| 1977 | 58.2 | 15.6 | 9.0 | 14.3 | 2.8 | 4,435.5 |
| 1978 | 51.4 | 12.3 | 20.2 | 13.9 | 2.2 | 5,559.7 |
| 1979 | 45.1 | 12.1 | 26.6 | 13.5 | 2.6 | 7,042.1 |
| 1980 | 44.0 | 13.1 | 26.9 | 13.4 | 2.6 | 7,888.8 |
| 1981 | 42.8 | 14.4 | 26.8 | 13.6 | 2.5 | 8,950.9 |
| 1982 | 40.2 | 13.6 | 29.9 | 13.1 | 3.2 | 9,732.8 |
| 1983 | 41.7 | 13.7 | 29.7 | 12.2 | 2.7 | 10,955.4 |
| 1984 | 41.1 | 14.0 | 30.6 | 11.5 | 2.8 | 11,260.7 |
| 1985 | 40.3 | 14.4 | 30.8 | 11.2 | 3.3 | 11,399.2 |
| 1986 | 40.0 | 15.1 | 30.9 | 10.1 | 3.9 | 11,415.5 |

(1) Refers solely to the Farm Credit Corporation.
(2) Includes insurance, trust and loan companies, Alberta treasury branches, Alberta electrical cooperatives, and Veterans' Lands Act.

Source: Agriculture Canada, Market Commentary: Farm Inputs and Finance, various issues.

These events help to explain the paradoxical conflicts between accelerating inflation of assets and rapidly declining income returns evident in the late 1970s. For the period 1971-81, interesting statistical correlations emerge from the matrix illustrated in Table 2.7.

Table 2.7
Relative Correlation Between Selected Economic Variables
1971-1981

| Economic <br> Variable | Income <br> Returns | Debt <br> Capacity | Land Price <br> Inflation | Long-Term Credit <br> Outstanding |
| :--- | :--- | :---: | :---: | :---: |
|  | 1.0 | 0.87 |  |  |
| Income Returns | 0.87 | 1.0 | 0.25 | -0.70 |
| Debt Capacity | -0.088 | -0.088 | -0.832 |  |
| Land Price Inflation <br> Long-Term Credit <br> Outstanding | -0.70 | -0.832 | 1.0 | 0.26 |

Sources: House of Commons Standing Committee on Agriculture; AgriTrends Research Inc.; Statistics Canada; Agriculture Canada.

While there existed an expected positive correlation between debt capacity and income returns in the 1971-81 period, there was a negative relation between current income and outstanding long-term debt. This suggests that the industry was being financed not in response to falling income, but in response to rising land prices. It is a moot point whether land price inflation was being driven by the credit market or vice versa. More important was the fact that the debt capacity of the industry was negatively correlated to the growth in the credit market. Reacting to inflation, the credit market, particularly in the late 1970s, ignored the income and interest rate signals that debt capacity was rapidly declining.

Figure 2.3 clearly illustrates in graphical form this correlation between variables and the extent to which the credit market and real estate values ignored the income signals and the falling debt capacity in the latter half of the 1970s.

By 1981 and 1982, the continued low income returns and low debt capacity became visible through the growing number of farm bankruptcies. At the federal level, the response to the growing financial distress of high financing costs was the Special Farm Financial Assistance Program (SFFAP). Over its duration, $\$ 350$ million in high risk private sector mortgage loans was refinanced into FCC's loan portfolio. The SFFAP provided for a two-year interest subsidy and was predicated on the assumption that the perceived low returns of 1979 and 1980 were temporary and that the income conditions which had existed in the mid-1970s would return. In 1981, the

FCC received the legislative authority to supplement its traditional government sources of capital with capital market borrowings.

Figure 2.3
Relative Trends in Rate of Return on Assets Long-Term Debt Outstanding, Debt Capacity and Real Estate Appreciation 1971-1980


Sources: Agri'Trends Research Inc.; Bank of Canada; Statistics Canada.

Until 1983 and 1984, agricultural lending institutions concentrated on acquiring market share and dominance, both within the private sector and also between government and private sector lenders. As conditions deteriorated in the 1980s in response to producer inability to service scheduled payments, an increasing proportion of debt was either extended in term, or refinanced between institutions. Tables 2.8 and 2.9 show these changes occurring. Table 2.8 shows how increasing amounts of debt were shifted from the shorter to the longer term. Part of this shift is the normal matching of the term of debts and assets, but part has also been the
refinancing of debt to longer terms as a response to financial stress. In 1986, while $\$ 2.3$ billion was reported as debt extended in the long-term market, the debt outstanding essentially did not change. Some $\$ 1.3$ billion or 60 percent of the credit extended in 1986 was for refinancing of existing debt.

## Table 2.8

Proportion of Debt Outstanding by Term
Canada, 1971-1986

| Year | Short <br> Term | Intermediate ${ }^{(2)}$ <br> Term | Long (3) <br> Term | Total Debt <br> Outstanding |
| :---: | :---: | :---: | :---: | :---: |
|  | - percent - |  |  | - \$ billions - |
| 1971 | 35.5 | 19.9 |  |  |
| 1972 | 35.7 | 21.6 | 44.7 | 4.56 |
| 1973 | 32.2 | 26.2 | 42.7 | 4.83 |
| 1974 | 31.2 | 27.7 | 41.7 | 5.56 |
| 1975 | 31.9 | 28.1 | 41.1 | 6.53 |
| 1976 | 29.4 | 29.9 | 40.0 | 7.83 |
| 1977 | 26.0 | 32.3 | 40.7 | 9.06 |
| 1978 | 24.1 | 30.1 | 41.7 | 10.31 |
| 1979 | 21.8 | 30.1 | 45.8 | 12.01 |
| 1980 | 22.4 | 30.0 | 48.1 | 14.16 |
| 1981 | 22.1 | 29.3 | 47.6 | 15.88 |
| 1982 | 21.5 | 29.4 | 48.6 | 18.13 |
| 1983 | 21.0 | 26.4 | 49.1 | 19.82 |
| 1984 | 20.7 | 26.6 | 52.6 | 20.83 |
| 1985 | 20.3 | 29.4 | 52.7 | 2.60 |
| 1986 | 19.9 | 29.5 | 50.3 | 22.13 |

(1) Up to 18 months.
(2) 18 months to 10 years.
(3) More than 10 years.

Sources: Agriculture Canada, Market Commentary: Farm Inputs and Finance, various issues; Statistics Canada, Agricultural Economic Statistics (21-603), 1987.

Table 2.9
Estimated Long-Term Credit Refinanced Canada, 1971-1986

| Year | Reported Debt <br> Outstanding, <br> End of Year | Long-Term <br> Credit <br> Extended | Estimated <br> (1) <br> Amount of <br> Refinancing | Refinancing <br> as Percent of <br> Credit Extended |
| :---: | :---: | :---: | :---: | :---: |
|  |  | - \$ millions - |  | -percent - |
| 1971 | $2,062.9$ | 205.6 | 73.0 | 35.5 |
| 1972 | $2,172.9$ | 232.4 | 61.6 | 26.5 |
| 1973 | $2,391.4$ | 481.0 | 105.5 | 21.9 |
| 1974 | $2,773.4$ | 717.2 | 205.9 | 28.7 |
| 1975 | $3,180.9$ | 763.4 | 201.8 | 26.4 |
| 1976 | $3,813.6$ | 852.2 | 37.7 | 4.4 |
| 1977 | $4,435.5$ | $1,174.6$ | 328.4 | 28.0 |
| 1978 | $5,559.7$ | $1,626.8$ | 233.8 | 14.4 |
| 1979 | $7,042.1$ | $1,942.2$ | 112.3 | 5.8 |
| 1980 | $7,888.8$ | $1,990.8$ | 689.7 | 34.6 |
| 1981 | $8,950.9$ | $2,300.1$ | 712.1 | 31.0 |
| 1982 | $9,732.8$ | $2,232.5$ | 833.3 | 37.3 |
| 1983 | $10,955.4$ | $2,672.4$ | 754.6 | 28.2 |
| 1984 | $11,260.7$ | $2,058.9$ | 942.1 | 45.8 |
| 1985 | $11,399.2$ | $1,995.2$ | 990.5 | 49.6 |
| 1986 | $11,415.5$ | $2,266.2$ | $1,338.0$ | 59.0 |

(1) This indicates the amount of refinancing of long-term debt or arrears of accrued interest on that debt. It was estimated by subtracting the scheduled payment of principal from the debt outstanding at the beginning of the year, to obtain a calculated value for debt outstanding at the end of the year. The difference between the reported debt outstanding in this table and the calculated value was subtracted from long-term credit extended to obtain the estimate of refinancing.

Sources: Agriculture Canada, Market Commentary: Farm Inputs and Finance, various issues; Farm Credit Corporation, Farm Credit Statistics, various issues.

## D. CANADA AND UNITED STATES FARM FINANCIAL COMPARISONS

Of particular interest to this study are the relative changes that have occurred in U.S. agriculture with respect to income, asset value adjustments, changes in outstanding farm debt, and level of government sector assistance. Figures 2.4, 2.5, 2.6, 2.7 and 2.8 compare changes in the variables between the two countries. The Figures show, according to a base of 100 in 1981, the relative change in these variables.

Figure 2.4
Relative Change in Total Net Farm Income Canada and the United States, 1981-1987


Source: Statistics Canada; United States Department of Agriculture.

Figure 2.5
Change in Farm Income less Government Payments Canada and the United States, 1981-1987


Source: Statistics Canada; United States Department of Agriculture.

Figure 2.6
Relative Change in Land Values Canada and the United States, 1981-1987


Source: Statistics Canada; United States Department of Agriculture.

Figure 2.7
Relative Change in Total Farm Debt Outstanding Canada and the United States, 1981-1987


Source: Statistics Canada; United States Department of Agriculture.

Figure 2.8
Relative Change in Government Farm Assistance ${ }^{(1)}$ Canada and the United States, 1981-1987

(1) In 1981, direct government payments to farmers amounted to $\$ 1,933$ million in the United States and $\$ 868.5$ million in Canada.

Source: Statistics Canada; United States Department of Agriculture.

The Figures illustrate obvious differences in both the rate and timing of the economic and social adjustment of farmers over this period. In general terms, land values and debt have both declined more and earlier in the U.S. It is especially interesting to note that debt in the U.S. fell by over 22 percent between 1981 and 1987, while in Canada debt outstanding has actually increased by 25 percent. This suggests that Canada has not yet dealt with its debt problems. The graphs project a sequence of adjustments. Income appears to fall first, followed by asset value reductions and then by reductions in farm debt. Similar occurrences were evidenced in the 1920s and 1930s in both Canada and in the U.S.

Of considerable interest from a future Canadian perspective is how the U.S. debt was reduced. The significant and rapid adjustment of debt came about by scheduled payments, forced write-offs through farm failure and foreclosure, write-offs by government policy and debt reduction through intergenerational transfers. A major part of the resolution of the debt problem in the U.S. was the failure of a large number of farms and banks. Some indication of this situation is that between 1981 and to date, 271 agricultural banks failed.

Overall, as shown in Figure 2.8, the level of government assistance to the farm sector has increased more in the U.S. than in Canada. In the U.S., the relative level of such assistance increased by almost 800 percent between 1981 and 1987 while in Canada it has increased by approximately 300 percent. It should be recognized that in 1981, U.S. direct payments to farmers were $\$ 1,933$ million compared to $\$ 868.5$ million in Canada.

## E. SUMMARY

This historical review illustrates several important characteristics of the agricultural industry which are of relevance in understanding current debt levels. Generally, the industry has experienced low income returns (particularly in the last 10 to 12 years), high rates of asset inflation, and a modest level of debt repayment capacity. Historically, the industry has had high capital requirements relative to its income.

Debt usage over the past decade has risen contrary to the economic signals of the period. In the face of declining income returns and debt capacity, and increasing interest rates, debt financing still increased significantly. This anomaly is at least partially explained by aggressive market penetration on the part of both the private sector and government lending
institutions as well as by credit policy design. Credit devices were used as policy instruments to help establish new farmers, or to help correct income or cost imbalances. Mortgage instruments demanding fixed regular payments proved inappropriate for the variability and the composition of income and capital returns.

Essentially, the inherent risk of debt financing has not been well understood. For the most part, debt financing costs and assessment of repayment capacity have been regarded solely in a short-term context. Most lenders lent on the basis of debt-to-asset ratios and using market value net worth statements as opposed to cost-based balance sheets. When the flaw of this approach became evident in the 1980s, increasing attention was given to repayment assessment. Private financial institutions used concepts of "cash flow" lending and began to insist on better financial information for loan decisions and business management. Few, if any lenders, however, have completely moved away from market-value accounting statements. Lending decision-making is still viewed first as a security evaluation process. Performance-based lending, which expands on the short-term concept of cash flow lending, is now receiving increased attention particularly in the U.S. Its goal is to better reflect longer-term debt capacity and risk. The continuation of market-value accounting generally leads to an understatement of risk in highly inflationary times such as the 1970s, and to an overstatement of risk in periods such as the present.

The major participants in the agriculture credit markets are experiencing financial difficulties. The excess debt is resulting in massive loan losses for these institutions and is creating cash flow deficiencies and insolvencies for farmers.


## INSTITUTIONAL ANALYSIS

This Chapter will examine some of the major institutional influences on the debt problems of farmers. This will include an evaluation of the structure and functioning of private sector lending institutions, and government lenders at the provincial and federal levels. Issues will be identified which may affect the resolution of current debt problems and the future financing of the industry.

## A. FINANCIAL INTERMEDIATION PROCESS

The financial intermediation process in Canadian agriculture is undergoing considerable stress. Its long-term ability as currently structured to provide capital and financial services to the industry is open to discussion. The degree of stress varies between institutions and between the private and government sectors. The actual financial resources and perception of future risk on the part of lenders, and the attitudes and policies of government will greatly affect the future structure of the intermediation process.

In general, the government lenders have absorbed the greatest degree of risk through programs targeted at assisting developing farmers in precarious financial circumstances, or because of programs which have transferred high risk loans from the private to the public sector.

Structural changes are occurring in the agricultural credit market in response to current and expected loan losses, and in anticipation of declining demand for debt financing by farmers.

## 1. Banks and Near Banks

Banks and near banks, including Credit Unions, Alberta Treasury Branches, Caisses-Populaires, and like institutions, have played a dominant role in agricultural finance. This role was expanded in the late 1970s when
amendments to the Bank Act allowed their entry into the long-term mortgage market.

In testimony before the Committee, the Canadian Bankers' Association reported that some 7 percent of their accounts were classified as "non-performing", meaning that no interest had been paid on a loan for at least 90 days.

The financial vulnerability of banks is difficult to assess, given the nature of their lending. With their ability to revolve credit through operating loans, some of the financial risk can be less apparent than that of a mortgage lender who lacks this revolving facility. Banks are attracted to the agricultural sector largely because they will thus have access to the relatively high levels of savings of farmers. As agricultural loans for many banks comprise a relatively minor proportion of total loan assets, losses in this sector can be partially offset against profits of other loans.

Banks are continuing to assess their role in the long-term financing of agriculture. The provincial regulations affecting the ability of lenders to recover on their security is, in some provinces, discouraging lenders from providing new loans, and is impacting on farmers' interest costs. The most recent example of provincial policy impacting on lenders is the Saskatchewan Government's Farm Security Act making the home quarter exempt as mortgage security. The legislation has the potential to make both private and federal government lenders reassess their portfolios and ability to continue to supply financial services in that province.

Witnesses have indicated that access to credit is becoming more restrictive as lenders demand greater security margins and better financial analysis in support of loan applications. They are also requiring that the farm business be operated with a full accrual accounting system.

Credit unions, whose loan portfolios are much more concentrated in the agricultural sector, are currently experiencing significant loan defaults and financial losses. The Saskatchewan Credit Union Central has taken a pro-active role in preparation for impending problems of managing large amounts of foreclosed land by proposing solutions helpful both to the lending institution and to the farmer. These have included a land-holding company for institutional real estate assets, as well as an organizational structure to manage assets and allow the participation of outside investors. This structure would also assist beginning farmers to enter agriculture, and
retiring farmers to leave it. This model is very similar to the equity financing proposal developed by the FCC.

The role which banks and other traditional financial intermediaries will play in the financing of agriculture is uncertain. With the threat of potential default, and the unanticipated level of expertise required to provide long-term mortgage loans, some institutions may emphasize the provision of short and intermediate-term loans. Longer-term loans will be made to more selective clients and under stringent requirements relating to reporting and analysis. Others in weaker and less diversified financial positions may gradually reduce their agricultural lending.

## 2. Provincial Government Lenders

Provincial government lenders have played an important role in agricultural finance. Their loan programs have sought to provide development opportunities to bring younger farmers into the industry, or to encourage specialization. Increasing provincial fiscal deficits and large loan losses have led some provinces to reconsider the part which their lending agencies have played in financing the sector in the past, its relative success, and what should be the future role of government in direct lending. Unlike the other provinces, the Province of Quebec has recently enhanced its TANDEM program. This program provides guarantees to the private sector to advance loans and extensive interest subsidies to farmers.

The increasing uncertainties as to the future structure of the agricultural financial market includes the FCC, which is discussed in more detail in the next section. It is possible that some of the existing institutions will not continue to provide financial services. Others will specialize within market segments which afford the greatest potential for profit with the least risk. There is a concern that government lenders may be unable to continue to offer the same type of services they have in the past.

The future supply and demand for debt capital by farmers over the next several years remains uncertain. While there is no extensive evaluation of the demand for and the supply of debt financing in the agricultural capital market over the past 10 to 15 years, there is considerable evidence that much of the demand was artificially induced. For example, the demand for and supply of debt was influenced by "non-market" influences:
credit subsidies lowered the real cost of credit to unrealistic and capitalizing levels;
-
guarantees of private sector loans were extended both by provincial and federal governments; and

- refinancing of loans between and within institutions gave the appearance of a real demand for credit for productive purposes.

Demand for credit will continue to depend on the usual market influences such as farm income and expected inflation of assets, and the level of "non-market" influences. It is expected that the credit market will contract. The Committee was unable to develop a detailed analysis of present and future credit patterns.

Extensive debate and analysis in the United States on the alternatives to restructuring their agricultural credit system cumulated in the development of a secondary credit market for farm mortgages for the private agricultural banks.

A secondary mortgage market refers to the issuing of securities to a broad range of investors to purchase pools of mortgages originated by lenders. Often there is an explicit government guarantee to encourage investors to participate. The recent initiative in Canada of mortgage-backed securities to raise funds in the housing market is an equivalent concept. The advantages of such a process are primarily to increase the availibility of long-term mortgage funds, often lower transaction and risk costs through pooling of large sources of capital, and an increased number of smaller lenders who can deliver loans without individual access to deposits and other sources of funds.

This concept may have some applicability to the agriculture sector. Any analysis of its application should not be solely restricted to the securitization of mortgages but should also include equity instruments.

1. The Committee, in recognition of the uncertainties facing farmers regarding the future availability of credit, recommends that the federal government undertake an evaluation of the market that would include:
(i) an analysis of the current structure of the agricultural credit market, the role of its participants, their financial capacity and their willingness to continue in this role;
(ii) an evaluation of the demand and need for debt financing by farmers over the next 10 years and the demand for complementary and alternative services;
(iii) an assessment with a view to rationalizing the relative roles of provincial, federal and private lenders in farm financing;
(iv) an evaluation of the potential for the establishment of a secondary mortgage and equity market for agriculture; and
(v) an analysis of credit arrangements available to farmers in countries with whom Canadian producers compete in agricultural commodities traded in international markets.

## 3. Farm Credit Corporation

The primary instrument of federal government credit policy is the FCC which was created by Parliament in 1959 as a successor to the Canadian Farm Loan Board. The FCC has been a major provider of long-term mortgage loans and complementary financial counselling services.

In the late 1960s and through much of the 1970s, the FCC was a primary player in the development of electronic accounting systems, farm management services and the effective financial management of credit. FCC support of the CANFARM accounting system and its precursor, ELFAC (Electronic Farm Accounting System), its advisory services programs and its supervised loan programs are all evidence of a major role in providing credit advice.

As noted earlier in Chapter Two, Table 2.6, the FCC was the dominant long-term lender until the end of the 1970s. Although the Corporation has been technically a residual lender (supplying credit not forthcoming from the private sector) throughout its history, this fact took on special significance as the private sector aggressively entered the credit market
in 1977 and subsequent years. The relatively conservative lending policies of the Corporation until 1975, based on productive value rather than market value, exposed it to criticism from the industry. The legislative changes implemented in 1975, which allowed the FCC to lend on market value security of up to 100 percent, were largely in response to these criticisms. Further amendments implemented in 1981 permitted the FCC to use capital market borrowings to supplement government borrowings. These amendments came into effect concurrent with the rapid market-share increases of the private sector, in the face of a five-year period of declining sector income returns, yet coupled with still increasing inflationary returns.

With the introduction of its capital market borrowings, the Corporation was directed to obtain a positive return on the government's investment. Notwithstanding this directive. the Corporation was obligated to implement the Special Farm Financial Assistance Program, which transferred almost $\$ 370$ million of high risk private sector loans to the government. Further, the FCC was directed, as a means of conserving its loan capital, not to compete with the private sector, and to target its loans to farmers who operated on a smaller scale and with lower equity.

The problems involved in making high risk loans to farmers with declining income returns and debt capacity and being obligated to achieve a positive return on capital have lately become obvious.

The financial implications are summarized in Table 3.1.

Recently, the FCC's ability to lend has deteriorated. It is now technically bankrupt with its debts greater than the value of its loan assets. The forthcoming 1987-88 Annual Report will likely show a negative equity in excess of $\$ 500$ million. Its debt costs are increasing and its level of productive assets is declining. Lending rates have risen in an effort to recover losses. As rates rise, more creditworthy clients find private sector loans more attractive and the corporation portfolio retains an increasing proportion of high risk farmers. A growing portfolio of non-performing loans, estimated in the range of $\$ 800-\$ 1,200$ million could result in the loss of 6,000 to 18,000 farmers. These losses result in the foreclosure of land and bring about asset management issues for the FCC as it considers long-term leasing, equity financing or other alternatives which will help the Corporation out of its present difficulties.

Table 3.1 Financial Profile of the Farm Credit Corporation Selected Years, 1976-1987

|  | $\mathbf{1 9 7 6 - 7 7}$ | $\mathbf{1 9 8 0 - 8 1}$ | $\mathbf{1 9 8 1 - 8 2}$ | $\mathbf{1 9 8 3 - 8 4}$ | $\mathbf{1 9 8 6 - 8 7}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Financial Position |  |  |  |  |  |
| (\$000) |  |  |  |  |  |
| Total Assets | $2,293,143$ | $3,483,054$ | $3,853,897$ | $4,901,222$ | $4,914,084$ |
| Total Liabilities | $2,203,877$ | $3,344,351$ | $3,700,177$ | $4,770,339$ | $5,038,875$ |
| Equity of Canada | 205,925 | 138,703 | 153,720 | 130,883 | $-124,791$ |
| Net Interest Margin | 12,886 | 31,736 | 35,220 | 41,440 | $-4,980$ |
|  |  |  |  |  |  |
| Selected Financial |  |  |  |  |  |
| Indicators |  |  |  |  |  |
| Debt To Equity Ratio | $26.23: 1$ | $24.03: 1$ | $23.98: 1$ | $36.38: 1$ | $-38.09: 1$ |
| Asset Coverage Ratio | $1.04: 1$ | $1.05: 1$ | $1.05: 1$ | $1.03: 1$ | $1.03: 1$ |
| Interest Coverage Ratio | $.987: 1$ | $1.03: 1$ | $1.01: 1$ | $.88: 1$ | $.93: 1$ |
| Profit Margin | $(\%)$ | -.54 | 1.44 | .55 | -11.58 |
| Return on Equity (\%) | -1.06 | 3.16 | 1.28 | -38.50 | -226.43 |
| Return on Capital (\%) | -1.08 | 3.33 | 1.37 | -31.86 | -60.68 |
| Net Loan Approvals ${ }^{(1)}$ | -- | 393,544 | 450,633 | 758,142 | 336,400 |

(1) Regular Loan approvals under the Farm Credit Act only.

Source: Farm Credit Corporation, Annual Reports, selected years.

While many witnesses commented on the need for a review and for changes to occur in the role, mandate and structure of the FCC, few had specific recommendations. The Canadian Bankers' Association (CBA) was perhaps the most specific in recommending that the FCC should not have any direct role in agricultural lending but should rather provide financial management training and supply guarantees for private sector lenders for loans to some higher-risk clientele to whom bankers would not normally extend credit.

The Canadian Federation of Agriculture (CFA) supports the FCC becoming a more complete agency providing a broader range of financial services to farmers including short and intermediate-term credit. Their primary focus is on the provision by the FCC of long-term affordable credit, a view that is supported by Prairie Pools Inc. In addition, the CFA supports a lease-to-own program which would give farmers facing foreclosure the
possibility of leasing their land with an option to repurchase. The Western Canadian Wheat Growers Association (Wheat Growers) supports lease-purchase agreements with the FCC of longer duration than the present five years. This is largely related to their desire to see FCC properties brought onto the market in an orderly manner. The Wheat Growers also stressed the importance of maintaining the FCC as a viable institution. Other farm organizations and individuals provided general support for the FCC but had few specific proposals.

It is the view of the Committee that the FCC cannot continue to operate within its present conflicting mandate, considering the inconsistency between offering a service and concurrently attempting to provide a positive return on capital. More importantly, the role of the FCC and the potential resolution of its problems should be examined from the perspective of the needs and characteristics of farmers.

The demand for debt financing has fallen dramatically in recent years. Under its regular lending program, the FCC approved less than \$200 million in the fiscal year 1987-88, and indications are that demand will not exceed much over $\$ 100$ million in 1988-89. The financial needs of farmers are changing as the industry begins what will be an intermediate period of capital contraction. Farmers are becoming aware of the risks of debt financing and of attempting to increase profitability through increased size and scale.

Policy makers and producers are more aware that greater profitability is achievable through management improvements, enterprise diversification, new product development, and value-added production and marketing.

Artificial incentives such as interest subsidies offered by governments will be the primary force shifting the debt demand of farmers towards greater debt use and risk-taking over the next several years.

The major financial and capital needs of farmers will be in the area of:

- management control and support systems;
- debt reduction incentives; and
equity building through management intensification, enhanced profitability through production innovation, technology transfer, diversification of enterprises, and value-added services.

The role of the FCC must change to meet the needs of farmers in this period of capital contraction. The Committee does not believe that solely a cash or equity injection will put the FCC in a stable future financial position. This is not realistic considering the agricultural economic environment of excess debt, declining debt demand and changing needs of farmers. A new approach is necessary.

One option suggested is for the FCC to become a financially sustainable full-service lender. For this to be practical, the FCC would have to compete fully with the private sector for the lowest risk loans; it would have to gain access to deposits to increase financial flexibility and lower its funding costs; and its current losses would have to be absorbed by the federal government. Further, the Corporation would be obligated to increase its service fees and reduce other indirect benefits given to farmers, particularly within its collection policies.

Alternatively, the FCC could remain essentially as a residual lender, providing loans not found to be creditworthy by private lenders. The federal government would then pick up the costs on an annual basis. The assumption of this alternative is that there is a segment which, while not worthy of private sector assistance, could be productively assisted by government credit programs. The historical evidence to support this role is not strong. The FCC up until 1978, while technically a residual lender, was at the same time essentially the only long-term lender. Therefore, it dominated the market and, throughout this period, the Corporation's financial performance was satisfactory. With the amendments to the Bank Act, however, higher risk levels had to be assumed by the Corporation in order to maintain some market share. Financial performance deteriorated and the significance of being a residual lender became apparent.

A major concern of some witnesses was for the federal government to maintain the FCC as a major policy tool of government, supplying credit subsidy programs. The analysis in the preceding Chapter has provided some evidence as to the impact such programs have had in the past in contributing to the excess debt of farmers and their current levels of financial stress. Further, it is increasingly evident that the credit system should not be used to correct income problems of the industry.

The overall conflict between the FCC being a policy arm of government and a commercial lender must be resolved if the function of the FCC as a government lender is to be successfully rationalized. A compromise solution is for the FCC to compartmentalize its functions into "commercial" and "policy" roles. If it is to be a commercial lender, it would have to compete with private lenders perhaps through becoming a deposit-taking financial intermediary. If it is to remain a public policy agency, then it must define what programs it wishes to carry out, identify their costs and be compensated annually by the Government of Canada for them. All members of the Committee support the FCC's policy role, including that of residual lender as necessary.

To the extent that the private sector is prepared to continue to meet the long-term lending requirements of farmers, there may be less need to have a government institution competing in this market. While the role of providing traditional financial services in a residual capacity in the agricultural sector is risky and costly, the FCC must assume this role if financial markets become unstable and/or private lending institutions retreat from the market. The role of the FCC should also be to provide leadership and innovation in the development of new financing tools which promote risk management and cost stability, and in the provision of other financial services targeted to the special needs of farmers at various stages of farming.

## 2. Within this perspective, the Committee recommends that:

(i) the Farm Credit Corporation's current financial losses be supported by the government;
(ii) the FCC play an innovative role in developing and providing financial services targeted to the needs of beginning farmers for better tools to build equity and managerial capacity, on farmers' needs for stable financing costs and on the special needs of exiting farmers;
(iii) the federal government recognize the need for a policy role for the FCC, and compensate the FCC annually for the costs of these policies; and
(iv) as part of its commercial role, the FCC make available long-term farm mortgages.

## B. FARM DEBT REVIEW BOARDS

A central focus of the Committee's study has been to carry out its legislative mandate to evaluate the effectiveness of the Farm Debt Review Act as a mechanism to deal with the debt restructuring requirements of farmers. In their testimony, witnesses concentrated their comments on the process, procedures and powers of the Review Boards.

The Farm Debt Review Boards became operational in the fall of 1986 after the Farm Debt Review Act had been proclaimed on August 5, 1986. In December 1987, the program was extended to March 1991 and provided with $\$ 40$ million of additional funds for a total of $\$ 66.3$ million. Each province has one Board with the exception of Saskatchewan, Alberta and Ontario, each of which has two. The Boards provide impartial third-party review and seek to arrive at mutually satisfactory arrangements regarding financing/refinancing options to suit individual farm circumstances. Farmers can apply to the Boards for assistance under either section 20 (insolvent farmer), and under section 16 (farmers in financial difficulty). For insolvent farmers a stay of proceedings is operative for up to 120 days, while negotiations take place.

## 1. Operations of the Boards

Table 3.2 provides an activity report on the operations of the Boards as of the end of May 1988. About 15,000 notices of intent had been received, 44 percent of these from Saskatchewan, 20 percent from Alberta and 12 percent from Ontario. Of the applications received, some 43 percent have been under section 20 , or from insolvent farmers, with the remaining 57 percent from farmers in financial difficulty.

The statistics indicate that there is a considerable lag between the number of completed applications and signed arrangements. As of May 30, 1988, 4,657 applications were completed, with 1,829 or 39 percent signed. There are a number of logical reasons for this lag, including normal timing considerations, but some evidence by witnesses suggests that agreements are not being completed because of the subsequent reluctance of lenders, or of the impracticality of the proposed settlements.

Table 3.2
Farm Debt Review Boards
Total Activity from August 1986 to End of May, 1988

|  | Notices of <br> Intent <br> Received | Insolvent | Financial <br> Difficulty |  |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Applications <br> Completed |  |  |  |  |  |  |  |
| Newfoundland |  | 8 | 6 | 14 | 9 | 7 |  |
| Prince Edward Island |  | 42 | 14 | 56 | 41 | - |  |
| Nova Scotia | 35 | 5 | 24 | 29 | 26 | 9 |  |
| New Brunswick | 909 | 58 | 59 | 117 | 101 | 66 |  |
| Quebec | 455 | 195 | 220 | 415 | 361 | 120 |  |
| Ontario | 1,873 | 685 | 749 | 1,434 | 1,025 | 290 |  |
| Manitoba | 923 | 485 | 505 | 990 | 715 | 344 |  |
| Saskatchewan | 6,667 | 507 | 1,744 | 2,251 | 1,201 | 615 |  |
| Alberta | 3,169 | 684 | 393 | 1,077 | 984 | 286 |  |
| British Columbia | $\mathbf{1 , 1 2 9}$ | 135 | 65 | 200 | 194 | 92 |  |
| Total |  |  |  |  |  |  |  |

Activity during May, 1988

| Province | Notices of Intent Received | Applications Received |  |  | Applications Completed | Arrangements Signed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Insolvent | Financial Difficulty | Total |  |  |
| Newfoundland | -- | -- | 1 | 1 | -- | -- |
| Prince Edward Island | 2 | -- | 1 | 1 | 5 | -- |
| Nova Scotia | - | 1 | 1 | 2 | 3 | -- |
| New Brunswick | 5 | 2 | 3 | 5 | 8 | 3 |
| Quebec | 28 | 5 | 27 | 32 | 37 | 16 |
| Ontario | 66 | 18 | 18 | 36 | 56 | 14 |
| Manitoba | 36 | 10 | 17 | 27 | 58 | 89 |
| Saskatchewan | 319 | 14 | 83 | 97 | 104 | 104 |
| Alberta | 102 | 35 | 10 | 45 | 55 | 26 |
| British Columbia | 9 | 2 | 2 | 4 | 7 | 3 |
| Total | 567 | 87 | 163 | 250 | 333 | 255 |

Source: Agriculture Canada, Special Programs Division, Farm Debt Review Boards' Monthly Activity Report, May 1988.

The importance of follow-up on the part of the Boards was stressed during the hearings and there has been no indication that if this should be necessary beyond the 120 -day stay period, either party to the arrangement would offer opposition. The evaluation carried out by Agriculture Canada, Audit and Evaluation Branch in March 1988 found that both farm associations and financial institutions considered that follow-up was a part of the Farm Debt Review Act not being implemented.

A Farm Debt Review Fund which is available to the Farm Credit Corporation through Agriculture Canada enables the Crown Corporation, as one of the major lenders, to participate in FDRB hearings. An initial amount of $\$ 30$ million was allocated in the February 1986 Budget so that the FCC could make concessions in arrangements reached through farm debt reviews without increasing its losses. In December 1987, the FCC received an additional provision of up to $\$ 330$ million to be used over the next three years to allow the FCC to engage not only in conventional refinancing packages but also in long-term lease backs, forgiveness of principal and/or interest in arrears and other types of concessions available in the private sector. As of February 1, 1988, signed arrangements committed approximately $\$ 14$ million of this fund for 365 farmers. Not all cases involved concessions but of those offered, the average concession was $\$ 43,000$.

Witnesses expressed varying opinions on the operations and efficiency of the Boards. There was general agreement on the need for a process such as the FDRB to assist in the mediation of debt restructuring decisions. Confidence in the mechanism has grown since the Committee first heard testimony on its operation, as the Boards themselves have felt more comfortable with the mediation process. The completion of 4,657 applications out of 6,583 by the end of May 1988 shows considerable progress over the first year's activity. Support was evident to continue the program. Witnesses stated that it sometimes provided the first opportunity for a farmer to take stock of his financial circumstances and helped communication with his creditor. The evidence of the witnesses varied depending on their experience with the particular Board in question and this raised concerns for the Canadian Federation of Agriculture and the Western Canadian Wheat Growers. These organizations stressed the need for consistency and equal treatment in negotiation and mediation based on defined guidelines.

Some Boards appeared to act more as a farmer advocate than others according to the witnesses and there were other differences related to the level of financial management expertise and counselling. It is possible the
balance between advocacy and mediation is affected by the availability of people in an advocacy role in other programs.

Prairie Pools Inc. raised a concern about preparation for the review hearing. In some provinces, the FDRBs do not make the financial statements available to the creditors before the hearing. This makes it difficult for creditors to come prepared to negotiate an arrangement. Sometimes creditor representatives do not have the authority to negotiate agreements which delays the process. In other cases, farmers are not well prepared in advance of the negotiating phase which again serves to delay proceedings.

The Agriculture Canada client survey of March 1988 reported that two-thirds of the farmers going into the process expected the Boards to have more authority to decide settlements or to influence creditors. The majority of farm organizations coming before the Committee considered that imposing settlements could undermine the mediation process. One or two groups considered the mediation process as a means of apportioning the costs of financial restructuring between borrowers and lender. It was felt that mediation would in fact achieve an acceptable form of debt adjustment through voluntary agreements between sellers and buyers.

## 2. Effectiveness of the Boards

Of critical interest is the effectiveness of the Boards in achieving solutions which will permanently restructure the farmer's debt and achieve long-term viability of the business. The number of applications processed or the number of signed agreements is an indication of the relative efficiency of the Boards. In the longer term, the measure of their effectiveness will be evident when it will become clear how well Board decisions and settlements have permanently resolved the financial difficulties of the farmer.

The Committee is concerned about the viability of farm businesses after the FDRB process. It is believed that leaving farmers in financially vulnerable situations with little or no equity will result in continued deterioration of the business and a high probability of failure within a few years. Without off-farm income or subsidies, agricultural businesses have only a moderate capacity to repay debt. While the Committee appreciates the desire of the farmer to remain on the land, it is the responsibility of the FDRBs and their advisors to understand the requirements of financial viability and arrange for financially stable solutions.

Evidence obtained by the Committee from witnesses on the effectiveness of the Boards to date shows the following:

- There is an apparent need for a third party objective review to facilitate problem resolution.
- The Boards serve the primary purpose of keeping the lines of communication open between the farmer and the lender.
- The Boards have raised awareness of the financial difficulties that many farmers are facing and the process has taken some of the stigma out of acknowledging failure of the farm business.
- A Board review of the financial records of individual situations allows, often for the first time, a full appreciation and acceptance of the reality of the problems which must be confronted.

Evidence presented also suggests that there are a number of problems and difficulties with the operation of the Boards and their potential effectiveness:

- There is confusion as to the role of the Boards, particularly in some provinces, between the advocacy versus mediation role. As these two roles are mutually exclusive, conflicts can arise when a Board attempts to perform both roles. Other participants see the Boards as arbitrators, wrongfully believing them to possess powers to impose settlements.
- The process can delay the resolution of problems, increasing costs to all concerned. This is a real disadvantage for those in the insolvency category.
- Lack of expertise in financial analysis and management is a problem identified by the evaluation of March 1988 conducted on the review board process by Agriculture Canada, Audit and Evaluation Branch. The relative expertise varies significantly among the provinces, Board members, panel members, farmers and financial institutions.
- Incomplete and poorly prepared financial information detracts from the negotiating process.
- Problems exist in relation to the sharing of information among lenders, Boards and farmer.
- Approaches are inconsistent auross different provinces.
- There is not enough follow-up after agreement has been reached.
- No final report on Board recommendations is issued to the farmer in cases where no agreement is reached.
- There is no provision for evaluating the process and the results over the next several years.
- A means to gauge the relative likelihood of success is missing.
- There is a a lack of understanding as to what constitutes farm viability.
- Standards of operation and standards for mediation are lacking.

3. To correct these deficiencies the Committee recommends that the federal government institute the following:
(i) a process of continued upgrading of the qualifications and skills of Farm Debt Review Board panel members and field personnel, including the provision of training programs where necessary;
(ii) more uniform and equitable guidelines to be used by all Boards in mediation, determination of farm viability, and recommendations for debt restructuring;
(iii) with competent advisors from the farm and private sectors, a counselling and management service for applicants during the FDRB process and for longer-term follow-up.
(iv) a better information data base system to support the operations of the Boards;
(v) other restructuring options, such as shared-appreciation mortgages; and
(vi) a procedure whereby the FDRB in each case where no agreement is reached, shall make available to the farmer a report outlining their recommendations.

## CHAPTER FOUR

## CURRENT FARM FINANCE AND DEBT ANALYSIS

This Chapter will develop an overview of the agricultural sector from the perspectives of farm income, debt, stress, and excess debt. Information will be presented on the basis of commodity type and geographic area. The data source is the 1986 Census of Agriculture. Special tabulations and analysis were made of 1985 , which is the year the Census represents; as well, the Census was "grown" to simulate conditions as of the 1987 calendar year. To "grow" or to simulate 1987 conditions using the 1986 Census, all relevant output and input prices were adjusted by Statistics Canada using published series. Further, adjustments were made to real estate values and to farm debt. Equipment investment was assumed to be constant over the period. All adjustments were made at the required provincial disaggregation level. The level of output or production was assumed in 1987 to be the same as in 1985.

## A. STRUCTURAL PERSPECTIVES BY REGION AND BY COMMODITY

## 1. Financial Characteristics

In 1985, some 73,000 farmers received total cash receipts between $\$ 30,000$ and $\$ 82,000$ (medium income farmers). A further 71,000 farmers had a gross income of over $\$ 82,000$ (high income farmers). These two groups are central from the perspective of agricultural policy. The 146,000 farmers who produce less than $\$ 30,000$ in sales (low income farmers) for the most part do not depend on agriculture as the primary source of income. Many of these would typically be classified as hobby farmers.

The farmers of the high income group, who represent less than one-quarter of all Census farmers, receive 72 percent of the income of the sector. The medium income group, which comprises one-quarter of farmers, generates 20 percent of that income. The low income group, which makes up over half the farm population, accounts for the remaining 8 percent of the income.

Table 4.1 presents a profile of select financial characteristics of farmers in eastern and western Canada regions, and compares situations in 1985 and 1987. This profile represents all income classes.

Table 4.1
Statistical Profile of Farmers in Canada, by Region 1985 and 1987

|  |  | East |  | West |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1985 | 1987 | 1985 | 1987 | 1985 | 1987 |
| Number of Farms |  | 122,874 | 122,874 | 167,352 | 167,352 | 290,226 | 290,226 |
| Average Sales | (\$) | 71,060 | 73,316 | 64,382 | 55,251 | 67,209 | 62,899 |
| Average Approximate Owned Assets | (\$) | 281,329 | 277,207 | 336,258 | 316,387 | 313,002 | 299,799 |
| Average Approximate Debt | (\$) | 68,677 | 67,077 | 77,134 | 82,721 | 73,554 | 76,098 |
| Approximate Debt as $\%$ of Assets |  | 24.41 | 24.20 | 22.94 | 26.15 | 23.50 | 25.38 |
| Average Excess Debt ${ }^{(1)}$ | (\$) | 107,616 | 109,525 | 125,895 | 142,337 | 119,206 | 132,711 |

(1) Excess debt = actual debt - debt capacity, and represents only those who were in an excess debt situation, and only positive levels of debt.
Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of
Agriculture, Ottawa, 1988 .

Average sales per farm have shown modest increases in the east while there have been declines in the west. This reflects the changing fortunes of farmers over the past few years of increased income and profitability for the livestock industry, and the impact of the U.S. Food Security Act on the grains and oilseeds sector. Assets have declined more in the western region of Canada than in the east. Most important to this study, average debt per farm, which has dropped slightly in eastern Canada, has risen in the west. Concurrent asset declines and debt increases in western Canada have raised the debt-to-asset ratio of these farms to 0.26 which is increasingly an unacceptable level of financial risk. The average level of excess debt of those farmers who have excess debt has increased dramatically for the western region, to $\$ 142,000$ in 1987.
debt in Canadian agriculture would be a less severe problem if it were evenly distributed among all farmers. The difficulty is that it is concentrated among a limited number of farmers. Other a greater underst the distribution of assets and income is important for a gristribution of of the debt problem. Figure 4.1 provides a cumulative distribution variables across the farm sector.

Figure 4.1
Cumulative Distribution of Debt, Assets, Sales and Census Farms by Debt-to-Asset Ratio, before Deficiency Payment


Source: House of Commons Standing Committee

The Figure shows some of the distributional imbalances. The 74 percent of the farm population with less than a 30 percent debt-to-asset ratio control 71 percent of the assets, produce 56 percent of the sales, but have only 22 percent of the debt. The 15 percent of the farmers with a debt-to-asset ratio greater than 50 percent control some 16 percent of the assets, produce 27 percent of the sales, but are responsible for repayment of 56 percent of the debt. Relative to farmers with lower debt-to-asset ratios, highly-indebted farmers are producing almost twice the gross sales per dollar of invested capital.

Figure 4.2 provides a distributional analysis on the basis of commodity type.

Figure 4.2
Distribution of Debt, Assets, Sales and Farms All Farmers, by Commodity Group

Canada, 1985


Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada 1986 Census of Agriculture, Ottawa, 1988.

Some important differences are apparent between the financial structures of these farm types. Higher levels of investment, debt and sales are evident in the dairy industry relative to the number of farmers. Reading from Figure 4.2, dairy farmers comprise 12 percent of all farmers, but have 19 percent of the debt and 18 percent of both the investment and sales in Canadian agriculture. The distribution reflects the more intensive nature of the industry and the relatively high levels of debt employed. The beef industry shows a more conservative financial structure with lower levels of debt compared to assets and sales. This reflects the long-term cyclical nature of the industry. The hog industry is unique. The debt and sales are high proportionate to asset levels and to the number of producers. The 1985 sales level supported this structure. However, this industry is continually exposed to price variability, leading to frequent financial difficulties. The grains and oilseeds industry, which represents 38 percent of Canadian farmers, holds a disproportionately low level of sales relative to assets and debt.

The distribution of assets, income, debt and number of farmers on the basis of age group in Figure 4.3 identifies some important aspects of the debt problem. It is increasingly evident that the farmers who entered the industry in the 1970s or later have a disproportionate amount of the debt. Both those under 35 years and those aged between 35 and 49 have the most debt. While it would be expected that the less than 35 -year age group would have proportionately higher levels of debt, this is not the expectation for the mid-age group whose proportion of debt by this period would normally be lessening. However, this latter group, which comprises 37 percent of the farmers, has 45 percent of the debt and 39 percent of the assets. As well, sales are proportionately lower than the debt.

## 2. Degree of Stress

The degree of financial stress in agriculture is difficult to define and measure. Farm bankruptcies have in the past been used as an indicator of such stress. Table 4.2 shows the national trend over the last eight years.

Using bankruptcy statistics, the debt and related financial problems of farmers peaked in 1984 and has since improved. Other statistics, such as the increasing amount and rate of arrears within the FCC and other financial institutions, would contest this evidence of an improving situation. The number of those leaving agriculture through bankruptcy is not then a good indicator of financial stress. Other more practical tools of measurement used with increasing frequency are quit claims, foreclosure actions, or forced farm sales.

Figure 4.3
Distribution of Debt, Assets, Sales and Farms Medium and High Sales, by Operator Age Canada, 1987


Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada 1986 Census of Agriculture, Ottawa, 1988.

Table 4.2
Farm Bankruptcies
Canada, 1979 to 1987

| Year | Number |
| :---: | :---: |
| 1979 | 125 |
| 1980 | 222 |
| 1981 | 261 |
| 1982 | 410 |
| 1983 | 488 |
| 1984 | 551 |
| 1985 | 508 |
| 1986 | 440 |
| 1987 | 354 |

Source: Consumer and Corporate Affairs, Canada, Bankruptcy Branch.

Financial stress has frequently been defined in terms of the debt-to-asset ratio of the farm operation. Though this is perhaps a reasonable long-term indicator of stress and a necessary indicator of solvency, it is not a sufficient indicator. An additional measure is required to identify the liquidity or cash-flow capability of the business. While many measurements exist, the liquidity indicator used to measure stress in this analysis is the Debt Service Ratio (DSR), defined as:

$$
\mathrm{DSR}=\frac{\text { gross sales }- \text { operating expenses }- \text { living costs }+ \text { off-farm income }}{\text { principal and interest payments }}
$$

Otherwise stated, the dollars available for debt servicing are compared to the total costs of debt payments. If this ratio equals 1.0 , there is sufficient income to pay the debts. A ratio of 0.5 implies that only half of the debt payment can be paid in that year. A value of 0.0 suggests that no debts can be serviced but operating expenses can be met. Any negative ratio suggests that even some of the operating expenses are not being met.

Using both the Debt/Asset Ratio (DAR) and the DSR, financial stress can be reasonably measured. (Definitions of financial stress are given in the Glossary.) Table 4.3 summarizes the risk profile of farmers by region and by income level as of 1985 . In that year, in the east 5.3 percent of medium income and 4.9 percent of high income farmers (a total of 2,838 ) were in the insolvent category. In the west, this figure was 5.5 percent for both income levels (a total of 4,849). Of these income classes, an additional 4,561 farmers in the east and 7,526 in the west were in the severe stress group.

In 1987, the number of insolvent farmers in the east had marginally risen, to 5.6 percent in the medium income category and 5.0 percent in the high income category, or 2,972 farmers. Figures for the west were quite elevated at 10.9 percent and 10.2 percent for those two income categories respectively, or 8,360 farmers. Of these income classes, there were 3,918 producers in the east and 7,738 farmers in the west in the severe stress group, as shown in Table 4.4.

A further classification of farmers in apparent insolvency and severe stress by major commodity group is summarized in Table 4.5. As was indicated in previous tables, financial stress increases as the income level rises. This is found to be true as well within a commodity sector. As would be expected, the dairy industry presents the lowest level of insolvency at 1.2
percent. Interestingly, dairy farming has a significant number in the severe stress category. Encouraged by the stability of their income, these farmers have been accumulating debt, often in response to the need to purchase additional quota. Any disruption to the marketing system enjoyed by dairy farmers would have serious impacts on this sector.

Table 4.3
Risk Profile of Farmers in Canada, by Region and Income Level 1985

| Income Level | EastRisk Class ${ }^{(1)}$ |  |  |  | Total ${ }^{(2)}$ | WestRisk Class ${ }^{(1)}$ |  |  |  | Total ${ }^{(2)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Insolvent | Severe | Moderate | Stable |  | Insolvent | Severe | Moderate | Stable |  |
| Medium |  |  |  |  |  |  |  |  |  |  |
| Percent | 5.3 | 6.4 | 25.1 | 63.2 | 100 | 5.5 | 7.8 | 27.6 | 59.2 | 100 |
| Number | 1,270 | 1,537 | 6,023 | 15,144 | 23,974 | 2,717 | 3,812 | 13,544 | 29,084 | 49,157 |
| High |  |  |  |  |  |  |  |  |  |  |
| Percent | 4.9 | 9.4 | 19.3 | 66.5 | 100 | 5.5 | 9.6 | 18.4 | 66.5 | 100 |
| Number | 1,568 | 3,024 | 6,226 | 21,466 | 32,284 | 2,132 | 3,714 | 7,084 | 25,616 | 38,546 |
|  |  |  |  |  |  |  |  |  |  |  |
| Percent | 3.8 | 5.2 | 19.5 | 71.5 | 100 | 5.0 | 6.2 | 22.9 | 65.8 | 100 |
| Number | 4,614 | 6,394 | 23,991 | 87,875 | 122,874 | 8,379 | 10,451 | 38,367 | 110,155 | 167,352 |

(1) The risk classes are generally defined as follows: insolvent, debt-to-asset ratio of 0.9 or more with debt service ratio of 0.75 or less; severe stress, debt-to-asset ratio between 0.5 and 0.9 with debt service ratio of less than 1.0 ; moderate, debt-to-asset ratio up to 0.5 with debt service ratio less than 1.0 ; and stable, mainly farms with debt service ratio equal to or greater than 1.0 .
(2) Percentages may not sum to 100 due to rounding.
(3) "Total" includes the low income group not shown in the Table.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

The commodity sector that experienced the greatest degree of stress in the early 1980s was hogs. Since 1985, the sector has enjoyed higher output prices and low costs due to depressed grain prices. Recently, hog prices have fallen, which will again contribute to increasing stress. The sector with the second highest level of difficulty was the grains and oilseeds sector. Since 1985 prices have fallen dramatically, but increases in government payments have largely offset these declines. The lowest levels of stress were evidenced in the beef sector which has not built up as much debt as other sectors.

Table 4.4
Risk Profile of Farmers in Canada, by Region and Income Level 1987

| Income Level | $\begin{gathered} \text { East } \\ \text { Risk Class }{ }^{(1)} \end{gathered}$ |  |  |  | Total ${ }^{(2)}$ | West Risk Class ${ }^{(1)}$ |  |  |  | Total ${ }^{(2)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Insolvent | Severe | Moderate | Stable |  | Insolvent | Severe | Moderate | Stable |  |
| Medium |  |  |  |  |  |  |  |  |  |  |
| Percent | 5.6 | 5.8 | 24.7 | 63.9 | 100 | 10.9 | 9.2 | 33.8 | 46.1 | 100 |
| Number | 1,320 | 1,360 | 5,773 | 14,952 | 23,405 | 5,454 | 4,585 | 16,900 | 23,035 | 49,974 |
| High |  |  |  |  |  |  |  |  |  |  |
| Percent | 5.0 | 7.7 | 18.1 | 69.3 | 100 | 10.2 | 11.1 | 25.2 | 53.5 | 100 |
| Number | 1,652 | 2,558 | 5,994 | 23,001 | 33,205 | 2,906 | 3,153 | 7,136 | 15,183 | 28,378 |
| Total ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |  |
| Percent | 3.8 | 4.8 | 18.7 | 72.8 | 100 | 8.2 | 6.8 | 27.2 | 57.8 | 100 |
| Number | 4,670 | 5,855 | 22,931 | 89,418 | 122,874 | 13,744 | 11,355 | 45,555 | 96,698 | 167,352 |

(1) The risk classes are generally defined as follows: insolvent, debt-to-asset ratio of 0.9 or more with debt service ratio of 0.75 or less; severe stress, debt-to-asset ratio between 0.5 and 0.9 with debt service ratio of less than 1.0 ; moderate, debt-to-asset ratio up to 0.5 with debt service ratio less than 1.0 ; and stable, mainly farms with debt service ratio equal to or greater than 1.0.
(2) Percentages may not sum to 100 due to rounding.
(3) "Total" includes the low income group not shown in the Table.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

As might be expected, and shown in Table 4.6, the greatest improvement in 1987 is reported in the hog sector, followed by the dairy industry. There is a small decline in the beef sector, but a very noticeable deterioration in grains and oilseeds.

Since 1985, many economic changes have affected financial stress. Asset values have fallen and debt outstanding has increased. Commodity prices in the grains and oilseeds sector have fallen by close to 50 percent for some grains by early 1988. Government payments have increased 300 percent since 1981 to help compensate for market income declines. In 1987, realized net farm income reached $\$ 5.6$ billion, compared to $\$ 4.3$ billion in 1985.

To complete this analysis of financial stress, estimates of stress under 1987 income and expense conditions and balance sheet data as of January 1, 1988, have been calculated from the "grown up" 1986 Census for all farmers. The results are shown in Table 4.7.

Table 4.5
Farmers in Stress ${ }^{(1)}$, by Commodity Type and Income Level Canada, 1985

|  | Commodity Group |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Income Level | Dairy | Cattle | Hogs |  <br> Oilseeds | Other | Total |
|  |  | - percent - |  |  |  |  |
| Medium | 1.2 | 4.7 | 9.6 | 5.9 | 6.7 | 5.2 |
| Insolvent | 5.1 | 6.7 | 11.6 | 7.6 | 8.1 | 7.3 |
| Severe Stress |  |  |  |  |  |  |
| High | 1.3 | 6.7 | 9.0 | 6.0 | 5.8 | 5.2 |
| Insolvent | 8.5 | 10.3 | 14.3 | 9.2 | 8.3 | 9.5 |
| $\quad$ Severe Stress |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |
| Insolvent | 1.2 | 3.1 | 8.2 | 5.4 | 4.2 | 4.2 |
| Severe Stress | 6.3 | 4.5 | 11.2 | 6.3 | 4.8 | 5.7 |

(1) Includes insolvent farmers with a debt-to-asset ratio of 0.9 or more and a debt service ratio of 0.75 or less, and those in severe financial stress with a debt to asset ratio between 0.5 and 0.9 and a debt service ratio of less than 1.0 .
(2) "Total" includes the low income group not shown in the Table.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

Table 4.6
Farmers in Stress ${ }^{(1)}$, by Commodity Type and Income Level Canada, 1987

| Income Level | Commodity Group |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dairy | Cattle | Hogs | Grains \& Oilseeds | Other |  |
|  | - percent - |  |  |  |  |  |
| Insolvent | 1.0 | 5.0 | 6.7 | 7.7 | 7.2 | 6.1 |
| Severe Stress | 4.2 | 6.2 | 6.5 | 7.8 | 7.3 | 6.9 |
| High |  |  |  |  |  |  |
| Insolvent | 0.9 | 7.1 | 2.9 | 6.6 | 5.5 | 4.7 |
| Severe Stress | 5.5 | 8.4 | 8.5 | 9.2 | 6.5 | 7.7 |
| Total ${ }^{(2)}$ |  |  |  |  |  |  |
| Insolvent | 0.9 | 3.7 | 4.1 | 6.7 | 4.3 | 4.7 |
| Severe Stress | 4.6 | 4.4 | 6.5 | 6.7 | 4.4 | 5.3 |

(1) Includes insolvent farmers with a debt-to-asset ratio of 0.9 or more and a debt service ratio of 0.75 or less, and those in severe financial stress with a debt-to-asset ratio between 0.5 and 0.9 and a debt service ratio of less than 1.0 .
(2) "Total" includes the low income group not shown in the Table.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

Table 4.7
Risk Profile of Farmers at January 1, 1988 under Market Conditions and Government Payments Prevailing in 1987 by Income Level, Canada

|  | Risk Class ${ }^{(1)}$ |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Income Level | Insolvent | Severe | Moderate | Stable | Total $\mathbf{l}^{(2)}$ <br> of Class |
| Medium |  |  |  |  |  |
| Percent | 9.2 | 8.1 | 30.9 | 51.8 | 100 |
| Number | 6,774 | 5,945 | 22,673 | 37,987 | 73,379 |
| High | 7.4 | 9.3 | 21.3 | 62.0 | 100 |
| Percent | 4,558 | 5,711 | 13,130 | 38,184 | 61,583 |
| Number | 6.3 | 5.9 | 23.6 | 64.1 | 100 |
| Total |  |  |  |  |  |
| Percent | 18,414 | 17,210 | 68,486 | 186,116 | 290,226 |
| Number |  |  |  |  |  |

(1) The risk classes are generally defined as follows: insolvent, debt-to-asset ratio of 0.9 or more with debt service ratio of 7.5 or less; severe stress, debt-to-asset ratio between 0.5 and 0.9 with debt service ratio of less than 1.0 ; moderate, debt-to-asset ratio up to 0.5 with debt service ratio less than 1.0 ; and stable, mainly farms with debt service ratio equal to or greater than 1.0 .
(2) Percentages may not sum to 100 due to rounding.
(3) "Total" includes the low income group not shown in the Table.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

The fundamental findings suggest that between 1985 and 1987, the number of insolvent farmers is estimated to have increased from 7,687 to 11,332 farmers, or by almost 50 percent, for farmers with sales greater than $\$ 30,000$. For this same group, the number in severe stress slightly decreased from 12,087 to 11,656 farmers. With incomes being essentially maintained by the government, the primary risk factor contributing to the greater number in the insolvent stress category is the increased collateral risk caused by lower asset values and higher debt levels.

## 3. Analysis of Excess Debt and Debt Capacity

A fundamental premise of this study is that there is a particular amount of debt outstanding within the agricultural industry which exceeds the ability of farmers to repay. Our analysis will determine both the level and the distribution of this excess debt.

Excess debt is related to the concept of debt capacity outlined in Chapter Two. The debt capacity of a farm business is the amount of debt which, under long-term conditions, the business should be able to generate sufficient net income to repay as scheduled. This debt is often expressed as a proportion of asset value. In Chapter Two, it was found that the debt capacity of most farm businesses has not exceeded 30 to 40 percent of the value of assets in the long run. Crudely defined, the debt capacity of a business is the capitalized value of expected income available for debt servicing. If a farmer has $\$ 10,000$ available for debt service, at a 10 percent interest rate, the business should be able to service about $\$ 100,000$ of debt. (This is somewhat overstating the debt capacity as principal payments have not been included.) In summary:

$$
\text { excess debt }=\text { actual debt }- \text { debt capacity }
$$

Excess debt implies a cash flow deficiency in the business. Typically this deficiency is met annually through increased borrowings. If current economic conditions persist for the business, the excess debt will accelerate and eventually lead to insolvency.

Table 4.8 provides a distribution by province of the amount of excess debt and the number of farmers in this situation in 1985. The provinces with the most excess debt were Saskatchewan and Alberta. The analysis found that, for farmers in this excess debt position, generally all of their existing debt was excess. They had almost no debt capacity and for most, it was negative. This suggests that not only was there insufficient net income to pay for debt service, there was not sufficient money for operating expenses.

Some 35,000 farmers were considered to have excess debt in 1985. Table 4.9 makes a further analysis of this debt by farmers' debt-to-asset ratios.

As expected, the excess debt is generally held by those with higher debt-to-asset ratios; some 36 percent of the excess debt of $\$ 2.4$ billion is held by farmers with debt-to-asset ratios greater than 90 percent. This debt represents money which will mostly be lost by financial institutions.

Table 4.8
Excess Debt by Province and Income Level, 1985

| Province | Medium Income |  |  |  |  | High Income |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total ${ }^{(1)}$ Excess Debt | $\begin{gathered} \text { Average }^{(2)} \\ \text { Excess } \\ \text { Debt } \end{gathered}$ | Number of Farmers with Excess Debt | Percent of Farmers with Excess Debt | Total Number in Level | Total ${ }^{(1)}$ Excess Debt | $\begin{gathered} \text { Average }^{(2)} \\ \text { Excess } \\ \text { Debt } \end{gathered}$ | Number of Farmers with Excess Debt | Percent of Farmers with Excess Debt | Total Number in Level |
|  | - \$ m ${ }^{(3)}$ | - \$ - |  |  |  | - \$ m ${ }^{(3)}$ - | - \$ - |  |  |  |
| British Columbia | 114 | 160,455 | 710 | 34.7 | 2,045 | 239 | 475,712 | 503 | 17.7 | 2,840 |
| Alberta | 675 | 135,284 | 4,992 | 34.1 | 14,640 | 1,175 | 405,923 | 2,898 | 20.9 | 13,865 |
| Saskatchewan | 873 | 123,208 | 7,088 | 30.2 | 23,470 | 869 | 327,148 | 2,654 | 17.7 | 14,995 |
| Manitoba | 240 | 93,055 | 2,586 | 33.7 | 7,675 | 376 | 276,424 | 1,360 | 18.4 | 7,390 |
| Ontario | 403 | 108,586 | 3,713 | 27.5 | 13,500 | 983 | 308,261 | 3,187 | 16.6 | 19,200 |
| Quebec | 239 | 87,308 | 2,735 | 27.6 | 9,910 | 428 | 273,196 | 1,562 | 13.7 | 11,400 |
| New Brunswick | 13 | 75,616 | 168 | 39.6 | 425 | 35 | 216,374 | 163 | 22.2 | 735 |
| Nova Scotia | 10 | 68,856 | 152 | 34.2 | 445 | 22 | 202,577 | 111 | 14.1 | 785 |
| Prince Edward Island | 16 | 74,855 | 216 | 33.8 | 640 | 32 | 239,527 | 135 | 21.2 | 635 |
| Newfoundland | -- | 25,962 | 15 | 26.8 | 55 | 3 | 182,249 | 15 | 13.2 | 110 |
| CANADA | 2,584 | 115,518 | 22,379 | 30.7 | 72,820 | 4,163 | 330,586 | 12,591 | 17.5 | 71,960 |

(1) Aggregate debt of farms that have excess debt.
(2) Average debt per farm that has excess debt.
(3) $\mathrm{\$ m}=\$$ millions.

[^1]Table 4.9
Aggregate Debt on Farms with Excess Debt, by Debt-to-Asset Ratio and Income Level, Canada, $1985^{(1)}$

| Debt/Asset Class (D/A) | Income Level ${ }^{(2)}$ |  | Total |
| :---: | :---: | :---: | :---: |
|  | Medium | High |  |
|  | - \$ millions - |  |  |
| No Debt ${ }^{(3)}$ | 1 | 1 | 2 |
| D/A Ratio 1-9\% | 79 | 39 | 118 |
| D/A Ratio 10-29\% | 435 | 333 | 768 |
| D/A Ratio 30-49\% | 542 | 658 | 1,200 |
| D/A Ratio 50-69\% | 479 | 793 | 1,272 |
| D/A Ratio 70-89\% | 348 | 676 | 1,024 |
| D/A Ratio 90\% + | 700 | 1,664 | 2,364 |
| Total of All D/A Classes | 2,584 | 4,163 | 6,647 |

(1) These data show the aggregate debt of farms comprising proprietorships, partnerships and family corporation farms that have excess debt.
(2) Income classes are based on the following ranges: medium, sales of $\$ 30,277$ to $\$ 81,999$; high, sales of $\$ 82,000$ and over.
(3) In the class with debt/asset ratio less than $1 \%$, a few farms have excess debt.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

The incidence of excess debt has been calculated on the basis of major commodity type (Table 4.10). The highest total and average excess debt was the greatest for high income farmers. The grains and oilseed sector accounted for almost half of the estimated excess debt in Canada in 1985.

Table 4.10
Excess Debt by Commodity Type and Income Level Canada, 1985 ${ }^{(1)}$

| Income Level | Commodity Type |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dairy | Livestock | Hogs | Grains \& Oilseeds | Other Farm Types |  |
| Medium |  |  |  |  |  |  |
| Total (\$ m $)^{(2)}$ | 246 | 533 | 126 | 1,345 | 333 | 2,584 |
| Average (\$ per farm) | 93,144 | 108,523 | 106,265 | 125,917 | 113,271 | 115,518 |
| High |  |  |  |  |  |  |
| Total (\$ m) | 488 | 836 | 441 | 1,725 | 674 | 4,163 |
| Average (\$ per farm) | 298,788 | 333,992 | 284,288 | 349,828 | 340,849 | 330,586 |
| Total |  |  |  |  |  |  |
| Total (\$ m) | 810 | 1,842 | 616 | 3,737 | 1,476 | 8,482 |
| Average (\$ per farm) | 132,429 | 100,634 | 166,786 | 133,695 | 106,833 | 121,364 |

(1) Aggregate debt of farms that have excess debt.
(2) $\$ \mathrm{~m}=\$$ millions.

[^2]
## B. LIFE CYCLE PROFILE OF FARMERS

A profile of the life cycle of farmers provides an understanding of the needs, difficulties and characteristics at each stage of development. The simplest classification of farmers is into the following development stages:

```
Stage I - Beginning Farmers (young)
Stage II - Established Farmers (expanding)
Stage III - Farmers in Transition (retiring, exiting)
```

These stages are associated with the age categories used in this analysis: Stage I consists of producers under age 35, producers aged 35-49 are in Stage II and those aged 50 and over are in Stage III. Figure 4.4 conceptually illustrates the major financial relationships of farmers within this framework.

Figure 4.4 Traditional Farm Growth Model


The Figure illustrates the cycle of young and beginning farmers entering the industry and absorbing the high capital costs through owned equity, inheritance and by debt financing. In the normal course of events, the operator acquires management skills and experience and gradually accumulates equity through retained earnings and asset value appreciation. Equity is "earned" by the farmer using net cash income (retained earnings) to either reduce debt and/or to reinvest in the business. The inflationary equity is a function of inflation or deflation primarily in real estate values. Upon retirement, equity is realized through the sale of farm assets and invested either in savings instruments and annuities, or in some instances in taking back mortgages from new purchasers.

Land price inflation, market liquidity and low real interest rates have contributed to the success of this traditional model, which in many respects has worked fairly well. However, the successful functioning of the three stages of farming is based on the following set of assumptions and implied risks:

- there will be sufficient and constant inflation in asset values to accumulate adequate retirement equity;
- the land market will be sufficiently liquid that the retiring farmer can sell and retire at his convenience;
- there is an efficient financial intermediation process which will recycle the equity of retiring farmers into debt for beginning farmers; and
- the economic conditions, management skills and experience of the beginning farmer are adequate to allow the entrant to borrow and repay large amounts of debt capital.

Several flaws have been identified by witnesses with this model and are evident in today's agricultural environment. The process outlined often requires the beginning farmer to enter the industry with excessive risk since he must acquire ownership to a larger amount of capital than his own equity will support. It means borrowing large amounts of debt capital at a stage in the farmer's career when experience and earning capacity are often at the lowest level. This leads to a mismatch between the earning capacity of the business and the level of fixed financing costs, and between management needs and management skills. Further, the process requires that a significant
proportion of the capital within the primary sector needs to be debt financed in each generation.

Likely the greatest flaw in the traditional cycle by which farmers become established, develop and retire from the industry is an implicit dependence on inflation. Modest amounts of owned equity continue to sustain larger amounts of debt capital upon the expectation that asset appreciation will accumulate future equity.

Evidence is mounting that traditional attitudes toward ownership and financing paradoxically have been the major obstacles to ownership. In a desire to own land, farmers have entered the industry through mortgaging sizeable farm units. The financing costs have consumed all retained earnings, and may even have resulted in losses leading to increased borrowings. Then, dependent on asset appreciation for equity growth, the business has lost substantial equity over the 1980s. As is not well understood by farmers, a heavily mortgaged farm implies that the operator has become a minor shareholder and is technically leasing the operation from the financial institution at mortgage interest rates.

Studies exist which have evaluated alternative ownership and financing techniques. They have looked at their relative impacts on the ability of the farm operators to survive, build equity, retain profits and eventually acquire ownership. (e.g., Ellinger and Barry, The Effects of Tenure Position on Farm Profitability and Solvency: An Application to Illinois Farms, Agricultural Finance Review, Volume 47, 1987.) These studies show that farmers who became established through first acquiring control of farm resources through leases, who gradually acquired experience, management skills and who then used earned equity to acquire ownership were more successful in achieving the objective of ownership of agricultural real estate. These same studies show that the operators who perceived that they had full ownership by becoming established in agriculture through debt financing found, over time, that they continued to lose equity and eventually ownership. In general, farmers who took in partners in their business, either in the form of holding leases, or more particularly in equity participation, experienced a greater degree of ownership sooner and with less risk.

The Committee has come to realize that a better understanding is required within the sector of the way that equity and ownership can be built and retained, and of the risk to ownership posed by inappropriate financing
tools. Traditional attitudes can be an obstacle in dealing with the debt problem.

Table 4.11 provides some economic characteristics of 144,000 farmers within the three stages of economic development. The analysis within each stage is on the basis of income level. Throughout the analysis, the 146,000 farmers with sales of less than $\$ 30,000$ are excluded.

## 1. Stage I Producers

In 1985, there were 15,915 medium income producers, who had average sales of $\$ 53,603$, while there were 15,560 high income producers with average sales of $\$ 183,645$. Medium income operators, with average assets of $\$ 253,104$ and average debt of $\$ 94,396$, had average equity of $\$ 158,708$. Comparatively, high income operators, with more than double the amount of assets, at $\$ 519,004$, and about two and half times as much debt, at $\$ 233,979$, had average equity of $\$ 285,025$.

In 1985, the debt-to-asset ratio was 0.37 for the medium income producers, while a ratio of 0.45 existed for high income producers, suggesting that the latter are more highly leveraged than are the former. However, a debt service ratio of 0.3 for the medium income producers and 1.5 for those with high income suggests that the former were able to pay only 30 percent of their debts in that year, while high income farmers were able to pay all of their debts and have income remaining for such uses as asset purchases, savings, etc. Given a debt/asset ratio of 0.37 and a relatively low ability to service debt, it is not surprising that, among medium income producers, 11 percent were insolvent, with a further 13.7 percent experiencing severe stress. High income operators had a relatively smaller percentage of insolvent producers, at 8.5 percent, but a similar percentage of producers in severe stress, at 13.8 percent. These figures reflect this group's increased ability to service their debt.

Finally, in 1985, 39.8 percent of medium income operators had excess debt, which on average was $\$ 133,538$. High income farmers were better off in the sense that, although their average excess debt reached $\$ 304,747$, only 21.3 percent of such producers had excess debt.

Table 4.11
Economic Profile of Canadian Farmers by Stage of Development and Income Level, $1985^{(1)(2)}$

| Item | Medium Income ${ }^{(3)}$ |  |  | High Income ${ }^{(3)}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stage I | Stage II | Stage III | Stage I | Stage II | Stage III |
| Number of Farmers | 15,915 | 23,560 | 33,335 | 15,560 | 29,970 | 26,425 |
| Average Age | 29 | 42 | 60 | 30 | 42 | 58 |
| Average Sales (\$) | 53,603 | 54,170 | 52,220 | 183,645 | 205,288 | 199,944 |
| Average Assets (\$) | 253,104 | 315,982 | 342,901 | 519,004 | 648,435 | 708,268 |
| Average Debt (\$) | 94,396 | 77,433 | 35,371 | 233,979 | 227,781 | 152,361 |
| Average Equity (\$) | 158,708 | 238,549 | 307,530 | 285,025 | 420,654 | 555,907 |
| Debt/Asset Ratio | 0.373 | 0.245 | 0.104 | 0.451 | 0.351 | 0.215 |
| Debt Service Ratio | 0.3 | 0.1 | 1.8 | 1.5 | 1.7 | 2.7 |
| Interest as Percent of Sales | 15.5 | 12.5 | 6.0 | 11.1 | 9.6 | 6.6 |
| Average Margin for Growth | -5,157 | -5,921 | 5,278 | 24,582 | 29,728 | 40,638 |
| Average Net Cash Income | 6,316 | 7,097 | 13,239 | 32,096 | 37,604 | 42,358 |
| Average Off-Farm Income | 7,041 | 6,877 | 4,791 | 3,366 | 3,287 | 3,038 |
| Average ExcessDebt ${ }^{(4)}$ (\$) | 133,538 | 117,846 | 95,031 | 304,747 | 346,686 | 327,339 |
| Percent of Farmers with Excess Debt | 39.8 | 39.9 | 19.9 | 21.3 | 20.0 | 12.5 |
| Total Excess Debt ${ }^{(4)}$ $(\$ \mathrm{~m})^{(5)}$ | 845 | 1,109 | 631 | 1,010 | 2,074 | 1,080 |
| Percent Insolvent | 11.0 | 5.9 | 1.8 | 8.5 | 5.8 | 2.6 |
| Percent Severe Stress | 13.7 | 9.1 | 2.9 | 13.8 | 11.3 | 5.0 |
| Percent Moderate Stress | 30.0 | 34.1 | 18.6 | 23.3 | 20.9 | 14.1 |

(1) The data are derived from the 1986 Census of Agriculture and describe only farms classified as proprietorships, partnerships and family corporations.
(2) The stages of development cover the following age groups: Stage I, under 35 years of age, Stage II, 35 to 49 years; and Stage III, 50 years and older.
(3) Income classes represent the following ranges: medium, $\$ 30,277$ to $\$ 81,999$; high, $\$ 82,000$ and over.
(4) Total debt only of farms that have excess debt.
(5) $\$ \mathrm{~m}=\$$ millions.

[^3] Agriculure, Ottawa, 1988.

## 2. Stage II Producers

Among the 23,560 medium income producers in 1985, average sales totalled $\$ 54,170$, up marginally from those of Stage I producers, while average sales for the 29,970 high income farmers reached $\$ 205,288,12$ percent higher than those of Stage I producers. Average assets of $\$ 315,982$ and debt of $\$ 77,433$ for medium income producers led to average equity of $\$ 238,549$ for this group. High income operators, with average assets of $\$ 648,435$ and debt of $\$ 227,781$, had an average equity of $\$ 420,654$.

As expected, the debt/asset ratios of medium and high income Stage II producers in 1985 were lower than was the case for Stage I producers; medium and high income producers had debt/asset ratios of 0.25 and 0.35 , respectively. The debt service ratio was 0.1 for medium income operators, indicating their ability to pay only 10 percent of their debt, while the comparable figure for high income operators was 1.7, roughly similar to their Stage I counterparts. Among medium income producers, 5.9 percent were insolvent, with a further 9.1 percent in severe stress; among high income producers, a similar percent of operators were insolvent, at 5.8 , although a somewhat higher 11.3 percent were experiencing severe stress.

Average excess debt in 1985 was $\$ 117,846$ for medium income farmers, lower than that of comparable Stage I producers. However, high income operators at this stage had an average excess debt of $\$ 346,686$, considerably greater than that of their Stage I counterparts. Among medium income operators, 39.9 percent had excess debt; the percentage of high income farmers with excess debt was significantly lower, at 20.0 percent.

## 3. Stage III Producers

The 33,335 Stage III medium income producers had the lowest average sales, at $\$ 52,220$. It should be noted, however, that medium income producers in all three stages, unlike high income operators, had more or less comparable average sales. Among the 26,425 high income farmers at this stage, average sales totalled $\$ 199,944$. As expected, this stage of producer, for both medium and high income groups, had the highest level of average assets, and equity and the lowest level of average debt. Medium income operators had average assets of $\$ 342,901$, equity of $\$ 307,530$ and average debt of $\$ 35,371$. Comparatively, the high income farmers had average assets of $\$ 708,268$ equity of $\$ 555,907$ and average debt of $\$ 152,361$.

Also as expected, this stage had the lowest debt-to-asset ratios. Medium income producers, with a debt/asset ratio of 0.10 , had a debt service ratio of 1.8 , the highest among the medium income group. High income producers, had a debt/asset ratio of 0.22 and a debt service ratio of 2.7 , also the highest among the high income group. Given the relatively low debt/asset ratios and the relatively high debt service ratios, it is not surprising that, for both income groups, this stage had the lowest percentages of insolvent farmers and farmers in severe stress. Among medium income operators, 1.8 percent were insolvent, with a further 2.9 percent in severe stress. The percentages for high income farmers were higher; 2.6 percent of operators were insolvent and 5.0 percent were experiencing severe stress.

Finally, average excess debt among medium income operators and the percent of farmers with excess debt were the lowest among all the stages, at $\$ 95,031$ and 19.9 percent, respectively. Comparable figures for high income operators were $\$ 327,339$ and 12.5 percent, the lowest percent of farmers with excess debt among all stages.

## CHAPTER FIVE

## POLICY OPTIONS: SIMULATIONS AND PRINCIPLES

Chapter Four has provided an analysis of the structural characteristics of farmers from the perspective of geographic region, commodity type and farm life cycle (age group). Within each of these classifications, the sector has been analyzed with respect to income level, stress level and degree of excess debt.

This Chapter will simulate a set of policy options for the farm sector with the view to determining their relative effectiveness and to providing a conceptual framework of principles to assist in the selection of recommendations relevant to the farm debt problem.

## A. POLICY SIMULATIONS

The levels of financial stress and of excess debt can be considered too high, particularly in some parts of Canada. To derive alternatives and recommendations to reduce these stress and debt levels, a series of calculations based on different "policy alternatives" was conducted on the farm population. Each simulation was applied to the 1986 Census before it was adjusted to 1987 , as this represents the most accurate base. The relative effectiveness of each alternative was judged by its capacity to ameliorate both the levels of financial stress and excess debt. While many policies could have been applied, four primary options were selected for simulation:

1. Deficiency Payment
2. Debt Set Aside
3. Interest Subsidy/Interest Relief
4. Equity Financing

## 1. Deficiency Payment

Deficiency payments, similar in design to the Special Canadian Grains Program (SCGP), are one direction which policy could follow in addressing the debt problem of farmers. Many witnesses supported the continuation of such assistance. The question for consideration in this study is how effective in reducing the debt load is financial assistance in the form of deficiency payments. Do cash payments to farmers on the basis of some relatively objective criteria such as farm scale (either acreage or gross income) reduce the level of financial stress or the amount of excess debt?

To answer this question, a deficiency payment policy option was designed and applied to the farm sector. It was assumed that a deficiency payment would be paid at the rate of 10 percent of gross income with a total payment of $\$ 25,000$ per farm operation.

On this basis, and given the income conditions which existed in 1985, the payout under such a program would have been:

- low income farmers: $\quad \$ 150.0$ million, average $\$ 1,029$;
- medium income farmers: $\$ 386.7$ million, average $\$ 5,311$; and
- high income farmers: $\$ 1,110.2$ million, average $\$ 15,429$.

As expected, the highest income farmers would receive the greatest proportion of the total deficiency payment.

To evaluate the distributional impacts of such a program on the debt problems of farmers, a calculation was made of the proportion of the deficiency received by the respective debt-to-asset classes and by income group. Table 5.1 provides this breakdown.

Table 5.1
Distribution of Deficiency Payment by Debt-to-Asset Ratio and Income Level Canada, 1985

| Debt-to-Asset Ratio |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income Level | No Debt | 1-9\% | 10-29\% | 30-49\% | 50-69\% | 70-89\% | Over 89\% | Total |
| Medium Income |  |  |  |  |  |  |  |  |
| $(\$ \mathrm{~m})^{(1)}$ | 95.2 | 90.7 | 86.5 | 46.7 | 26.9 | 15.6 | 25.0 | 386.7 |
| Proportion (\%) | 24.6 | 23.5 | 22.4 | 12.1 | 7.0 | 4.0 | 6.4 | 100.0 |
| Average Deficiency |  |  |  |  |  |  |  |  |
| Payment (\$) | 5,031 | 5,289 | 5,430 | 5,477 | 5,532 | 5,513 | 5,472 | 5,311 |
| High Income 5 |  |  |  |  |  |  |  |  |
| (\$m) | 125.9 | 202.4 | 259.3 | 190.7 | 130.4 | 79.9 | 121.8 | 1,110.2 |
| Proportion (\%) | 11.3 | 18.2 | 23.4 | 17.2 | 11.7 | 7.2 | 11.0 | 100.0 |
| Average Deficiency |  |  |  |  |  |  |  |  |
| Payment (\$) | 14,284 | 14,639 | 15,207 | 15,737 | 16,044 | 16,436 | 16,986 | 15,429 |

(1) $\$ \mathrm{~m}=\$$ millions.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

For the medium income group, 70.5 percent of the payments would go to farmers who had debt less than 30 percent of their assets. As previously discussed, this group of farmers typically has a lower level of financial stress and fewer debt problems. In this respect, such an untargeted program would not be providing benefits which would be correlated with the problem of excess farm debt. For the high income group, some 53 percent of the payment made to this group would go to those with less than 30 percent debt in their farm operations. Although this distribution is more even across debt-to-asset classes, an unacceptable amount of payment would go to farmers who do not have a debt problem. For the group of farmers who have over 70 percent debt on their farms, and, therefore, the most serious debt problem, the proportion of deficiency received is 10.4 and 18.2 percent for the medium and high income groups respectively.

The analysis also evaluated the impact of the deficiency payment policy on excess debt. Table 5.2 presents the results in the form of the proportionate reductions in excess debt across debt-to-asset classes and between income groups. For medium income farmers, the greater impact on excess debt occurs for those with the lower debt-to-asset ratios. In this context, the program is not effective in dealing with excess debt. Excess debt is reduced for this income group by $\$ 574$ million with an expenditure of $\$ 386.7$ million or an "effectiveness" ratio of 1.5 . This finding implies that each dollar of program expenditure has a 1.5 dollar impact on the reduction of excess debt.

The deficiency payment impact on high income farmers is more equitably distributed over debt-to-asset classes. On a total group basis, the excess debt is reduced by $\$ 1.58$ billion for a program expenditure of $\$ 1.11$ billion. The effectiveness ratio of this program on this group is 1.4.

Generally, program effectiveness ratios of this low a magnitude suggest the ineffectiveness of such a policy tool. The use of untargeted deficiency style policies to deal with the excess debt and related financing problems of particular farmers is not cost-effective. Based on a program effectiveness ratio of 1.5 , a total of $\$ 4.5$ billion in deficiency payments would be required annually to stabilize the debt problems of these farmers. Further, this deficiency payment would have to be continued indefinitely over the maturity of the debt.

Table 5.2
Impact of Deficiency Payment on Excess Debt of Farmers by Income Level Canada, 1985

| Income Level | Debt-to-Asset Ratio |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1-9\% | 10-29\% | 30-49\% | 50-69\% | 70-89\% | Over 89\% | Total |
| Medium Income |  |  |  |  |  |  |  |
| Excess Debt Before (\$ m) ${ }^{(1)}$ | 79 | 435 | 542 | 479 | 348 | 700 | 2,583 |
| Excess Debt After (\$ m) | 53 | 310 | 404 | 377 | 280 | 583 | 2,007 |
| Number of Farmers Before | 4,289 | 6,380 | 4,330 | 2,788 | 1,710 | 2,833 | 22,230 |
| Number of Farmers After | 2,695 | 4,375 | 3,144 | 2,115 | 1,324 | 2,253 | 15,906 |
| \% Reduction in Excess Debt | 32.91 | 28.74 | 25.46 | 21.29 | 19.54 | 16.71 | 22.30 |
| High Income |  |  |  |  |  |  |  |
| Excess Debt Before (\$ m) | 39 | 333 | 658 | 793 | 147 | 1,664 | 4,163 |
| Excess Debt After (\$ m) | 21 | 183 | 379 | 476 | 397 | 1,130 | 2,586 |
| Number of Farmers Before | 1,093 | 2,321 | 2,512 | 2,175 | 1,567 | 2,923 | 12,591 |
| Number of Farmers After | 542 | 1,171 | 1,287 | 1,181 | 840 | 1,789 | 6,810 |
| \% Reduction in Excess Debt | 46.15 | 45.05 | 42.40 | 39.97 | 41.27 | 32.09 | 37.88 |

(1) $\$ \mathrm{~m}=\$$ millions.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

The impact of this deficiency payment option was once again evaluated for its relative ability to reduce financial stress. Figure 5.1 graphically illustrates the change in the financial stress levels of farmers, including both insolvent and severe stress categories, "before" and "after" deficiency payments. The greatest proportionate reduction in stress is for those with between 50 and 90 percent debt-to-asset ratios. Overall, the level of financial stress for this magnitude of deficiency payment dropped from 10 percent to 8.1 percent, or by 19 percent. This relatively modest fall in financial stress levels is consistent with the impact of deficiency payments on excess debt, as shown in the preceding paragraphs.

Figure 5.1
Percent Under Stress ${ }^{\left({ }^{(1)}\right.}$ in Each Debt-to-Asset Class All Census Farms, Before and After Deficiency Payment

(1) Includes both insolvent and severely stressed farmers.

[^4]In summary, untargeted payments are not an effective policy tool for dealing with the debt and financial problems of farmers. This is not to say that the merits of a universal-type deficiency payment option might not be effective in dealing with actual or perceived income problems but they should be evaluated on their own merits and relative to other mechanisms. The point here is that the use of deficiency programs to help solve the debt problem is demonstrated to be inefficient. It can even be argued that such payments can increase the severity of the debt problem as the outstanding debt for many farmers continues to accumulate for a further period; the perceived financial relief masks the underlying excess debt issue, leading to higher risk and insolvency costs. There is some evidence of this having been the case over the past several years. Generous government payments, primarily through untargeted programs, have lifted realized net farm income to historically high levels but so too, paradoxically, has financial stress risen. The paradox is largely explainable given the nature of the policy tools applied.

With such broad-based policy tools, one of the primary consequences is program or benefit slippage since the payments of such programs are largely recycled through farmers back into the financial institutions. Again, until the debt problem is brought under control, the effectiveness of many government assistance programs will be minimal and the primary beneficiaries will be financial institutions.

## 2. Debt Set Aside

A major policy option suggested by many individuals and farm organizations, including the Christian Farmers Federation of Alberta, Prairie Pools Inc. and others, is for some form of debt set aside. The set aside recommended would place a certain amount of the farmer's debt into a non-interest-bearing category for a specific period of time, say three years. The government or the financial institution would absorb the interest costs over this period. At the end of the period, the interest and principal payments would be restarted.

The groups recommending this option assume that in many farm categories the current price and cost conditions are depressed, and that with a breathing space of a few years, the individual would then be able to pay these costs. Either the amount of debt in excess of asset value, or the amount of debt reflecting the fall in security or land values over the past six to eight years, were other suggested bases for debt set asides.

To begin to evaluate the effectiveness of debt set asides as a policy tool to address the debt problem, one must fully understand the long-term debt capacity of a farm business. The example below assesses the structure and classification of debt and the nature of the solutions which may be applied to this debt.

This demonstration example is based on the 1986 Census of Agriculture and represents a typical high income farmer in Alberta in the severe stress category:

| Current value of assets | $\$ 694,227$ |
| :--- | ---: |
| Average value of debt | $\$ \underline{01,016}$ |
| Net worth | $\$ 193,211$ |
| Estimated interest rate | $11.5 \%$ |
| Return on assets | $5.0 \%$ |

With a 5 percent return on assets and with an interest rate of 11.5 percent, the safe maximum debt-to-asset ratio of the business is some 43 percent. For this farm, that implies that the maximum debt capacity is $\$ 298,000$. As this is a maximum, in years when the rate of return is less than 5 percent, the debt capacity would be less. At 3 percent return, the debt capacity would fall to $\$ 181,000$.

This debt is classified according to short-term and long-term debt capacity, and to debt which exceeds any debt capacity possibilities. In the short-term and under distressed conditions when the rates of return on assets fall to say 3 percent, the debt capacity would remain at about $\$ 181,000$. The long-term debt capacity of the business is approximately $\$ 300,000$. The debt above $\$ 300,000$, in this case $\$ 201,000$, will likely never be repaid from farm returns.

Figure 5.2 diagrammatically illustrates this debt restructuring.

Figure 5.2
Debt Restructuring Model


The diagram suggests that the business should always be able to repay a certain proportion of debt, in the example, $\$ 181,000$. Under distressed conditions, there can be an amount of debt which exceeds repayment capability under adverse circumstances yet remains within the long-term debt capacity, which could be set aside. For the example this could be up to $\$ 119,000$. This would be a sound policy course if there would be a high probability that economic conditions would improve and increase the debt capacity, and thereby allow the operator to reassume all the financing costs. For the amount of debt which may exist above the long-term debt capacity level, it is impractical and illusionary to set it aside. It essentially will never be repaid under any expected conditions.

The major point of this analysis is that policy-makers must understand the debt capacity of the farm sector before they design debt set aside or other restructuring programs. To engage in a set aside which puts into storage debt which can never be repaid is not facing the debt problem. This debt would eventually have to be written off and in the meantime, it would continue to send artificial signals to the industry about its long-run solvency.

In general, for most farm types, debt which is in excess of 50 to 60 percent of the value of assets is not likely repayable. For enterprises which are experiencing a temporary depression of income, it can make sense to place the amount between 20 percent of assets to 50 or 60 percent of assets into a set aside. Care must be taken that the set aside does not serve as a mechanism to avoid dealing with the debt problem. Many of the programs which have been developed over the past few years have been predicated on the assumption that the current income was depressed and that a temporary relief of interest cost or, as in this case, a debt set aside, would make sense.

The amount of excess debt estimated to be faced by the industry in 1987 is in the order of $\$ 6.0$ billion for farmers in the medium and high income groups. Our calculations would suggest that possibly $\$ 4.0$ billion is in a category which is unlikely ever to be repayable. To place the $\$ 4$ billion in a set aside would result in an annual cost of $\$ 440$ million indefinitely into the future and increase the overall costs of an eventual resolution. For example, the cost of absorbing a $\$ 100,000$ excess debt now is $\$ 100,000$. The cost of setting it aside for say five years at 11 percent and then writing off the debt would be $\$ 168,500$ at that time.

It is difficult to calculate an effectiveness ratio for a debt set aside program. In the situation where debt is plainly set aside to the amount in excess of 60 percent of the value of the farm's assets, the ratio is less than
1.0. Otherwise stated, the ultimate cost of the debt set aside is greater than the value of the current debt outstanding.

Setting aside debt which is between 20 and 60 percent of the asset value on a five-year basis, where the income levels are clearly temporarily depressed and there is potential for future income improvement, would have a higher program effectiveness ratio. Assuming a 20 percent default rate and an 11 percent interest rate, the effectiveness ratio would be about 2.2. An expenditure of one dollar would reduce the excess debt problem by 2.2 dollars.

On the surface, debt set asides are an attractive option. However, the potential for set asides to be applied to debt which is non-repayable under any conditions leaves the way open for an organized write-down program. Any such set aside approach would have to be carefully targeted to debt which is only in difficulty as a result of short-term conditions. Most of the excess debt of farmers, revealed from the figures in this study, is in a higher risk category and therefore less amenable to the debt set aside type of solution.

## 3. Interest Subsidy/Interest Relief

One of the most popular alternatives with many precedents is some form of interest concession as a mechanism to reduce excess debt or relieve financial stress. The principle behind an interest subsidy is that this will provide temporary relief to a highly indebted farmer until the market recovers to allow full debt-servicing capacity. The assumptions and the problems of this program are almost identical to those of the debt set aside.

Table 5.3 provides a summary analysis of a targeted interest relief program applied to medium and high income farmers. The target group was those farmers who had a debt-to-asset ratio greater than 40 percent, and who had a debt service ratio of less than 1.0. This would capture a broad segment of the sector who are experiencing the most severe excess debt problems. The interest subsidy was based on reducing the interest cost of those captured by the program by one-third.

Table 5.3
Impact of an Interest Subsidy on High Risk Farmers by Income Level

| Income Level | Debt Service Ratio ${ }^{(1)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Less than 0 | 0.01-0.24 | 0.25-0.49 | 0.50-0.99 |
| Medium |  |  |  |  |
| Excess Debt Before ${ }^{(3)} \quad(\$ \mathrm{~m})^{(2)}$ | 1,262.3 | 444.3 | 541.5 | 373.2 |
| Excess Debt After ${ }^{(3)}$ (\$ m) | 1,262.3 | 444.3 | 436.9 | 86.5 |
| \% Reduction in Excess Debt | 0 | 0 | 19.32 | 76.83 |
| Aggregate Subsidy (\$ m) | 22.6 | 10.1 | 12.2 | 20.1 |
| Average Subsidy (\$) | 5,182 | 6,341 | 6,212 | 5,674 |
| Number of Recipients of Subsidy | 4,354 | 1,591 | 1,970 | 3,534 |
| \% Stressed Before ${ }^{(4)}$ | 24.65 | 46.80 | 48.04 | 39.88 |
| \% Stressed After ${ }^{(4)}$ | 24.65 | 46.80 | 48.04 | 24.11 |
| High |  |  |  |  |
| Excess Debt Before ${ }^{(3)}$ (\$ m) | 1,250.1 | 652.4 | 1,101.6 | 1,069.5 |
| Excess Debt After ${ }^{(3)}$ (\$ m) | 1,250.1 | 652.4 | 873.9 | 99.0 |
| \% Reduction in Excess Debt | 0 | 0 | 20.67 | 90.75 |
| Aggregate Subsidy (\$ m) | 27.3 | 16.0 | 27.0 | \$86.4 |
| Average Subsidy (\$) | 11,544 | 13,205 | 13,779 | 13,192 |
| Number of Recipients of Subsidy | 2,364 | 1,212 | 1,959 | 6,548 |
| \% Stressed Before ${ }^{(4)}$ | 36.92 | 59.71 | 58.87 | 68.06 |
| \% Stressed After ${ }^{(4)}$ | 36.92 | 59.71 | 58.87 | 37.50 |

(1) Debt service ratio represents the sum of net cash income, off-farm income and interest payment expenditures less $\$ 18,000$ for living costs, divided by the amount of annual debt repayment. A ratio of 1.0 indicates that the available money is equal to the amount of debt repayment.
(2) $\$ \mathrm{~m}=\$$ millions.
(3) Aggregate debt on farms with excess debt.
(4) Percentage of farms in both insolvency and severe stress.

[^5]For the low DSRs, the money spent failed to affect the level of excess debt. This is a result of many farmers who have DARs less than 40 percent (and therefore outside the parameters of the program) but who have excess debt. The group for whom this program makes the most sense in the context of effectiveness, is for the DSR group of 0.5 to 1.0 .

The impact on excess debt reduction is more effective for the high income group as a short-run solution.

The nature of an interest subsidy type of program is to deal with a short-run problem. The principal amount of excess debt remains outstanding. To the extent that the excess debt is clearly above the repayment capacity of the industry, it would be possible to continue subsidizing it throughout its amortization period.

The program's influence on the levels of financial stress is less dramatic. For many of the classes, there is no impact on stress as the subsidy is going to people who are not in either an insolvent situation or in severe stress. At the higher levels of the DSR, the stress reduction is more noticeable.

The program effectiveness ratios for this program are given in a short-run context. For the medium income group, a subsidy of $\$ 65$ million reduced financial stress by $\$ 391$ million, for a ratio of 6.0 . For the high income group, the ratio was 7.7 , a relatively high effectiveness ratio. In the long-term, the impact of a subsidy program is much less effective, as the debt would have to eventually be reduced. The program ratio over the long-term is likely closer to 1.0 .

## 4. Equity Financing

The final option evaluated is that of equity financing. This option is more complex to explain. As was evident from the testimony before the Committee, many individuals and farm groups do not understand this financing concept. This lack of understanding and traditional attitudes toward ownership have interfered with the communication of the concept. The background paper provided by the Committee ahead of the hearings (see Appendix A) outlines one primary technique which could be used to make available equity capital to complement the debt financing of the industry.

In brief, equity financing is the use of capital in the business which takes a residual return and which shares in the net profits or losses in the proportion of equity investment relative to the business capital value. The mechanism proposed would develop a pooled fund, such as a Rural Property Trust, which would collect investor interests from a variety of sources (retiring farmers, private individuals, pension funds, etc.) and would invest these with the assistance of a Farm Management Investment company in a diversified portfolio of farm properties. For the competent but highly indebted farm operators, the opportunity would be available to sell a portion of the business to the Trust, and in return lease back the transferred assets on a flexible long-term equity accumulating lease, with options to repurchase. Cash generated from the sale of the asset could be used to pay down debt and reduce the financial exposure of the business. The farmer would be trading off debt, carrying principal and interest financing costs of the order of 12 to 13 percent for lease costs of 4 to 5 percent. A further analysis of this option is given in Chapter Seven.

In its application as a policy alternative in this context, it is assumed that there would be available equity capital for recapitalizing the farm business on the following basis:

- only competent farmers with DARs between 0.2 and 0.9 ;
- DSR would be equal or greater than 1.0 ;
- 70 percent of debt to be converted with outside equity capital;
- this amount converted, leased back at 4.5 percent; and
- the remaining 30 percent of debt to remain at the original cost.

Table 5.4 summarizes the results of this policy application on this specific group of farmers. For those who would take advantage of this financing technique, the cash flow reduction in financing costs would be 55 percent. If this were to be compared to the equivalent subsidy required under an interest rebate program, a loan at 11.5 percent would have to be reduced to an effective interest rate of about 5 percent to offer the same cash flow benefits.

Table 5.4
Impact of Equity Financing Alternative Applied to Farmers with Debt-to-Asset Ratio Between 0.2 and 0.9 and Debt Service Ratio Greater than 0.0, High Income Farmers Canada, 1985

| Debt Service Ratio |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0.01-0.24 | 0.25-0.49 | 0.50-0.99 | 1.00-1.49 | 1.50-2.00 | $2.00+$ |
| Principal and In Payments Before Equity Financing | rest <br> (\$) | 41,360 | 44,624 | 46,127 | 41,777 | 36,790 | 27,089 |
| Lease and Debt <br> Payments After <br> Equity Financing | (\$) | 18,346 | 19,683 | 20,330 | 18,449 | 16,275 | 11,960 |
| Cash Flow <br> Advantage | (\$) | 23,014 | 24,941 | 25,797 | 23,328 | 20,515 | 15,129 |
| Equity <br> Requirement ${ }^{(1)}$ | $(\$ \mathrm{~m})^{(2)}$ | 254.3 | 440.1 | 1,413.5 | 1,421.8 | 946.7 | 1,509.1 |
| Number of Recipients of Equity Financing |  | 1,136 | 1,841 | 5,728 | 6,339 | 4,787 | 10,380 |

(1) Equity requirement is the amount of equity capital needed to reduce the debt payments to the extent shown in the Table.
(2) $\mathrm{s} \mathrm{m}=\$$ millions.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

The cost effectiveness of this option is difficult to assess as it is not envisioned that the government would want or need to provide substantial assistance to bring in equity financing. Even providing guarantees behind lease payments, to help attract equity investors would result in a cost less than an interest subsidy program or deficiency payment. Further, the option would provide a more permanent solution to the debt as it removes it.

## B. DEBT RESTRUCTURING PRINCIPLES

The seriousness of the farm debt problem has attracted a number of suggestions to reduce the size and financial impact of debt. Within the context of the financial risks identified in Chapter Four, proposing effective options requires a clear understanding of the problems and needs of each farm category by stage of development. The emphasis in this study is to find solutions which permanently reduce the debt burden and at the same time prevent similar financial circumstances from recurring in the future.

Consequently, where farmers have debt in excess of the long-term repayment capacity of the industry, options which defer the costs, or which set aside the debt are not realistic and practical. Further, options which artificially lower the real costs to below acceptable levels are not desirable; they result in longer-term penalties and costs to the industry through increased use of debt, capitalization of asset values and potential long-term financial risks. To the extent possible, financial restructuring has to be equitable in the bearing of costs.

The analysis in Chapters Two, Three, Four and this Chapter, together with the testimony of many witnesses leads the Committee to formulate a number of principles or concepts which will help guide the selection and development of options for debt restructuring:

- Recommended solutions or options for debt restructuring should reflect the unique characteristics of farmers at their respective stages of economic and social development.

A congruity must exist between the permanency of the problem and the recommended option or solution. For example, if a particular segment of the industry is carrying debt which is not repayable under any realistic future economic recovery for the sector, then applying temporary solutions such as subsidies or set asides is not practical.

- To the extent possible, recommended options should be perceived to be equitable both with respect to the sharing of costs and responsibility among lenders, farmers, and government, and also between different farmers.
- Financing options and mechanisms must better match the financial costs to the repayment capacity of the sector. Agriculture is characterized by extremely variable financial capacity. The design of its financial instruments should reflect this variability if it is to stabilize the return to owner's equity.
- Financial restructuring and government intervention in the financing of farmers should attempt to remain neutral to resource allocation. The principle of financial market intervention should serve only the objective of reducing financing risk and stabilizing real costs of capital; it should not contribute to artificially lowering costs or controlling rates which may lead to higher future real costs of capital. This requires the focus of assistance to shift to stabilizing real capital costs, not nominal costs.
- Financial restructuring should be separated from income assistance. Income problems cannot effectively be resolved through modification of the cost of the debt. More importantly, credit incentives or subsidies should not be used to encourage specific commodity sector investment. This often leads to a misallocation of resources.
- Until the debt problems of farmers are brought under control and into equilibrium with the debt capacity of the industry, the effectiveness of other income policies will be relatively ineffective due to program slippage.

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## CHAPTER SIX

## BEGINNING FARMERS

Beginning farmers here are classified as those less than 35 years old in 1985. This Chapter will begin by a review of their financial characteristics. This is followed by an analysis of several financing options which could be used by beginning farmers to become established. This leads to recommendations to address the needs of those who wish to enter the industry, or to help re-establish those who cannot continue under their current financial structures.

## A. BEGINNING FARMER OPPORTUNITIES

Traditionally, beginning farmers are characterized as having high investment costs and borrowings coupled with relative inexperience and developing management skills. The analysis in Chapter Four showed that beginning farmers in 1985 had excess debt in the order of $\$ 1.9$ billion. In addition, 8.9 percent of this group were considered to be insolvent. Although these farmers have the lowest levels of equity, they have the highest equity requirements and the greatest potential for equity appreciation.

Current and expected income conditions suggest that much of this excess debt is above the long-term repayment capacity of these farmers. Solutions which would subsidize the debt to some acceptable level, or set it aside for a period of time, are unrealistic. Such recommendations would apply only where the debt is temporarily in excess of the repayment capacity of the farmer.

The mechanisms to which farmers have had to resort to finance their entry into agriculture over the past 10 years have, for many, proven to be unsuccessful. Table 6.1 summarizes their financial characteristics in 1985.

Table 6.1
Financial Characteristics of Stage I Farmers by Income Level 1985

| Characteristic |  | Medium Income ${ }^{(\mathbf{1})}$ | High Income ${ }^{(\mathbf{1})}$ |
| :--- | :---: | :---: | :---: |
| Average Assets | $(\$)$ | 253,104 | 519,004 |
| Average Debt | $(\$)$ | 94,396 | 233,979 |
| Average Net Worth | $(\$)$ | 158,708 | 285,025 |
| Average Sales | $(\$)$ | 53,603 | 183,645 |
| Debt/Asset Ratio |  | 0.373 | 0.451 |
| Debt Service Ratio | 0.3 | 1.5 |  |
| Return on Investment ${ }^{(2)}$ | $(\%)$ | 1.45 | 7.29 |
| Number of Farmers |  | 15,915 | 15,560 |

(1) Income classes represent the following ranges: medium, sales of $\$ 30,277$ to $\$ 81,999$; and high, sales of $\$ 82,000$ and over.
(2) Return on investment is calculated as the sum of net cash income, interest expenditure and off-farm income, less $\$ 18,000$ for living costs, expressed as a percentage of average assets.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

A number of suggestions have been made by witnesses for meeting the needs of beginning farmers, and attracting new entrants to replace those who are going to retire over the next several years.

Compared with other farmers in Stages II and III, this group is exposed to the highest level of financial risk. The high income farmers with a debt-to-asset ratio of 0.45 are particularly vulnerable. This level of debt, on average, is not in the long-run repayable.

The industry has tended to view the problem of beginning farmers as a lack of sufficient low-cost credit. The traditional policy response has been programs which have increased the supply of debt financing and subsidized interest costs. The classic design has been a fixed-rate subsidy for a specified time, or a gradually decreasing subsidy over the initial development period.

The assumption behind such programs has been that the debt-carrying capacity of the business will grow over time and that there will be a point when the business can "graduate" to paying market interest rates. However, the load of debt which under subsidy conditions was repayable, is not repayable at market interest rates at any level of management ability.

Long-term mortgages amortize only a minor percent of the original loan over the first 5 -to-10-year period, leaving the business with unacceptable levels of debt.

In addition, the availability of subsidized credit is capitalized into the cost of the original farm, equipment, quota, or other assets, further exposing the business to long-term risk.

In consideration of the needs of new entrants to agriculture, a refocusing of the roles of the credit system and debt financing is necessary. The use of debt as a financing mechanism to acquire ownership of farm assets results in a level of speculative risk that this group of farmers cannot bear.

The analysis of the economic profile of farmers has helped identify characteristics and needs of farmers who have entered the industry over the past 10 years and leads to a recognition of the opportunities for new entrants. In the 1970 s, high inflation rates and subsidized interest rates led to abnormal incentives for individuals to enter agriculture. Availability of credit and relatively low management requirements reduced many of the classic barriers to entry. Many farmers entered the industry by acquiring full-sized units, using significant amounts of borrowed capital, and investing in land of marginal productive capacity. Management skills, particularly in marketing, investment and financial risk management were not necessarily commensurate with the scale and complexity of the business. Accounting control and monitoring systems were seldom utilized. Most of these farmers are now in Stage II of the development cycle, having lost ownership and control because of low retained earnings and falling asset values.

Testimony of witnesses and our analysis suggest that today's conditions are now more favourable for entering the industry than they have been for many years. Concern is expressed that the former mistakes of encouraging farmers into the industry under artificial conditions, such as subsidized interest rates are not repeated. The needs of beginning farmers include access to:

- sufficient investment opportunities (this need has been enhanced due to current stress conditions);
financial control systems; and entrants;
appropriate financing which includes a mix of debt, owned equity, external equity, leases, and which offers the flexibility to adjust the financing mix with time and financial servicing ability;
adequate training and skill development opportunities and support, particularly during the phasing-in period of new
management support systems for marketing, investment and financial management services, and to make accessible new technology alternatives and value-added diversification options.

In consideration of the above needs of beginning farmers, a program could be developed and coordinated by the FCC. The problems of the FCC's high risk loans and their eventual resolution have relevance to the design of a beginning farmer program. Real estate assets which the FCC will continue to accumulate over the next several years could present opportunities for new entrants with the necessary complement of supporting operating resources, skills development, and management services to phase into agriculture. The FCC itself could package a portion of its recovered real estate assets for eventual lease and purchase by farmers. To facilitate the entry of farmers and enhance the ability to exercise purchase options, investment features should be considered in the package. The use of a Registered Farm Savings Plan is one option which was recommended by the Federal-Provincial Task Force on Agricultural Finance. Funds put aside and eventually used for the farm purchase would attract reduced taxes.

Alternatively, a Trust to hold assets could be established on behalf of the federal government. A Trust is a legal entity which would provide the investment management of a pooled farm real estate fund. Farmers participating in the venture would lease land from the Trust, and have the option to purchase shares or trust units on an annual basis. These trust units would be turned over to the Trust when the farmer wished to exercise the purchase option as partial payment for the land. This is a form of equity financing for beginning farmers. An example is worked out to help explain the entry options for farmers with alternative financing forms of leasing, through a trust (equity) concept and with mortgage financing.

A farmer wishes to enter agriculture (or an existing farmer wishes to expand the existing operation). The individual wishes to purchase a $\$ 100,000$ parcel of real estate. Three financing alternatives (Table 6.2) are evaluated for acquiring control of this asset:

- mortgage financing, at interest rates of 12.0 percent, with 20 -year amortization;
- lease financing with an annual investment option for savings of reduced mortgage payments, with option to purchase; or
- equity financing through an Investment Trust.


## Table 6.2 <br> Comparative Evaluation of Asset Purchase with Alternative Financing Options

| Options and Assumptions | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mortgage Option |  |  |  |  |  |
| Principal and Interest Payment ${ }^{(1)}$ | 13,388 | 13,388 | 13,388 | 13,388 | 13,388 |
| Property Value | 100,000 |  |  |  | 127,628 |
| Mortgage Value ${ }^{(2)}$ | 100,000 |  |  |  | 91,183 |
| Equity in Property | 0 |  |  |  | 36,445 |
| Lease Financing, with Purchase and Investment Option |  |  |  |  |  |
| Lease Payment | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Property Value | 100,000 |  |  |  | 127,628 |
| Annual Investment | 8,388 | 8,388 | 8,388 | 8,388 | 8,388 |
| Cumulative Value Investment Fund (at 7\%) |  |  |  |  | 48,237 |
| Required Mortgage (Property |  |  |  |  |  |
| Value - Investment Fund) |  |  |  |  | 79,391 |
| Lease plus Financing through |  |  |  |  |  |
| Trust (Equity Financing) |  |  |  |  |  |
| Lease Payments | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Property Value | 100,000 |  |  |  | 127,628 |
| Annual Share Purchase | 8,388 | 8,388 | 8,388 | 8,388 | 8,388 |
| Cumulative Share Value (at 5\%) ${ }^{(3)}$ |  |  |  |  | 46,349 |
| Required Mortgage (Property |  |  |  |  |  |
| Value - Share Value) |  |  |  |  | 81,279 |

(1) Annual payments amortized for 20 years at $12.0 \%$ on $\$ 100,000$.
(2) At the end of five years, $\$ 8,817$ of the principal has been paid.
(3) Share value accumulates at $5 \%$ or the same rate as land inflation.

These financing options are assessed from the perspective of annual cash flow costs and the equity in the property at the end of the investment period. The property is assumed to inflate at 5 percent per year.

The first option (mortgage finance) results in the highest annual cash flow costs, and under this assumption of inflation, leads after five years to a modest accumulation in equity of $\$ 36,445$ in the property.

This option is most dependent on future land price inflation as the annual mortgage costs would not allow excess revenue for savings or equity building.

The second option (lease-purchase with an investment feature) provides the opportunity to have lower annual ownership costs, and the ability to accumulate equity for purchase of the property at term. There is no direct means of benefiting from appreciation over the term of the lease. The equity in the property, assuming the investment fund is used to acquire the property, is $\$ 48,237$. This option is most preferable when savings rates are higher than land inflation rates, as used in this example.

The third option (use of a formal mechanism such as an Investment Trust) will allow the operator to benefit from lower lease payments and the savings to be invested in shares or trust units thereby incorporating any land price changes. This option ensures a better matching of the investment fund (trust shares) to the land market.

The analysis of these financing options points out first, that there is low potential to accumulate equity and ownership through mortgage financing, except in extremely inflationary conditions; second, that a lease-purchase program, particularly for farmers becoming established, should be accompanied by an investment feature. In the above example, the standard bank investment vehicle provided for greater equity accumulation due to the assumption of lower land price inflation. When land price inflation is greater than savings rates, the share purchase is more attractive. In after tax dollars, the equity financing alternative would be significantly more attractive as the shares are treated as capital gains and the savings as income.

In the Committee hearings, several witnesses referred to the necessity of having established business standards for people wishing to enter the
industry. In addition to no identifiable standards, there is no well-developed facility or service whereby individuals can receive information, counselling, investment, and financial and risk management support to become established in agriculture as a career. A fragmented service is offered primarily in the form of extension services by provincial governments. The partial involvement of government in this area has meant that the private sector has not played a significant role. The next section elaborates on improvements required in management information.
4. The Committee recommends that the federal government support the development of a complementary set of beginning farmer financial services initiated and possibly coordinated by the Farm Credit Corporation and with the involvement of private industry, and provincial governments. The specific elements of the program would include:
(i) a needs analysis of beginning farmers and of the services they require to establish careers as agricultural producers;
(ii) a set of standards for the management skills and experience requirements for beginning farmers;
(iii) using recovered FCC properties, opportunities for beginning or other farmers to establish themselves through lease-purchase options; and
(iv) the extension of the right by the FCC to own property beyond five years to allow it to enter into long-term leases.

## B. FARM MANAGEMENT SERVICES

A number of witnesses, including many farm organizations and financial institutions, have identified the need for better farm-level information, farm management practices, and accounting control systems. The federal government announced a $\$ 13$ million Farm Management Initiative in December 1987 for cost-shared arrangements with the provinces to research ways of improving management skills. The Senate Standing Committee on Agriculture and Forestry in its Report of April 1988 supported the need for a Farm Management Information System in Canada.

The Standing Committee supports the initiatives taken to date by the federal government in support of farm management. The Committee identifies several areas where these needs are particularly critical.

The Farm Debt Review Boards, discussed in Chapter Three, could benefit from such assistance. Both farmers applying to the Board, and panel members themselves could benefit from enhanced training, skills development and support services. Of particular concern is the relative degree of solvency for farmers after signed agreements have been ratified. A considerable number of farmers left in uncertain financial situations, risk a high probability of failure within a year or two. Better information and analysis of what constitutes unacceptable risk and viability so that more durable decisions and permanent solutions can be found would improve the long-term effectiveness of the Boards.

Beginning farmers, in particular, could benefit from a complete and coordinated set of farm management services, including training and skills development.

Several elements are necessary to overcome the farm management and information system deficiencies in Canada:

- A consistent and supported set of concepts, standards and accounting principles is required as a basis for a farm management and information system. Canada has continued to wrestle with this issue for many years, as has the United States. The industry, farmers, lenders and policy makers must work cooperatively to establish this base.
- A coordinated data base of farm-level data must be established. Canada lacks accurate and comprehensive data on farm-level finances, cost of production and related economic variables. This particular deficiency retards the understanding of the current debt situation and of how debt financing has impacted on the industry over the past 10 to 15 years. It also places a barrier to the development and understanding of new alternatives.
- With consistent standards, principles, concepts, and good data, better and more business-oriented training courses and farm business management and related programs can be developed for
farmers. These courses could specialize in the needs of beginning, established and retiring farmers.
- The development of a national, and particularly a private sector-based industry, has been impeded due to the lack of a comprehensive information system, but more importantly, has not been able to compete with the two levels of government which have provided varying levels of service on a no-cost basis. Indications are that the private sector is willing to invest capital and developmental resources for the establishment of a private sector coordinated farm management service, but only if it does not have to compete with the government. It is important for the government to signal the private sector that there could be a role for it to play.
- The potential to utilize farm-level experience to advise and counsel farmers particularly in conjunction with the Farm Debt Review Board process must be developed. This could be modelled after the Counselling and Assistance for Farmer Program (CAFP) set up in Saskatchewan.

5. The Committee supports improving farm management and recommends that the federal government in cooperation with the provinces encourage the industry to:
(i) develop consistent farm management definitions, concepts and accounting systems;
(ii) work toward the development of farm-level information systems for use by all parts of the agricultural sector, including farmers, government, financial institutions, suppliers, marketing agents and educators; and
(iii) encourage a private sector farm management service.

## CHAPTER SEVEN

## ESTABLISHED FARMERS

This Chapter will review the financial and risk characteristics of farmers who would normally be considered well established in the industry. The evidence shows that this is not the case. The Chapter will proceed to evaluate the impact of interest costs on farmers and leads to recommendations with respect to interest stabilization and mortgage instruments which may better stabilize real borrowing costs. A central focus in the Chapter is the role that alternatives such as equity financing could play in helping competent farmers who may be inappropriately financed.

## A. ECONOMIC PROFILE

In a favourable economic climate, established farmers have gradually accumulated equity through retained earnings and appreciation of assets. They have acquired management skills and experience which would typically encourage them to seek expansion, diversification or value-added activities in order to enhance their operations. By this phase a more balanced distribution in the business between earning capacity, debt, and financing costs would normally prevail.

In Chapter Four, however, we saw that farmers at this stage of development held $\$ 3.2$ billion of excess debt (Table 4.11). Although some 57 percent of this group were in a stable financial position, 27 percent were in moderate stress, and a further 16 percent were in severe stress and in the insolvent category.

Because of the investment conditions prevalent when these farmers became established, the statistics portray a very different set of circumstances from that traditionally expected. On some farms, equity gain is stagnant or eroding and earnings are being consumed by debt servicing. Although economic conditions in certain sectors are quite conducive to expansion, these farmers do not have the financial capability to embark on development plans. Their requirements, in addition to debt reduction, are:
stability of financing costs and removal of financial uncertainties;

- financial control and management support systems; and
$\circ$
dependable future returns to equity.

The debt which these farmers are facing is obscuring their inherent management skills and capacity to remain viable. Theirs is perhaps the most difficult debt adjustment problem to solve. They are farmers who are in mid-career, have a full-sized farm unit under their control, are quite productive, but suffer from a serious debt problem. Table 7.1 summarizes two of the income categories of farmers who are representative of this stage.

## Table 7.1

Financial Characteristics of Stage II Farmers by Income Level 1985

| Characteristic |  | Medium Income $^{(\mathbf{1 )}}$ | High Income $^{(\mathbf{1 )}}$ |
| :--- | :---: | :---: | :---: |
| Average Assets | $(\$)$ | 315,982 | 648,435 |
| Average Debt | $(\$)$ | 77,433 | 227,781 |
| Average Net Worth | $(\$)$ | 238,549 | 420,654 |
| Average Sales | $(\$)$ | 54,170 | 205,288 |
| Debt/Asset Ratio |  | 0.245 | 0.351 |
| Debt Service Ratio | 0.1 | 1.7 |  |
| Return on Investment ${ }^{(2)}$ | $(\%)$ | 1.87 | 6.6 |
| Number of Farmers |  | 23,560 | 29,970 |

(1) Income classes represent the following ranges: medium, sales of $\$ 30,277$ to $\$ 81,999$; and high, sales of $\$ 82,000$ and over.
(2) Return on investment is calculated as the sum of net cash income, interest expenditure and off-farm income, less $\$ 18,000$ for living costs, expressed as a percentage of average assets.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

A significant number of these farmers are possibly not in a position to continue farming. For those who are good managers and producers, but have considerable excess debt, the solutions are less apparent.

The Table divides the farmers of this stage into medium and high income categories. Those in the high income group have an investment of nearly $\$ 650,000$, double that of the medium income farmers. They have three times the debt at $\$ 228,000$, resulting in a net worth on average of $\$ 421,000$. Their high level of gross sales, compared to the medium income group is the first indication of their earning capacity. The estimated return on assets of 6.6 percent is high, compared with less than a 1 percent rate of return for the lower income class.

With an average debt level of $\$ 228,000$, the high income group will have debt payments in the order of $\$ 36,000$ to $\$ 45,000$ per year assuming current market interest rates, and typically structured debt between short, intermediate and long-term. The average high rate of return of 6.6 percent will give these farmers $\$ 43,000$ for debt service. In essence, this group of farmers are on average utilizing all their retained earnings for debt service rather than equity accumulation. Future equity building will be dependent on land value changes. This situation is very risky, particularly in the western provinces where land values are anticipated to drop further over the next several years. As the analysis represents the average, there are a high proportion of farmers who will not be meeting their debt payments.

This high income group has a higher than average capability to generate profits before financing costs. Their problem is the inappropriate capital structure. The medium income group has much less income-generating ability and is more exposed to risk of insolvency.

## B. ALTERNATIVE MORTGAGE INSTRUMENTS

## 1. Costs of Borrowing

The availability of debt capital and its cost are primary considerations in agricultural finance. In the Committee's hearings, some witnesses stressed the need to subsidize its cost. Others referred to the capitalization impacts of low-priced debt or subsidized credit. Basic questions arise about the cost of credit. When is it "too high" and under what conditions could the case be made for interest subsidies? Do the benefits of interest subsidies become capitalized into higher future asset prices?

To understand some of the answers to these questions, it is instructive to define and calculate the real cost of borrowing money. Table 7.2 provides
a review of interest rates over the past 17 years. Real interest rates are normally defined as the nominal or stated rate less the inflation rate as measured by the Consumer Price Index. The traditional inflation rate is not totally applicable to the agricultural sector. A more realistic measure of the cost of borrowing is to compare the nominal cost of borrowing to the income return on the asset being financed. Using this measure termed Real Agricultural Interest Rate (RAIR), Table 7.2 shows how real borrowing costs fell and became negative in the 1970s, and how in recent years they have risen.

The extent to which real interest costs are "too high" and require subsidization or adjustment, or are "too low" and induce capitalization of debt use and asset values, can be approximated through the concepts of capitalization and subsidy potential in Table 7.2. The capitalization potential is defined as the amount by which RAIRs fall below the repayable long-term rate. The subsidy potential is defined as the amount by which RAIRs are above the repayable long-term rate. In a long-term context, there is the potential for capitalization in the form of higher farm land values and excessive use of debt to occur when RAIRs drop below the long-term repayable rate. The analysis suggests that capitalization impact forces were in evidence in 1971 through 1976. Conversely, interest costs impose excessive hardship and negative equity impacts when the RAIR cost of borrowing rises above the long-term repayable rate as was particularly true in the 1980s.

If inflationary returns are considered as part of the returns which can be used to repay debt, the capitalization and subsidy implications are obscured. The evidence suggests that financing over the late 1970s and possibly in much of the 1980s continued to be structured such that repayment of debt was reliant on both income returns and capital appreciation. Beginning in 1978, the subsidy potential began to increase and peaked in 1981. This mismatch between debt instrument design and the income characteristics of the industry contributes significantly to the financial risk of the industry.

The analysis presented in the Table leads to several important conclusions. One, in the first half of the 1970s, RAIR costs were very low and inflationary. In the late 1970s and up to 1987, those costs were deflationary. Two, real costs are critical to risk management and business viability. Controlling real agricultural interest costs, not nominal interest rates, potentially stabilizes financial risk within the sector. Stabilizing nominal interest rates, however, will result in large variations in the RAIR, leading either to low costs accompanied by steep inflation and excessive debt use, or to high costs, with numerous farm failures and insolvencies. In
essence, any financing instrument, debt or equity, or combinations of both, should be designed to correlate the repayment costs with the income returns to the enterprise, thereby stabilizing the real costs of capital.

Table 7.2
Nominal and Real Agricultural Interest Rates Canada, 1971-1987

| Year | Nominal <br> Long-Term Average Interest Rate ${ }^{(1)}$ | Rate of Income Return to Assets | Real Agricultural Interest Rate ${ }^{(3)}$ | Repayable <br> Long-Term <br> Rates ${ }^{(4)}$ | Capitalization Potential | Subsidy <br> Potential |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | - percent |  |  |  |
| 1971 | 6.80 | 3.9 | 2.90 | 6.0 | 3.1 | -- |
| 1972 | 6.80 | 4.5 | 2.30 | 6.0 | 3.7 | -- |
| 1973 | 6.70 | 8.6 | -1.90 | 6.0 | 7.9 | -- |
| 1974 | 7.30 | 7.8 | -0.50 | 6.0 | 6.5 | -- |
| 1975 | 7.80 | 7.1 | 0.70 | 6.0 | 5.3 | -- |
| 1976 | 8.90 | 4.5 | 4.40 | 6.0 | 1.6 | -- |
| 1977 | 9.00 | 2.9 | 6.10 | 6.0 | -- | 0.1 |
| 1978 | 10.50 | 3.4 | 7.1 | 6.0 | -- | 1.1 |
| 1979 | 10.80 | 3.2 | 7.6 | 6.0 | -- | 1.6 |
| 1980 | 13.24 | 2.2 | 11.04 | 6.0 | -- | 5.04 |
| 1981 | 15.67 | 3.1 | 12.57 | 6.0 | -- | 6.57 |
| 1982 | 14.29 | 2.0 | 12.29 | 6.0 | -- | 6.29 |
| 1983 | 12.78 | 1.2 | 11.58 | 6.0 | -- | 5.58 |
| 1984 | 13.06 | 1.6 | 11.46 | 6.0 | -- | 5.46 |
| 1985 | 12.27 | 2.2 | 10.07 | 6.0 | -- | 4.07 |
| 1986 | 11.73 | 3.2 | 8.53 | 6.0 | -- | 2.53 |
| 1987 | $10.59^{(2)}$ | 3.3 | 7.29 | 6.0 | -- | 1.29 |

(1) Long-term average interest rate on credit extended by all lenders.
(2) Long-term interest rate under the Farm Credit Act used as a provisional estimate.
(3) Real agricultural interest rate (RAIR) equals nominal rate less income rate of return.
(4) Repayable long-term rate is the rate of interest a farmer could pay based on the long-term income rate of return to assets of 3.81 percent and a 60 percent debt-to-asset ratio ( 40 percent equity).

Sources: AgriTrends Research Inc.; Farm Credit Corporation, Farm Credit Statistics, various issues.

Many well-intentioned financial instruments or government policies have destabilized the sector due to their focus on nominal interest rates. The Farm Credit Corporation's previous policy of 29-year fixed-interest rate mortgages is one example. Through the 1970s this fixed-interest rate policy resulted in very low real borrowing costs as returns rose and rates were
constant and offered at concessionary levels. For most of the 1970s, the FCC did not respond, by virtue of its conservative lending practices to the excessive debt demand that the low real borrowing costs induced. The continuation of the long-term fixed-interest rate policy through the high interest period of 1981 and 1982, though lower than market rates, increased real borrowing costs as market rates dropped in 1983 and 1984. This necessitated an interest write-down program for FCC borrowers.

The potential need for an interest rate subsidy or for a reduction in debt use should be assessed considering the real cost of capital relative to the long-term returns of the sector; it should be designed so that over time the real agricultural rates are stable. For example, providing for a significant interest subsidy over an extended period could have serious inflationary, capitalization, resource use misallocation effects and induce excessive debt use should an economic recovery subsequently occur. If such a program is considered necessary, it should be designed to adjust dynamically and to maintain financing costs at an acceptable level. The Commodity-based Loan Program recently offered by the FCC is an example of a financing instrument which attempts to lock in the costs of debt at a constant level, whether future economic conditions worsen or improve. Some of the initial criticism of the program by farm organizations was a consequence of not fully understanding that its purpose was to assist those farmers who could afford 6 percent real rates, and that it did not allow the benefits of credit to be capitalized into higher values and increased debt use.

The previous paragraphs have described the role that interest rates can play in both capitalizing or deflating asset values. A primary conclusion is that widely variable real agricultural costs of debt capital have played a major role in destabilizing the agriculture industry. As illustrated in Table 7.2, real agricultural interest rates have varied from a low of almost -2 percent in 1973, to a high of 12.57 percent in 1981.

It is apparent there is a need to stabilize those costs. Witnesses have in some instances suggested that the sector requires stable interest rates, but have usually not clarified if they are recommending stable real or nominal rates. As we have seen, stabilizing nominal rates for most agricultural enterprises would result in increased volatility in the repayment ability of the farmer. For example, locking in farmers' interest rates at a fixed nominal rate would lead to artificially low borrowing costs when returns rose or to excessive borrowing costs when agricultural returns dropped. This would lead
to either excessive borrowing and inflation or to high levels of financial stress.

It is suggested that efforts be made to develop mechanisms which would, as much as possible, stabilize the real borrowing costs for farmers. The objectives would be to:

- stabilize borrowing costs over time;
- minimize the inflationary or deflationary impacts of borrowing;
- contain an insurance element which would allow credit reserves to be accumulated in periods of low real costs and allow payouts in periods of high real costs; and
- provide an objective signal or criteria to assist policy makers in assessing the need for interest subsidization.

There are several directions financing mechanisms can take to stabilize real agricultural interest rates.

## 2. Indexed Loans

Indexed financing instruments were first considered by the Economic Council of Canada in 1981 as an appropriate tool to finance the industry. Indexed loans or mortgages are issued at a rate reflecting the real returns of the industry, and the balance of the returns come through inflation of assets or prices. The Commodity-based Loan Program of the FCC introduced in 1985 was the first such instrument offered to agriculture. The Shared-Appreciation Mortgage concept developed in the next section is also a form of indexed loan supported by the Committee.

## 3. Interest Stabilization Plan

The Committee supports efforts to develop a voluntary system of stabilizing the real agricultural interest rates paid by farmers. The plan, based on the analysis in the previous section, would first establish a target RAIR considered to be neutral to impacts on the capital structure of the industry. A system of providing for the establishment of credit reserves when the RAIRs fell below this target, and for a depletion or pay out from the reserves when RAIRs rose above the target, is suggested. The possibility of designing
a credit reserve fund, based on the same concept as the commodity stabilization plans, should be evaluated. The fund would, to the extent possible be self financing. Possibly, at the outset, some tri-partite support could be used to seed the fund. This Interest Stabilization Plan would provide a formal mechanism for farmers to diversify their investment and financing risks.
6. The Committee recommends that the federal government research and evaluate the possibility of developing an Interest Stabilization Plan for farmers. It is suggested that such a plan be analyzed from the perspective of sharing costs among farmers and both levels of government.

## 4. Variable Rate Mortgage

In addition to the interest stabilization plan, there is the potential to design a mortgage instrument which helps to stabilize the financing costs for farmers by correlating the rate with some measure of profitability. There are many ways in which a Variable Rate Mortgage could be designed. The principle is for the mortgage to be issued at market rates and for the scheduled payments to fluctuate around this level. One mechanism for accomplishing this is to adjust the financing costs to the relative change in output an input prices. For example, a $\$ 100,000$ loan is written at current market rates of 11 percent. The scheduled payment for a 20 -year repayment period is approximately $\$ 12,558$ per year. The annual payment is adjusted, based on the relative change of commodity prices and input costs as defined by:

## Index of output prices <br> Index of input prices

The ratio of indexes is measured relative to the year in which the loan is taken, which will always be 1.0 at that time. If for example in one year, output prices have increased by 10 percent and input prices have increased by 4 percent, the factor to calculate the adjustment to be made to the payment is:

$$
\frac{1.10}{1.04}=1.058
$$

The payment payable would then be $\$ 12,558$ times the 1.058 factor which is $\$ 13,286$. This amount greater than the scheduled payment of $\$ 728.00$ would be applied against prepayment of the loan, could be put into a credit reserve as discussed in the interest stabilization plan, or the amortization period could be lengthened. This mechanism would allow financing costs to be stabilized around market interest rates and better correlate payment with ability to pay.
7. The Committee recommends that a Variable Rate Mortgage be considered for implementation. This program would allow nominal interest rates to vary with market conditions, reflecting relative changes in costs and prices.

## 5. Shared-Appreciation Mortgage

A form of mortgage repayment plan applicable to situations where a significant proportion of total income is derived from capital appreciation of assets is the Shared-Appreciation Mortgage (SAM). SAMs are generally offered at an interest rate of some fixed proportion of market interest rates, and with the balance of the lender's return being derived from participation in either gross income, net income, asset appreciation, or some combination of the former. Such mortgages have been commonly used in the real estate market to finance apartments, hotels and condominiums.

There are many combinations of interest rates and participation which can be incorporated in the mortgage, all influenced by perceptions of risk and debt-servicing capacity:
(i) $\quad 75 / 50 \mathrm{SAM}-75$ percent of current market interest rate and 50 percent of future land value inflation. At an 11.5 percent market interest rate, the mortgage would be written at 8.625 percent. Based on the mortgage value, the lender would share in 50 percent of any positive change in the land value from today's current value;
(ii) $60 / 75$ SAM - 60 percent of market rates and 75 percent of inflation; or
(iii) $50 / 100 \mathrm{SAM}$ - 50 percent of market rates and 100 percent of inflation.

A debt restructuring option based on this concept could be designed as shown below. This could include, possibly through the Farm Debt Review Boards, the evaluation of the financial capability to repay debt. Obviously if there is no ability, or if no accommodation can be found from the lenders, there may be no choice except for the farmer to leave the business. If there is a reasonable level of management, and ability to generate reasonable returns before debt costs, the rate of interest repayable by the farmer could be assessed. In the financial profile of many established farmers, a 5.5 to 6 percent rate would be possible for those with a debt-to-asset ratio of about 70 percent. The debt could be restructured into a shared-appreciation mortgage agreement. The lender could participate in 100 percent of future appreciation. Regular appraisals of the security would be required. If future appreciation averages 5 percent over a five-year term, the lender would receive a 10.5 to 11 percent return.

## Example 7.1

## Current Situation

|  | 1988 |  |
| :--- | :---: | :---: |
| Assets | (\$) | 566,000 |
| Debts | (\$) | 413,000 |
| Net worth | (\$) | 153.000 |
| Mortgage payments | (\$) | $59,028 /$ year $(11.5 \%, 15$-year amortization $)$ |

Payment beyond capacity, unlikely to be in operation in five years.

Under Shared-Appreciation Mortgage (SAM)
Debt converted to SAM at 6\% and 20-year amortization.
Payments reduced to $\$ 36,007$ for an annual savings of $\$ 23,021$.
At the end of 5 years in 1993, the situation has become:

1993
Assets (5\% inflation)
Debt
Mortgage appreciation
Total debt
Net worth
(\$) 349,711
(\$) 114,104
(\$) 463,815
(\$)

722,375


463,815
$\underline{258,560}$

At termination, assumed to be the sale of the farm, the lender realizes on the accumulated appreciation of the mortgage which will be $\$ 413,000$ appreciated at 5 percent for five years or $\$ 114,104$. The ending net worth of the farmer will be the ending value of the assets $(\$ 722,375)$ less the mortgage value of $\$ 349,711$ and the mortgage appreciation of $\$ 114,104$. This leaves the farmer with $\$ 258,560$ net worth at the end of the period compared with \$153,000 in 1988.

As with all options, this one has positive and negative features. Positively, the mortgage instrument clearly matches payment to both the levels and to the two types of income which the industry normally receives. The option allows good managers with excess debt to remain on the farm. It provides a market-driven mechanism to deal with the debt issue over the long run, compared with a set aside, which is dependent on cash income rising in the future to allow the debt costs to be reinstated. On the negative side, to realize on the lender's mortgage appreciation, the business must be transferred or sold, or repurchased by the farmer.

The shared-appreciation mortgage offers the flexibility to deal with farmers in varying financial situations. As the amount of debt as a proportion of assets increases, the mortgage must demand a lower interest rate component and a high participation component in order to allow debt servicing. As a SAM interest rate of less than 5 or 6 percent is likely not acceptable to the industry, no accommodation can be made to maintain this farmer in agriculture. As the debt-to-asset ratio is reduced, the relative interest rate (repayable interest rate) increases, until the farmer can pay all the costs from the income returns. This is a 100 percent of market interest rate, and zero participation mortgage (conventional mortgage).

In this context, such a program is self-targeting, as financial need will dictate the structure of the SAM or the overall requirement for assistance. Accountability remains with the farmer and equity is maintained among other farmers who have chosen not to debt finance to such an extent.
8. The Committee recommends that the government consider the advisability of developing an alternative form of farm financing based on the principles of the Shared-Appreciation Mortgage concept including:
(i) the use of this financing tool to increase the effectiveness of the Farm Debt Review Board process;
(ii) its usefulness for restructuring high risk FCC accounts; and
(iii) the treatment of the appreciation in the mortgage value as a capital gain for taxation purposes.

## 6. Equity Financing

Equity financing in various forms may offer advantages to farmers with excess debt to restructure their businesses. As discussed in Chapter Five in the policy analysis, this may become an effective alternative means of reducing debt.

From the testimony of witnesses, it became evident that many did not see how this financing technique could be structured to apply to agriculture. A major concern was that equity financing would result in less ownership of farmland by farmers. Their perception was that farmers would be selling owned equity in their operation, and would have difficulty in buying it back.

In the application of equity financing studied by the Committee (see Appendix A), ownership is not taken and the potential for future ownership is enhanced. The concept allows for equity to be held in shares of the equity financing vehicle. Because debt is exchanged for equity capital, the reduction in debt servicing costs would allow a better cash flow. Any surplus funds could be used to purchase additional shares that could be used to repurchase the land. The consequence on the farmer's balance sheet is that existing owned equity remains at previous levels, and that it is now more secure, given the lower leverage and risk levels. Related to farmers' concerns about possible loss of ownership under an equity financing scheme is a lack of understanding of their relative ownership under a mortgage financed situation. A mortgage security represents a claim on all assets encumbered by the mortgage instrument, and in cases of default, through either personal covenants or federal law, can result in a seizure of additional assets. The presumption of ownership by a farmer on a farm property encumbered with a high ratio mortgage is largely illusory.

As discussed earlier, studies in the United States have shown that ownership is more likely achievable if the business is more adequately financed to reflect its earning capabilities and with a sharing of risk.

Equity financing could be a mechanism allowing farmers to sell a portion of their assets to a third party investor, the funds so generated used to reduce debt or for other purposes, and the property leased back on a long-term flexible basis with repurchase options. The original equity position of the operator can be preserved and the cash flow can be improved since debt financing costs at market interest rates are substituted by lease rates. With this restructuring, the business may be less exposed to financial risk, has a higher level of cash flow to reinvest in the business, and should have a greater likelihood of long-term viability.

Investors would include retiring farmers who could leave their money in farming with greater security. Lenders who have large holdings of foreclosed land and cannot sell it because it would reduce land values, and investment funds and individuals looking for long-term investments would also be likely candidates. Long-term investment in land could produce returns about equal to an equity investment through a stock exchange. Suitably structured, an equity financing scheme could produce for investors dividends and capital gains with their inherent tax advantages.

The application of equity financing to a highly indebted, high income farmer is as follows.

The analysis of Census farms provides the following financial characteristics for a severely stressed farmer:

| Total investment | $\$ 565,592$ |
| :--- | :---: |
| Debt outstanding | $\underline{\$ 413,191}$ |
| Net worth | $\$ 152,401$ |
| Debt-to-asset ratio | .73 |
| Debt payments | $\$ 64,000$ (11.5\%,10-year average |
| amortization period) |  |

These operators are generating an above-average return on investment, but a large negative return on equity (net worth) as a result of the high costs of debt servicing. Further drops in land values pose a threat to their solvency.

Using traditional options to solve the financial problems of these individuals will not be effective. This business has the capacity to pay approximately $\$ 34,000$ in financing costs per year. Considering principal and interest payments, this would allow about $\$ 250,000$ of debt to remain. Ignoring the fact that this business has excess debt permanently in excess of its ability to repay it, the interest rate could be reduced to about 4 or 5 percent and the business would produce a cash flow. This would likely mean that this rate would have to remain at this reduced level indefinitely. Alternatively, an amount of debt could be set aside without interest cost. In this example, some $\$ 163,000$ would have to be set aside. Again, this would likely have to remain as a set aside as the long-term debt capacity would unlikely ever increase to repay it. Neither of these types of solutions deal with the debt reduction which is required.

An equity financing solution is applied to this situation. The nature of the solution could be for a portion of the operation to be sold to an equity financing intermediary or trust, cash and shares received in return, and the property leased back with purchase and investment options.

Specifically, for example, 60 percent or $\$ 340,000$ in assets are exchanged for $\$ 272,000$ in cash and $\$ 68,000$ in Trust units or shares. The cash is used to reduce debt by that amount, the property is leased at 5 percent, the shares earn a dividend based on the returns to Trust assets, assumed to be 4 percent.

The business is left with the original owner equity of $\$ 152,401$ intact. The reduced cash flow cost of the business allows the flexibility for the manager to concentrate on maximizing his operating returns to reinvest them in the business or purchase additional shares with the objective of eventually converting these into cash for use in the repurchase if desired.

## Example 7.2

The balance sheet impacts on the business are:

| Restructured Business Assets | Debt and Equity |  |  |
| :--- | :---: | :---: | :---: |
| Owned assets | $\$ 225,592$ | Mortgage | $\$ 141,191$ |
| Trust shares | $\$ 68,000$ |  |  |
| Total | $\$ 293,592$ |  | $\$ 141,191$ |
| Operator net worth (equity) |  | $\$ 152,401$ |  |
| Lease option $\$ 340,000$ |  |  |  |

The income and expense impacts on the business are:

| Financing cost, previous | $\$ 64,000$ |  |
| :--- | :--- | :--- |
| Financing cost after, |  |  |
| Mortgage $(11.5 \%, 15$ years $)$ | $\$ 20,180$ |  |
| Lease cost $(5 \%$ on $\$ 340,000)$ | $\$ 17,000$ |  |
| Total | $\$ 37,180$ |  |
|  | $\$ 2,720$ | $\$ 34,460$ |
| Less share revenue $(.04 \times 68,000)$ | $\$ 34,460$ | $\$ 29,540$ |

Equity financing as a financial option could work particularly well for farmers with debt above 20 to 30 percent of assets to restructure debt, increase retained earnings and reduce risk. For farmers with debt above 80 or 90 percent of assets, to qualify and make such an option work, some debt would have to be written off. The unfortunate outcome is that if equity financing is not available, there is no other solution but to exit for such farmers. All the debt will be written off through foreclosure, or similar remedies. Both the lender and the farmer then lose.

Figures 7.1 and 7.2 examine the potential use of equity financing for farmers at varying levels of owner equity, rates of return, and combinations of equity and debt financing. Figure 7.1 represents a business with a 3 percent return on assets. With levels of owner equity of less than 40 percent, there is no capacity to use outside equity. The business has a negative growth rate (growth rate is the net return after financing cost to investment). Even
a total replacement of the debt with equity will hardly allow the business to break even. With 60 percent owner equity, there is some limited potential to profitably use equity to provide a positive rate of growth. For low return operations, few can productively use equity financing, and debt financing is even less applicable.

Figure 7.2 provides the same analysis for a high return operation (5 percent). Here, equity financing begins to make sense in increasing the operator's rate of growth for farmers with 20 percent owner equity. For example, a farm with 40 percent owner equity would have a negative rate of growth of 2 percent with the other 60 percent of capital financed with debt. Substituting this debt with outside equity would increase the rate of return to a positive 2 percent growth rate.

For the 12,000 farmers in the severe stress category (medium and high income classes), who have for the most part above-average returns on investment, there is no option for restructuring of debt except one that includes a permanent reduction of debt through techniques such as equity financing. Solutions which subsidize or set aside the debt will not deal with their financial problems. An economic recovery will also have minimal impacts on their status.

The testimony of many witnesses did not always show a full understanding of this financing concept, its impacts on farmers, and the assurances that would be required for equitable sharing of rights between farmers and investors. In addressing the key issue of investor incentives, witnesses were almost universally opposed. Yet there still appears to be support for incentives to encourage debt usage, such as private sector loan guarantees.

The Western Canadian Wheat Growers, and other witnesses felt that one of the deficiencies and obstacles facing equity capital coming into the industry is the lack of an intermediation process, such as exists for debt, to provide these services efficiently and effectively for farmers.

Figure 7.1
Rates of Growth for Low Return Farm Operations
At Varying Levels of Owner Equity and Proportions of Equity Financing


Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

Figure 7.2
Rates of Growth for High Return Farm Operations At Varying Levels of Owner Equity and Proportions of Equity Financing


Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

The Committee believes that equity financing needs to be considered by farmers to augment traditional debt financing. Further, it sees the private sector as being instrumental in developing the concept. The provinces, by virtue of their control of land ownership legislation have an important role.

To test the acceptibility and practicality of equity financing as a mechanism to restructure debt, it is suggested that a pilot project or other limited-scale approach be undertaken by private industry in cooperation with interested provinces. The federal government should be prepared to support this initiative in the provision of technical assistance and in the partial offset of start-up costs. The federal government's role should be to ensure consistency of process and an equitable sharing of risks and benefits between farmers and investors.

Government and private lenders may be faced with managing large blocks of foreclosed land because of future land market conditions. Participation in an equity mechanism may prove to be a suitable alternative. The use of investor incentives, such as private sector guarantees, should not exceed the level of incentives now given in debt financing.
9. The Committee recommends that the federal government send a positive signal to the farm sector, investment community and the provinces that it would support the private sector development of an intermediation process for equity financing.


 2













## CHAPTER EIGHT

## FARMERS IN TRANSITION

This Chapter will address the transitional problems of older farmers, farmers facing no alternative but to leave farming and those still in farming but on marginal land. Farmers retiring from agriculture presently face special problems. The 1986 Census of Agriculture identified the structural issues of the rising average age of farmers, partially attributable to a restricted rate of exit of retirement age farmers. Current economic conditions are delaying their retirement plans. There is also an increasing number of farmers who will be making the transition from agriculture for economic, financial and managerial reasons. There are other farmers who will be required to modify their land-use farming practices of highly erodable and marginal land. It is suggested that the debt capacity on such land for the most part is negligible, and until taken out of production, this land and its debt will be obstacles to development. The transition period for these farmers will be difficult.

## A. RETIRING FARMERS

Declining asset values over much of the 1980s have created problems for retiring farmers whose real estate is worth less than anticipated at the beginning of the decade. In some parts of Canada, retiring farmers are experiencing a "liquidity trap" for though many desire to leave the industry, few buyers are available and they find themselves competing with financial institutions in the sale of their assets. The traditional mechanism of accumulating equity primarily through land as a retirement pension plan has proven for many farmers to be a high risk venture, totally dependent on being able to reach retirement age at the peak of an inflationary cycle in the value of the assets.

Several witnesses reminded the Committee of the old adage that farmers traditionally live poor and die rich. There has not been much evidence to support this claim. Analysis of the land-market cycles would suggest that over the past 15 years there was only one period between 1977 and 1981 where the timing, market liquidity and values made it true.

The characteristics of farmers in the third stage of economic development or those who are approaching retirement are summarized below by income level (Table 8.1).

Table 8.1
Financial Characteristics of Farmers in Stage III, by Income Level 1985

| Characteristic |  | Medium Income $^{(\mathbf{1})}$ | High Income $^{(\mathbf{1})}$ |
| :--- | :---: | :---: | :---: |
|  | $(\$)$ | 342,901 |  |
| Average Assets | $(\$)$ | 35,371 | 108,268 |
| Average Debt | 307,530 | 555,361 |  |
| Average Net Worth | $(\$)$ | 52,220 | 199,944 |
| Average Sales | $(\$)$ | 0.104 | 0.215 |
| Debt/Asset Ratio |  | 1.8 | 2.7 |
| Debt Service Ratio | 0.92 | 5.7 |  |
| Return on Investment ${ }^{(2)}$ | $(\%)$ | 33,335 | 26,425 |
| Number of farmers |  |  |  |

(1) Income classes represent the following ranges: medium, sales of $\$ 30,277$ to $\$ 81,999$; and high, sales of $\$ 82,000$ and over.
(2) Return on investment is calculated as the sum of net cash income, interest expenditure and off-farm income, less $\$ 18,000$ for living costs, expressed as a percentage of average assets.

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

These data raise questions about the financial welfare of this group of farmers. In 1985, the high income farmers had total assets of over $\$ 700,000$ with debts of $\$ 152,000$ resulting in a market value net worth in excess of $\$ 0.5$ million. Updating the Census data to simulate the conditions of 1987 , it is found that these high income operations have begun to deteriorate, particularly from the perspective of debt levels. The debt was calculated to have increased over the two-year period by 15 percent to almost $\$ 175,000$. This is an indication that some very wealthy farmers are experiencing cash flow deficits on operations and are forced consequently to use borrowed capital.

The reason for this may be that some high income farmers have reached an age where they would like to retire, but lacking liquidity in the land market, have delayed doing so in the hope that market conditions will strengthen in the near-term. These farmers will not realize inflationary net worths as great as they had anticipated at the beginning of the decade.

Another issue that affects farmers in this stage of economic development and which has some bearing on the increase in debt over the past few years, is the amount of debt they have had to absorb associated with the failed attempts of their sons and daughters to establish themselves in agriculture in the early 1980s. Witnesses mentioned that parents sometimes co-signed loans for family members, and eventually had to assume the payment obligations at a time when they themselves were considering leaving farming.

Traditionally, farmers who are retiring, once the assets are disposed of, invest the net equity in deposits and other savings instruments of financial institutions. While in some cases retiring farmers take back mortgages from purchasers of their farms, for the most part, the funds to refinance the next generation must be re-lent to the sector through traditional financial intermediation.

In this context, there exists a role for the federal government, possibly through the FCC, to design mechanisms to facilitate the retirement process of such farmers. Such mechanisms could include the development of:

- guarantees to encourage retiring farmers to take back mortgages from the new purchasers;
- guarantees to encourage retiring farmers to retain a minority equity interest in the original property, and allow the new purchaser the option to acquire this equity over a scheduled time period; and
- an Agricultural Investment Certificate or Vendor Bond instrument which would allow for the accumulation of funds for agricultural loans. These funds could be offered providing for a fixed-real rate of interest, say 3 percent, plus a further inflationary return based on the productivity of the farm sector. These funds would possibly provide a source of funds for the FCC, and could finance the Interest Stabilization Plan proposal outlined in Chapter Seven.

10. The Committee recommends that the federal government, possibly through the FCC, in consideration of the needs of retiring farmers:
(i) perform an assessment of the needs of retiring farmers;
(ii) consider a process to provide guarantees both of debt and equity instruments between retiring farmers and new entrants;
(iii) evaluate the need and the design of an investment instrument to help recycle savings of farmers more directly back into the agricultural sector; and
(iv) assess the potential for retiring farmers to participate in an equity financing body.

## B. STRESSED FARMERS

The financial characteristics of farmers captured in the 1986 Census of Agriculture reveal the extent of stress in eastern and western Canada (Table 8.2).

Table 8.2
Number of Farmers in Insolvency or in Severe Stress, 1987
(Farmers with Sales Greater than $\$ \mathbf{3 0 , 0 0 0}$ )

| Stress Class | Eastern Canada | Western Canada | Totals |
| :--- | :---: | :---: | :---: |
| Insolvent | 2,972 | 8,360 | $\mathbf{1 1 , 3 3 2}$ |
| Severe | 3,918 | 7,738 | 11,656 |
| Totals | $\mathbf{6 , 8 9 0}$ | $\mathbf{1 6 , 0 9 8}$ | $\mathbf{2 2 , 9 8 8}$ |

Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

Clearly, the financial problems of farmers have shifted toward the western provinces. The total number of farmers in the most severe difficulty has not changed dramatically over the past several years. What has changed is the geographic distribution of stress and the fact that as farmers have departed because of financial problems, they have been replaced by others with deteriorating positions. Because of the inappropriate financial structures of many farmers in the severe and the moderate stress categories, there is a migration toward the higher risk categories.

Typically, in these stress categories, investment returns before consideration of debt financing costs are reasonable. More rarely, their returns cannot support any debt, and can barely cover operating expenses.

The 23,000 farmers identified have the potential to leave the industry under expected income levels and traditional debt restructuring such as interest subsidies, set asides, etc. The impact of these options is primarily to modify the timing of their exit. Those in the insolvent category, have debt-to-asset ratios on average greater than 1.0. Those in the severe stress category have debt-to-asset ratios greater than 0.7 on average.

There appear to be three options for farmers in this high risk group. One, these farmers can leave farming through voluntary action or forced foreclosure actions. Two, as discussed in the previous Chapter, for those of this group who have good returns on investment, and some owned equity, these people can be assisted through equity financing mechanisms, when and if they can be put in place.

A third option applies to those who have control of good-sized units, reasonable rates of return on investment, but almost no owned equity. What these farmers will require, if it is felt desirable to retain them in agriculture, is a re-establishment package. In many respects, these farmers need to be re-established both from the perspective of recapitalizing the business, and often from managerial assistance and training. The starting point may be a reduction or elimination of the debt through a quit claim to the lender, access to training and management support resources, and access to capital resources to manage, operate and potentially acquire ownership in the future either of the same unit, or perhaps a different operation. This option currently does not exist for farmers. The one option for people in financial difficulty is to leave farming and take advantage of assistance from the Canadian Rural Transition Program (CRTP).

The use of the CRTP has been modest relative to the FDRB process. The financial assistance available within the FDRBs particularly through the concessions available from the FCC make it a competitor to the CRTP. It has created an artificially attractive financial incentive to stay in agriculture when in reality it would be more beneficial for farmers to leave agriculture. If there were a more equitable distribution of benefits between the two programs, individuals leaving agriculture might be persuaded to make more
use of the CRTP. Hopefully, the recent additional financial incentives will help remedy this imbalance.

The recent enhancements to the CRTP have increased the financial assistance to help farmers leave farming by acquiring skills and eventually moving into a different career. The CRTP is not designed to help farmers with low equity to become re-established in agriculture. In another part of this report, the Committee recommends lease-purchase options as a financing alternative. While lease-purchase options with the FCC may help solve the short-term cash flow problems of low equity farmers, it will not necessarily secure their long-term survival. These farmers also need access to suitable existing or specially designed farm management programs that will enhance their business skills in agriculture and provide support to diversify and to take advantage of other technology.
> 11. The Committee recommends that the CRTP should support training which could be integrated with lease-purchase or equity financing programs offered by the FCC or the private sector.

## C. LAND-USE MANAGEMENT

Central to the resolution of the debt problem, particularly in the prairie region of Canada is land resource management. Throughout the 1970s, in response to high grain prices and high income rates of return to assets, large areas were intensively farmed and areas of grasslands were converted to grain production. The short-term economic returns coupled with above average growing and harvesting conditions resulted in land-use modifications unsustainable over the long run. Increasing special assistance for drought or excess moisture was necessary. Soil erosion and soil salinity were by-products of intensive crop management practices on marginal land.

The extent of this problem has been documented in other studies (Senate Agriculture, Fisheries and Forestry Committee, Soil at Risk, 1984; Agricultural Institute of Canada, Will the Bounty End? 1984; and Science Council of Canada, A Growing Concern: Soil Degradation in Canada, 1986). The incidence of drought in parts of the prairie region in 1988 adds poignancy to resolution of this problem. The potential drought areas of Saskatchewan and Alberta and parts of Manitoba are unfortunately correlated with high levels of excess debt.

The problems of debt and land resource management are directly related. It is unlikely that much of the debt can be reduced until the marginal crop production areas of the prairies are reconverted to land uses such as forage, pasture, reforestation or recreation. Incentives may be required to change these land-use patterns. The recent Special Canadian Grains Program did not address this problem, as farmers would have been penalized for taking land out of grain production and reseeding it for other uses such as forage.

Studies by the Prairie Farm Rehabilitation Administration have provided an analysis of this problem and have suggested mechanisms for rationalizing the use of marginal land.

The United States introduced their Conservation Reserve Program (CRP) in 1986 as part of the 1985 Food Security Act. The objectives of this program are to:

- reduce wind and water erosion;
- protect long-term capability to produce food and fibre;
- reduce sedimentation, improve water quality, create better habitat for fish and wildlife;
- curb production of surplus commodities; and
- provide needed income support for farmers.

To date, 23 million acres have been enrolled under the program. Enrollment into the CRP establishes a 10 -year contract prohibiting haying, grazing or commercial harvest of any crop and requires that the land be placed in a conservation use with adequate grass and tree cover.

Farmers submit bids to the U.S. Government to put land into the CRP, specifying the rental they would require and the cost of land-use conversion. The government in effect leases the farmers land by paying the amount of annual rent specified in accepted bids and provides for half the cost of establishing a vegetative cover. This might be a program applicable to Canada.

Another incentive could include amendments to the SCGP to provide deficiency payments for land which is being permanently converted to grass or forage, etc.

Since much of the debt is beyond the capacity to be repaid, one other possibility might involve setting aside or permanently reducing the debt on marginal land if long-term resource management practices are followed. A debt reduction program could be considered where investment by the farmer in converting land to forage, or other similar uses would be matched with a corresponding reduction of debt.

One means of doing this, which concurrently would deal with the problems of highly erodable, saline and marginal soils, is described. For land which is so identified, the farmer could bid to have the land placed in a reserve. The federal government rather than paying the farmer a lease payment to effect the conversion of this marginal land into a more sustainable use, could assume the annual payment obligations which are against the property. The existing debt, which would be limited in amount to the productive value of the property, and may require some lender concessions, would be rescheduled to a 10 -year amortization schedule, with the payments being assumed by the government to the extent the farmer met the requirements of the land use modifications. If at any point, the farmer changed the use back to intensive crop production, the individual would again resume responsibility for debt repayment. The debt reduction-conservation agreements would be of 10 -year duration, and if held to maturity, would eliminate the debt against the land. The land held under the agreements, would not qualify for lender security, or for deficiency payments. For example, marginal land valued at $\$ 200$ per acre, with $\$ 150$ debt against it at 11.5 percent would cost $\$ 23$ per acre per year.
12. The Committee recommends that the federal government building on work already done on land-use management, evaluate the most effective mechanisms and incentives for converting marginal land to its highest and best long-term use with appropriate treatment of the debt on this land.

## GLOSSARY

Agricultural Investment Certificate (or vendor bond) is a financial instrument which could facilitate the accumulation of funds for agricultural loans by offering investors a fixed real rate of interest plus a further return related to the productivity of the farm sector.

Canadian Rural Transition Program (CRTP) was introduced by the Government of Canada, in 1986, to provide financial support, job counselling, training, relocation assistance and self-employment grants or wage subsidies to farmers leaving farming because of financial difficulty.

Capital Markets are financial markets where long-term loanable funds for debt and equity financing are obtained. They are comprised of all institutions that act as channels for the supply and demand of long-term capital and that buy or sell the financial instruments (bonds, debentures and other securities) representing the claims on funds from capital markets.

Capital Return is the change in the value of land, buildings, machinery and other assets over the year, adjusted for building repairs, and expressed as a percentage of the beginning value of the same assets.

Coefficient of Variation is a statistical measure that enables comparison of the relative degree of variation in different distributions summarized by averages, by expressing the standard deviations as percentages of their respective averages. A small percentage indicates less variation in the annual receipts or prices represented by an average.

Conservation Reserve Program (CRP) was established by the United States government, through the Food Security Act (Farm Bill) of 1985, to convert up to 25 million acres of highly erodible cropland from the production of agricultural commodities in return for annual rental payments and assistance with the cost of conservation measures.

Counselling and Assistance for Farmers Program (CAFP) was established by the government of Saskatchewan to provide counselling and operating loan guarantees to farmers in financial difficulty. It was focused on farmers having a net worth less than $50 \%$ of assets and not exceeding $\$ 500,000$.

Credit-Worthy indicates that a borrower has a satisfactory repayment record with lending institutions.

Debt Capacity is the amount of debt which a business should be able to repay from net income in the long-term. It may be estimated from the capitalized value of the amount of income available to repay debt (i.e., such income $\div$ interest rate) or from the long-term average ratio of income returns to interest rates.

Debt Financing is the furnishing of the necessary funds for a business by means of borrowed money that must be repaid on specified dates or on demand and that becomes a liability or debt against the business.

Debt Service Ratio (DSR) is a measure of the short-term cash-flow capability of the business which indicates specifically the ratio of the money available for the repayment of debt relative to the total costs of debt payments. In this study, the debt service ratio is calculated as:

$$
\text { DSR }=\frac{\text { gross sales }- \text { operating expenses }- \text { living costs }+ \text { off-farm income }}{\text { principal }+ \text { interest costs }}
$$

If the ratio equals 1.0 , there is sufficient income to meet the annual debt payments. Ratios of less than 1.0 indicate that a correspondingly smaller part of the total debt payments can be paid during that year.

Debt-to-Asset Ratio (DAR) is a measure of long-term solvency and financial stress, determined by the ratio of total liabilities or debts divided by total assets. A ratio of 0.5 which indicates that debts constitute $50 \%$ of total assets, is considered to be the dividing line between moderate and severe stress when the debt service ratio falls below 1.0 .

Equity Financing is the use in the farm business of outside capital from investment sources, to reduce the amount of debt or to provide funds for expansion. The equity capital shares in the net profits or losses of the business and in residual returns.

Excess Debt is the amount of total liabilities or debt that exceeds the debt capacity of the business.

Financial Intermediation is the process whereby funds or savings from lenders are channelled to borrowers to meet their needs for capital.

The institutions which facilitate these transactions are called financial intermediaries.

Gross Sales comprise total cash receipts from market sources and government payments.

Grown-up Census is the term used to describe the simulated farm finance and debt conditions of 1987 . These simulated data were derived from the 1986 Census of Agriculture by making adjustments at the provincial level in the census data for known changes between 1985 and 1987, in input and output prices, real estate values and farm debt. Equipment investment and the quantity of production were assumed to be the same as in 1985.

Holding Period is the length of time an asset is held by its owner.
Income Categories refer to two income groups of farmers in 1985, defined as follows: medium income, those receiving between $\$ 30,277$ and $\$ 81,999$ in gross sales; and high income, those receiving $\$ 82,000$ and over in gross sales.

Income Return is calculated as annual farm cash receipts less operating expenses (excluding interest payments), less depreciation and an $18 \%$ charge against cash receipts to provide a return to management and unpaid family labour, expressed as a percentage of total farm assets at the beginning of the year.

Interest Stabilization Plan is a mechanism to stabilize real borrowing costs for farmers, which is based on an insurance concept of accumulating credit reserves in periods of low real costs and making payouts in periods of high real costs.

Lease Financing is the use of a lease agreement to gain control of assets.

Mortgage Financing is the use of a debt instrument which gives the lender a lien on property, to obtain funds to purchase assets.

Non-Performing Loans are loans that a lender determines to have a high risk of ever being repaid. The chartered banks usually consider a loan to be non-performing if interest has not been paid for 90 days. The precise definition varies among institutions.

Productive Value is a measure that was formerly included in the federal Farm Credit Act, to determine the income generation capacity of a particular farm with regard to the repayment of a loan.

Real Agricultural Interest Rate (RAIR) is an indicator of real interest rates in the agricultural sector, determined by subtracting the rate of income return on farm assets from the nominal interest rate on long-term credit extended in the same year. It reflects the real cost of money in agriculture more closely than the difference between nominal interest rates and the Consumer Price Index.

Real Borrowing Cost is the real rate of interest to a farmer on borrowed money. It is a critical factor in risk management and farm viability.

Registered Farm Savings Plan is a mechanism to encourage the tax-sheltered saving of capital to be used eventually for the purchase of a farm.

Shared-Appreciation Mortgage (SAM) is a type of mortgage currently used in some urban real estate markets, and which is offered at a fixed proportion of market interest rates plus a further return to the lender from a share of gross income, net income, asset appreciation or a combination thereof.

Special Canadian Grains Program (SCGP) was introduced by the Government of Canada, in 1986, to compensate farmers for the depressed market prices of grains and oilseeds, which are being caused by world grain surpluses and the international subsidy war.

Special Farm Financial Assistance Program (SFFAP) was introduced by the Government of Canada, through the Farm Loans Interest Rebate Act of 1982, to provide interest rebates equivalent to $4 \%$ of the principal on loans approved during a two-year period commencing on June 28, 1982. The program was introduced to provide short-term relief from the adverse effects of high interest rates, to farmers in need of such assistance for the survival of the farm business.

Stages of Development associated with age categories in this study indicate three periods in the business life cycle of farmers. Stage I represents beginning farmers consisting of producers under age 35. Stage II represents established or expanding farmers aged 35 to 49. Stage III represents farmers in transition or retiring farmers consisting of those aged 50 and over.

Standard Deviation is a statistical measure of the variability of a set of numerical values about their arithmetic average. It is in the same units as the average and indicates for normal distributions, that about $68 \%$ of the values are within the range of the average plus or minus the amount of its standard deviation.

Stress Categories are four classes of financial risk that are defined generally as follows: insolvent, debt-to-asset ratio of 0.9 or more and with a debt service ratio of 0.75 or less; severe stress, debt-to-asset ratio between 0.5 and 0.9 with a debt service ratio of less than 1.0; moderate stress, debt-to-asset ratio of up to 0.5 and with a debt service ratio of less than 1.0 ; and stable, mainly farms with a debt service ratio equal to or greater than 1.0

Tandem Program is a unique and innovative guaranteed loan program developed by the government of Quebec to promote long-term farm credit from private institutions. Loans are approved by the provincial Farm Credit Bureau and carry an interest rate subsidy equivalent to one-half of the difference between $4 \%$ and the prime rate as outlined in the legislation, an Act to Promote Long-Term Farm Credit from Private Lending Institutions.

Trust is a legal entity to hold farm assets and to provide investment management of a pooled real estate fund for the purpose of equity financing.

Variable Rate Mortgage is a type of mortgage designed to stabilize real borrowing costs, by raising or lowering those costs in accordance with market interest rates and returns to agriculture. The level of interest rate assistance would vary with either market interest rates or the rate of returns.
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## APPENDIX A

## PROTO-TYPE AGRICULTURAL FINANCING PROPOSAL

## Preface

The attached document outlines a proposal which could serve as a framework for discussion of the issue of Equity financing.

The federal government has provided a significant level of financial assistance to the agricultural industry over the last several years. In spite of this assistance, it is apparent that there remains a significant number of farmers who are in financial difficulty primarily due to excessive debt. In this context, it is necessary to consider options which may help to lower the debt loads of these farmers and increase their viability. An alternative such as that detailed here may be one tool which may effectively deal with the farm debt problem.

The proto-type is developed recognizing that its eventual acceptability will be dependent on the support it receives from farmers, farm organizations and government. It is obvious that there must be strong support by the respective provincial governments which control land ownership legislation. The possible introduction of such a proto-type must be initiated at the provincial level given the differences in attitudes and agricultural characteristics amont the provinces.

The proposal is developed recognizing that there are many alternative structures, policies and procedures to those suggested in the document. Some of the alternatives or choices have been identified at the conclusion of this document.

## PROTO-TYPE AGRICULTURAL FINANCING PROPOSAL

## Introduction

This document outlines an operating proposal which has the potential of providing an alternative source of capital and supporting financial services for Canadian farmers. It is being described in the present form for discussion purposes recognizing that its structure is likely to vary to accommodate unique provincial circumstances.

Excess debt remains a threat to the livelihood of a significant number of farmers in spite of continued high levels of cash flow assistance to the sector by both federal and provincial governments. Estimates of insolvent farmers range from 10,000 to 14,000 farmers, and there is an additional group of farmers whose cash flows are deteriorating due to high debt loads and low commodity prices. Estimates of the number of farmers in this group are less clear but forecasts have been provided of 30,000 to 40,000 farmers.

Off-farm capital (equity capital) can potentially reduce the farmers' debt load, reduce the cash flow financing costs of the operation and lower the risk of further erosion of the farmers' equity.

The following sections will provide the detailed specifics of a means whereby such capital could be supplied to the sector by a private company. The potential role of all participants which could include government is outlined together with the options and policy choices which must be addressed.

## I. THE FUNCTION OF EQUITY FINANCING

## Definition and Objectives

Equity financing is often not a clearly understood concept. It is a common source of capital to many non-agricultural businesses. A business can obtain capital by selling shares or ownership in exchange for cash. This can be done by the operator finding individuals who wish to invest in the business (private market) or selling shares in a market such as the Toronto Stock Exchange (public market).

For a variety of reasons, farmers have not had a ready access to equity markets as a source of capital. The consequence has been a heavy reliance on debt capital and on capital appreciation through asset inflation as a means to develop new businesses, build equity and to transfer assets between generations. This has required farmers to assume a level of cost and risk over the deflationary 1980's which for many of them has created financial difficulties.

The proto-type described in this paper outlines a mechanism for farmers to obtain access to the equity capital markets.

## The Need and Targeting of Equity Financing

Farms have been traditionally financed with debt capital and with any ownership capital which the operator can put together. The amount of debt which can safely be used to capitalize a farm business is related to the return on assets or income expected in the business and the cost of debt. A typical return on farm assets is in the order of four percent. If interest costs are ten percent, the business could use debt up to 40 percent of the total capital value of the assets and be able to repay it. (Ratio of return on assets to cost of debt). A rough measure of an allowable debt-to-asset ratio is the ratio of the expected returns on assets to the repayment cost of debt. There is a need for equity capital (either generated by the operator or outside the business) to cover the difference between the investment value of the business and the safe level of debt which the business can sustain. It follows that the more owner equity available, the less the need for outside capital.

The diagram illustrates the debt capacity and the equity requirements for a typical farm business earning a 4 percent return on assets at varying costs of debt financing.

As the cost of debt increases, the debt capacity decreases, and concurrently the need for equity capital increases. For example, if the operator has only a limited amount of owned equity capital, the business will be facing a considerable equity capital deficiency at relatively high interest rates.

## Diagram I.

Debt Capacity and Equity Requirements at Varying
Interest Rates and a 4 Percent Asset Return


Ways to Deal With the Equity Deficiency of a Farm: An Example
There are several ways that the equity deficiency facing farmers can be eliminated. The various options and their costs are evaluated with a typical example.

## EXAMPLE

Assume a farm situation with a $\$ 500,000$ total investment in today's values, with $\$ 375,000$ of debt at 12 percent and with an estimated return on assets of 4 percent under current commodity price conditions. While the farmer is a good manager, untimely investment decisions have resulted in the current debt load. This business is not sustainable under these conditions. The debt capacity of the business is approximately $\$ 165,000$ (ratio of asset return to interest rate, multiplied by the investment value; $4 \div 12 \times \$ 500,000$ ). The equity requirement of the business is $\$ 335,000$ ( $\$ 500,000-\$ 165,000$ ). As the operator has an owned equity of $\$ 125,000$, an equity deficiency exists of $\$ 210,000$ ( $\$ 500,000-\$ 290,000$ ). Three options are examined to remove this equity deficiency.

1. Interest subsidy

The government could reduce the interest rate on the debt capital until the costs become manageable. In this case, an interest rate of 5.3 percent could be adequate to stabilize the cash flow deficiency of the business. ${ }^{1}$ The annual cost of the subsidy would be 6.7 percent ( $12-5.3$ ) on $\$ 375,000$ or $\$ 25,125$.
2. Income support

The government could provide deficiency payments to the operator to increase the rate of return on assets to a sufficient level to meet the cash flow cost of the debt. A return of 9 percent would be adequate to service the debt, or a income subsidy of some 5 percent or $\$ 25,000$ per year. ${ }^{2}$

[^6]Return on Assets required

$$
\begin{aligned}
& =\frac{\text { Cost of Debt } \times \text { Amount of Debt }}{\text { Investment Value }} \\
& =\frac{12 \times \$ 375,000}{\$ 500,000}=9.0 \%
\end{aligned}
$$

3. Outside equity financing

As a further alternative, the equity deficiency could be met through outside capital in the amount of $\$ 210,000$ being attracted to the business. If this capital was provided by private industry, the costs to the government would be nothing. If the government wished to
subsidize the farmer's lease payments, the cost could be up to \$10,500
per year.
The first two options, in addition to likely costing more, do not deal with the underlying structural problem of excess debt. In both these cases, the debt remains. These approaches can only work if there is an imminent turn-around in commodity prices which would generate the eventual income to support this debt.

The target group which would benefit from or have a need for equity capital financing are viable farmers who are currently experiencing a equity deficiency. As we see, the equity deficiency facing farmers is a function of economic factors such as low returns, excess debt, high interest rates and low owner-equity.

## II. AN EQUITY FINANCING PROTOTYPE

## Operating Structure

The effective delivery of farm equity capital and supporting financial services revolves around the establishment of a private enterprise Farm Management Investment Company. Such a company will have access to capital from a variety of sources (retiring farmers, Canadian investors and possibly international investors) and will offer to invest in farm operations where capital restructuring will benefit the farmer. It will also provide a full range of management services to administer acquired properties as well as supporting farm management services in the areas of finance, investment, and marketing.

Diagram II schematically illustrates the proposed operation of the investment company and its interface with farmers, the investment community, and financial institutions.

Diagram II
Farm Management Investment Company


The Farm Management Investment Company (FMIC) would provide the vehicle to initiate investments, manage leases, farm properties and supply a supporting set of farm management services to the industry. FMIC would have working on its behalf a complement of Farm Investment Managers who would be existing farm management consultants and other professionals. These managers would work directly with farmers performing a variety of functions including:

1. Provide a contact for farmers.
2. Work out investment plans and pro-forma budgets with farmers who would possibly benefit from a re-structuring of their balance sheets through replacement of debt with equity capital and through farm management assistance.
3. Manage property leases and monitor the performance of the assets controlled by FMIC.
4. Provide to lessees and to other farmers access on a fee-for-service basis farm management services concentrating in the areas of finance, investment and marketing as described below.

FMIC, in effect, would be acting on behalf of investors wishing to invest in agriculture, providing them with expertise and an established mechanism. This structure would allow investment to be sourced from a variety of mechanisms: for example, pooled funds through real estate investment trusts, pension funds, or private individuals.

Both FMIC and the Farm Investments Managers would work directly with financial institutions and provide potential alternatives for farmers within the Debt Review Board mediation process.

The following sections detail the specific operating policies and procedures proposed in the proto-type.

## Investment Policy

Typically, the company will be attempting to find investment opportunities where there are long-term benefits both to the farmer and to the investor. There is no benefit to the farmer in attempting a
restructuring which does not provide a excellent prospect of long-term viability and profitability. This is also in the best interest of the investor. The investor is interested in a long-term stable investment which affords the opportunity to participate in asset appreciation.

Purchased assets, typically farm real-estate, would be acquired at the appraised value reflecting current economic conditions and the ability of the asset to generate income. Subsequent transactions where assets are sold and where the farmer is buying back the assets will be evaluated under the same methods.

All properties managed by FMIC would be appraised on a regular basis either yearly or every eighteen months.

Several types of investment techniques are anticipated. For non-incorporated farms, the investment will take the form of a direct purchase of a divisible interest (for example, a half-section of land) or a partnership agreement may be negotiated whereby both the farmer and the investor share in net profits, losses and assets. With incorporated farms, the investor may purchase a specific number of common shares in the farm corporation.

To assist farmers to eventually repurchase their properties, several investment options would be made available. The farmer would be encouraged to purchase investment units (where a trust exists) or could be offered a stock purchase option which would pay a return to the farmer, and would allow capital to accumulate to assist in the re-purchase of the property.

## Property Management and Leases

Leases will be offered with terms up to 20 years at the option of the farmer with the rates re-negotiated frequently throughout this period. The lease payments will be established on a participating basis where both the farmer and the investor share price and production risk. Examples include typical $1 / 3-2 / 3$ crop share agreements or price or production indexed leases. Flexibility will be available for alternative lease structures to meet different needs.

The farmer will be offered the right of first refusal at any time the property may be offered for sale upon maturity of the lease. The farmer
has the right to re-purchase the property at any time at the appraised value.

## Farm Management Services

In all instances, the farmer enters into a farm management services contact with the farm management company. The minimum obligation of the farmer under this contract is to provide on a regular basis a statement of the financial performance of the business.

In certain situations, where additional management resources are an integral part of the future success of the business, a formal set of services and obligations on both the farmer and the company are agreed upon and followed. The objective of these management services is to increase the productivity and profitability of the farm business to the benefit of both the farmer and the investor.

In general, the company will offer, on a fee-for-service basis, professional farm management services in the specific areas of financial management, investment planning and analysis, marketing, and risk management.

## III. TYPICAL EXAMPLES FOR EQUITY FINANCING IN CANADIAN AGRICULTURE

1. Heavily indebted farmer

An example follows of a typical client arrangement with FMIC:
Total Investment $\quad \$ 500,000$
Total Debt $\quad \$ 350,000(12 \%, 12$ year maturity, $\$ 57,448$ - annual payments amortized)

Owner equity $\quad \$ 150,000$
The business financed as such would not be able to meet all of its financial obligations. Management is expected to be adequate.

The management investment company could potentially make a offer to invest $\$ 250,000$ in the business. This would leave the operator with 50 percent ownership. The injection of funds would be applied to debt reduction. The outside equity investment is leased back to the farmer on a long-term agreement, with a participating lease payment schedule based on a 5 percent return.

After completion of the investment, the capital structure of the business would be:

$$
\begin{array}{ll}
\text { Operator owned assets } & \$ 250,000 \\
\text { Debt } & \$ 100,000
\end{array}
$$

Owner equity
\$150,000
Outside equity investment (lease interest) $\$ 250,000$

The financing costs for the farmer are:

1. Debt payments on $\$ 100,000$ at $12 \%$ and 12 years
$=\$ 16,413 / \mathrm{yr}$
2. Lease payments at $5 \%$ of $\$ 250,00$, per year
$=\$ 12,500$

Total annual payments \$28,913

The net cash flow saving to the farmer is the difference between the original financing costs of $\$ 57,448$ and the $\$ 28,913$, or $\$ 28,535$ per year.

The first benefit to the farmer is the reduction in financial costs. The second benefit is the reduced future risk to this investment. The example shows that the farmer's equity of $\$ 150,000$ was undisturbed in the recapitalization. With the lower level of debt, this owned equity is much more secure against further asset devaluations and against accumulating debt arrears.

## 2. Retiring Farmer

A second typical situation involves that of a retiring farmer who wishes to retire from agriculture, anticipates difficulty in finding a buyer in today's market and would like to hedge the risk of selling at a distressed price only to find that in a few years prices have recovered and a opportunity was missed.

The financial situation of the farmer may be:
Investment
\$500,000
Debt \$ 50,000

Owner equity $\$ 450,000$

The management investment company would offer the farmer the following alternatives:

1. Offer to purchase the farm for $\$ 500,000$. The farmer who has a need for some immediate cash could receive in exchange for the property $\$ 150,000$ in cash, and offer the balance of $\$ 350,000$ in shares or trust units. These shares would carry a dividend depending on profitability of the trust, likely in the order of 3.5 to 4 percent.
2. The shares provide the farmer with the flexibility to hedge or spread out the sale of the farm over a longer time period as the shares are redeemed by the company on an agreed upon basis or the shares are sold on the market.
3. The farmer also has the opportunity to assign the lease or shares to a family member as a mechanism to gradually transfer the farm ownership between generations.

## IV. THE ROLE OF THE GOVERNMENT

The proto-type has been developed primarily as a private enterprise approach for providing alternative investment capital to agriculture. Consequently, the objectives and the target market which would be attracted to this alternative would be limited to intermediate risk situations, where some significant owner equity remains in the business and where high average or above average management skills exist.

Farm businesses which have limited or no equity and with management skills less than average would not likely meet the investment criteria of the management investment company.

If the government felt the desire to assist a different target group than that described in the above proposal, the additional costs that this would impose on the private company would have to be identified and accounted for.

A potential target group which the government might wish to assist may be the high risk and essentially zero equity farmers applying to the Farm Debt Review Boards (FDRB's) for mediation of their debts.

The Management Investment Company could participate within the FDRB process in any of several ways:
(1) Enter into a joint venture with a lender such as FCC and the farmer where the property is purchased in exchange for cash and shares to the lender, resulting in a significant reduction in the farmer's debt. The farmer retains his equity and partial ownership (Example following provides the details of the transactions).
(2) The government provides a revenue guarantee through lease payment subsidies to the farmer and financially supports a farm management services program for the farmer.
(3) The Management Investment Company works with lenders and the Review Board process to develop workout proposals which include purchasing the lenders debt (at discounted rates) in exchange for property.

## V. OPTIONS IN ORGANIZATION AND DELIVERY OF EQUITY FINANCING

This proposal, by necessity, has had to choose between many options and policies throughout. It is important to highlight some of the major options which may exist to help focus subsequent discussions.

## 1. Role of Government

This is one of the most controversial. In addition to the overall consideration whether equity financing should be either completely developed, implemented and operated by a government institution or a private institution, several other roles of government must be considered. They include the requirements of provincial governments to amend land ownership laws where necessary, the use and implications of investor tax concessions, and the potential to amend the tax laws to allow farmers to accumulate a tax-protected stock investment fund with shares purchased to assist them buying back their farms.

## 2. Targeting and objectives

What should be the target group toward which these funds are directed? Only to viable farmers who, with a restructuring of debt, will succeed, or should efforts be made to target funds to include the very high risk farmers with excessive debt. Obviouly, the targeting and objectives are related to the role of the government wishes to play.

## 3. Valuation of assets

How assets are evaluated are critical to both the farmer and the investor. The methods employed (cost, comparable sales, or income approach) can materially affect value, ease of determination and relative objectivity. Should assets be valued differently upon initiation and expiration of the investment?

## 4. Lease options

There are many combinations and choices for the term, the frequency of rate re-negotiations, options for purchase, rights of
first refusal, risk sharing, the handling of leasehold improvements, etc. Lease options include crop share, cash lease, indexed lease, and many others.

## 5. Outside investment capital sources

This is a very controversial area. First, there is the concern whether outside capital should be permitted to invest in agriculture. This statement has to be rationalized in the context of how similarly debt capital investors (Banks, Credit Unions, Government) also directly invest in the industry. Other issues include the role of international investor capital versus investment by Canadians. Others considerations include incentives for farmers themselves to invest in their industry.

## 6. Relative farmer control and investor control

Important concerns are raised as to relative control which remains with the farmer under this type of financing, relative to debt financing. The structure employed and the mix of investors, impact on the degree of autonomy which remains with the farmer. The ability of the farmer to buy back the assets sold remains a controversial issue.

## EXAMPLE

A typical situation which may be illustrative of many such cases is:

| Assets | $\$ 500,000$ |
| :--- | :--- |
| Debts | $\$ 450,000$ |
|  |  |
| Equity | $\$ 50,000$ |

This situation is desperate in today's economic climate. The debt servicing costs at 12 percent and with a 12 year maturity would be $\$ 73,862$ per year.

As discussed earlier, with a 4 percent return on assets, with interest rate at 12 percent, the business should only have about $\$ 165,000$ in debt.

The solutions open to the FDRB's are limited in this case. The interest rate would have to be reduced to 4.4 percent to provide sufficient cash flow. Alternatively an income subsidy of $\$ 34,000$ per year is required to stabilize the business.

As the situation stands, the management investment company would not likely want to invest where the debt ratio is so high and the management level is in question. Other than purchasing the property outright and finding a new lessee, it would not consider the investment.

If it was in the interest of government to keep this operator in business, there could be a joint venture structured through the Review process. The company may offer to invest up to 50 percent interest or $\$ 250,000$ under certain conditions.

Given the higher risk of the venture, the investment funds may be placed if the government accepts non-participating shares (no coupon shares) in exchange for some of its debt. For example, of the $\$ 250,000$ investment, $\$ 125,000$ may be supplied in cash, the balance would be as non-participating shares held by the lender on behalf of the farmer. The lender would hold these as additional collateral for the remaining debt.

If the debtor in this case was the Farm Credit Corporation, for example, the corporation could apply to the Farm Debt Review fund for compensation of lost interest revenue.

The resulting situation would be:

1. FCC who originally held $\$ 450,000$ of high risk and likely uncollectable debt, could receive $\$ 125,000$ in cash from the investment company, and $\$ 125,000$ in shares and extinguishes $\$ 250,000$ of the farmers debt.
2. The remaining debt of $\$ 200,000$ would likely remain at $12 \%$. FCC would likely be compensated by the Farm Debt Review Fund for the reduction in revenue on the $\$ 125,000$ shares. For viability, it may be required that the cost of the remaining debt be reduced somewhat, with similar compensation to FCC.
3. The farmer still owns $\$ 250,000$ in assets, against which there is the $\$ 200,000$, 12 percent mortgage to $F C C$, and the operator retains his original $\$ 50,000$ in equity.

Although this is a complex set of transactions, all parties come out ahead. FCC has reduced its financial exposure significantly and has received a cash injection as well as being compensated for future revenue losses. The management company is willing to accept the risk of the investment due to the non-participating share financing. The farmer is left on the farm with his original equity and with significantly reduced financing costs.

Finally, such a restructuring would only work with a strong supporting management services contract provided by the management company. Other roles which the government could play include providing lease payment guaranties to the Investment Management Company, lease subsidies, etc.

## SUMMARY OF DEBT RESTRUCTURING

## ORIGINAL SITUATION TRANSACTIONS RESULTING SITUATION


 Wall manint acitum 3 -79 (

## WITNESSES

## Individual/Organization Date Issue

## FARM DEBT REVIEW ACT

## Agriculture Canada, Agriculture Development Branch:

- Bob Ray, Director, Special Programs;
- Ken Ash, Manager, Special Programs.

Barker, Steven, Farm Business Consultant.
Canadian Bankers' Association:

- Brian A. Farlinger, Assistant Director;
- Bill Fulton, Chief Agricultural Officer, Canadian Imperial Bank of Commerce;
- Lindsay Barfoot, Vice-President, Bank of Montreal
- Al Caldwell, Manager, Agricultural Services, Toronto Dominion Bank;
- Doug McRorie, Vice-President, Agricultural Services, Royal Bank of Canada;
- Gerry E. Chamberlain, Director General, Agricultural Services, Bank of Nova Scotia;
- Cyrille Parent, Director, Agricultural Services, National Bank of Canada.
April 1, 1987 ..... 18
April 1, 1987 ..... 18
December 9, 1987 ..... 37
June 3, 1987 ..... 31
April 14, 1987 ..... 21


## FARM DEBT REVIEW ACT

## Canadian Co-operative Credit Society:

December 15, 1987
39

- Norman Bromberger, Chief Executive Officer, Saskatchewan Credit Union Central;
- Greg Wallace, Manager of Public Affairs, Saskatchewan Credit Union Central.


## Canadian Federation of Agriculture:

May 14, 1987
25

- D. Knoerr, President;
- J. Proulx, First Vice-President;
- G. Blanchard, Second Vice-President;
- W. Hamilton, Executive Secretary.


## Christian Farmers Federation of Canada:

- Elbert van Donkersgoed, Research and Policy Director;
- Gary Sytsma, Member of Executive;
- Pat Daunt, Member of the Federation.


## Department of Agriculture:

May 20, 1987
26

- Jean-Jacques Noreau, Deputy Minister, Research Branch;
- B. Morrissey, Assistant Deputy Minister, Food Production and Inspection Branch;
- Dan Fenety, Acting Director General, Grains and Oilseeds Branch.


## FARM DEBT REVIEW ACT

## Farm Credit Corporation:

Agriculture

- Eiliv Anderson, Chairman.
- Brian Strom, Director, Lending Operations;
- Jules Modderman, Chief, Loan Administration.


## Farm Debt Review Boards:

- Douglas Neil, Chairman, Saskatchewan;
- George McLaughlin, Chairman, Ontario;
- Dennis Hueppelsheuser, Chairman, Alberta;
- Jean-Paul Clouthier, Chairman, Québec;
- Bruce Chafe; Chairman, Newfoundland;
- James Waardenburg, Chairman, British Columbia.

MacKenzie, Robert, Farm Business Consultant. June 3, 1987
April 28, $1987 \quad 22$

- Brigid Pyke, President;
- Jack Wilkinson, Second Vice-President;
- Cecile Bradley, Manager, Research and Communications;
- Max Sabey, Member, Finance Committee.

Ryder, Lawrence, Lawyer.
Wise, The Honourable John, Minister of
May 20, 1987
26
May 21, 1987 27
May 21, 1987 27
April 1, 1987 ..... 18
December 9, 1987 ..... 37
April 1, 1987 ..... 18
Ontario Federation of Agriculture:April 28, 198722
June 3, 1987 ..... 31
May 20, 1987 ..... 26

## EQUITY FINANCING AND LONG-TERM LEASES OF FARMLAND

## Canadian Co-operative Credit Society:

- Norman Bromberger, Chief Executive Officer, Saskatchewan Credit Union Central;
- Greg Wallace, Manager of Public Affairs, Saskatchewan Credit Union Central.


## Farm Credit Corporation:

- Ralph Ashmead, Manager, Research and Development.


## Government of Saskatchewan:

- Sherwin Petersen, M.L.A., Kelvington-Wadena Constituency, Legislative Secretary to the Honourable Grant Devine, and Chairman of Agriculture Caucus.

Ministry of Agriculture and Food of Ontario:

- Henry Ediger, Executive Director, Foodland Preservation and Financial Program, Finance and Administration;
- Nancy Bardecky, Director, Farm Assistance Programs, Finance and Administration.

Ministry of Agriculture of Saskatchewan:

- Jack Drew, Deputy Minister;
- Doug Maley, Director, Economics Branch.

December 15, 1987
39

September 23, 198733
September 29, 198734

December 1, $1987 \quad 35$

December 10, 198738

December 1, 198735

## FARM CREDIT CORPORATION OF CANADA

## Farm Credit Corporation of Canada: <br> February 25, 1988 <br> 47

- James Hewitt, Chairman;
- Charles Gerald Penney, Vice-Chairman;
- Brian Strom, Director, Lending Operations.


## OPTIONS FOR FINANCIAL RESTRUCTURING OF FARM DEBT

AgriTrends Research Inc., Calgary:

- Lloyd Quantz, President.

Canadian Bankers' Association:

- Brian Farlinger, Chief, Commercial Affairs;
- Gerry Chamberlain, General Manager, Agriculture Services, Bank of Nova Scotia;
- Doug McRorie, Vice-President, Agriculture Services, Royal Bank of Canada.

Canadian Federation of Agriculture:

- Gordon Blanchard, Second Vice-President;
- Sally Rutherford, Policy Analyst;
- Andreas Dolberg, Resource Analyst.

Christian Farmers Federation of Alberta;

- John Vander Meulen, President;
- John Kolkman, Research and Policy Coordinator.


## Department of Agriculture:

- George Paterson, Acting Director General, Audit and Evaluation Branch;
- Carol Motuz, Acting Director, Program Evaluation Division, Audit and Evaluation;
- Bernice Vincent, Senior Evaluation Officer, Program Evaluation Division, Audit and Evaluation Branch.

May 5, 198852

May 12, 198855

May 12, 1988
56

May 10, 198853

May 19, 198857

## OPTIONS FOR FINANCIAL RESTRUCTURING OF FARM DEBT

National Farmers Union:
May 3, 1988
50

- Wayne Easter, Chairman;
- Raye-Anne Briscoe, Regional Co-ordinator in Ontario;
- Nettie Weibe, National Women's Vice-President.
- Bill Duke, President;
- Paul Sim, Senior Policy Analyst.

Nesbitt Thomson:

- Paul Johnson, Vice President and Director of Capital Markets;
- Michael J. Butler, Government and Corporate Finance;
- Barry Randell, Manager, Ottawa Branch.

Prairie Pools Inc.:

- Garf Stevenson, President, Saskatchewan Wheat Pool;
- Charles Swanson, First Vice-President, Manitoba Wheat Pool;
- Dale Riddell, Corporate Secretary, Alberta Wheat Pool.
Western Canadian Wheat Growers Association: May 5, 1988 ..... 52

Western Canadian Wheat Growers Association:

May 5, 1988

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May 11, 198854

## SUBMISSIONS

## Individual/Organization

## FARM DEBT REVIEW ACT

Alberta Farm Women's Network
Barker, Steven, Farm Business Consultant
Barrow, Peter (Peter Barrow Communications, Guelph, Ontario)
Canadian Bankers' Association
Canadian Co-operative Credit Society
Canadian Federation of Agriculture
Christian Farmers Federation of Canada
Farm Credit Corporation
Farm Debt Review Boards
Lanskail, Donald (Mayor, West Vancouver)
McKenzie, Ryder, Barker
Ontario Federation of Agriculture
United Co-operatives of Ontario
Women for the Survival of Agriculture

## Individual/Organization

## EQUITY FINANCING AND LONG-TERM LEASES OF FARMLAND

Canadian Co-operative Credit Society
Farm Credit Corporation
Government of Alberta
Government of Saskatchewan

Individual/Organization

## FARM CREDIT CORPORATION OF CANADA

Farm Credit Corporation of Canada

## Individual/Organization

## OPTIONS FOR FINANCIAL RESTRUCTURING OF FARM DEBT

Agriculture Committee - Medicine Hat and District Chamber of Commerce
AgriTrends Research Inc., Calgary
Australian Rural Management Limited
Byshal, Mrs. Rose
Canadian Bankers’ Association
Canadian Cattlemen's Association
Canadian Federation of Agriculture
Christian Farmers Federation of Alberta
Deloitte, Haskins and Sells
Department of Agriculture
Farmers Advocate (The)
National Farmers Union
Nesbitt Thomson
Olson, Francis
Ontario Federation of Agriculture
Planche, Hugh
Prairie Pools Inc.
Ross, Bruce
Rouse, James A.
Saskatchewan M.L.A. Committee Report - Farm Finance for the Future
Union des Producteurs Agricoles
Western Canadian Wheat Growers Association

## GOVERNMENT RESPONSE REQUEST

Pursuant to Standing Order 99(2), the Committee requests that the Government table a comprehensive response to the Report within one hundred and fifty (150) days.

A copy of the relevant Minutes of Proceedings and Evidence (Issue Nos. 18, 21, $22,25,26,27,29,31,33,34,35,37,38,39,47,50,52,53,54,55,56,57$ and 58, which includes this report) is tabled.

Respectfully submitted,

Geoff Wilson,
Chairman

## MINUTES OF PROCEEDINGS

TUESDAY, MAY 31, 1988
[Text]
The Standing Committee on Agriculture met at 9:09 o'clock a.m. in camera this day, in Room 306 of the West Block, the Chairman, Geoff Wilson, presiding.

Members of the Committee present: Vic Althouse, Don Boudria, Harry Brightwell, Maurice Foster, Bill Gottselig, Jean-Guy Guilbault, Stan Hovdebo, Geoff Wilson.

Acting Member present: Walter Van de Walle for Sid Fraleigh.
In attendance: From the Library of Parliament: Sonya Dakers and Len Christie, Research Officers. Ralph Ashmead, Consultant.

The Committee commenced its consideration of the Draft Report on Options for Financial Restructuring of Farm Debt. (See Minutes of Proceedings and Evidence, Tuesday, May 3, 1988, Issue No. 50.)

At 10:56 o'clock a.m., the Committee adjourned to the call of the Chair.

THURSDAY, JUNE 2, 1988

The Standing Committee on Agriculture met at 9:16 o'clock a.m. in camera this day, in Room 308 of the West Block, the Chairman, Geoff Wilson, presiding.

Members of the Committee present: Vic Althouse, Don Boudria, Harry Brightwell, Maurice Foster, Bill Gottselig, Stan Hovdebo, Fred McCain, Geoff Wilson.

Acting Member present: Jim Caldwell for Sid Fraleigh.
Other Member present: Jack Scowen.
In attendance: From the Library of Parliament: Sonya Dakers, Research Officer. Ralph Ashmead, Consultant.

The Committee resumed its consideration of the Draft Report on Options for Financial Restructuring of Farm Debt. (See Minutes of Proceedings and Evidence, Tuesday, May 3, 1988, Issue No. 50.)

At 10:58 o'clock a.m., the Committee adjourned to the call of the Chair.

## THURSDAY, JUNE 9, 1988

The Standing Committee on Agriculture met at 9:10 o'clock a.m. in camera this day, in Room 306 of the West Block, the Chairman, Geoff Wilson, presiding.

Members of the Committee present: Vic Althouse, Don Boudria, Harry Brightwell, Maurice Foster, Sid Fraleigh, Geoff Wolson.

Acting Members present: Felix Holtmann for Arnold Malone, Jack Scowen for Bill Gottselig.

In attendance: From the Library of Parliament: Sonya Dakers and Len Christie, Research Officers. Ralph Ashmead, Consultant.

The Committee resumed its consideration of the Draft Report on Options for Financial Restructuring of Farm Debt. (See Minutes of Proceedings and Evidence, Tuesday, May 3, 1988, Issue No. 50.)

It was agreed that the Committee meet to continue discussion on the draft report of Options for Financial Re-structuring of Farm Debt on Tuesday, June 14, Wednesday, June 15 and Thursday, June 16, 1988.

At 11:36 o'clock a.m., the Committee adjourned to the call of the Chair.

TUESDAY, JUNE 21, 1988

The Standing Committee on Agriculture met at 9:20 o'clock a.m. in camera this day, in Room 269 of the West Block, the Chairman, Geoff Wilson, presiding.

Members of the Committee present: Vic Althouse, Don Boudria, Maurice Foster, Sid Fraleigh, Bill Gottselig, Fred McCain, Geoff Wilson.

Acting Member present: Jack Scowen for Harry Brightwell.
In attendance: From the Library of Parliament: Sonya Dakers and Len Christie, Research Officers. Ralph Ashmead, Consultant.

The Committee resumed its consideration of the Draft Report on Options for Financial Restructuring of Farm Debt. (See Minutes of Proceedings and Evidence, Tuesday, May 3, 1988, Issue No. 50.)

At 11:38 o'clock a.m., the Committee adjourned to the call of the Chair.

## WEDNESDAY, JUNE 22, 1988

The Standing Committee on Agriculture met at 5:15 o'clock p.m., in camera this day, in Room 705 at 151 Sparks Street, the Chairman, Geoff Wilson, presiding.

Members of the Committee present: Harry Brightwell, Maurice Foster, Sid Fraleigh, Arnold Malone, Geoff Wilson.

Acting Member present: Jack Scowen for Bill Gottselig.
In attendance: From the Library of Parliament: Sonya Dakers and Len Christie, Research Officers. Ralph Ashmead, Consultant. The Committee resumed its consideration of the Draft Report on Options for Financial Restructuring of Farm Debt. (See Minutes of Proceedings and Evidence, Tuesday, May 3, 1988, Issue No. 50.)

At 7:04 o'clock p.m., the sitting was suspended.
At 7:27 o'clock p.m., the sitting was resumed.
At 9:38 o'clock p.m., the Committee adjourned to the call of the Chair.

TUESDAY, JUNE 28, 1988

The Standing Committee on Agriculture met at 3:41 o'clock p.m., in camera this day, in Room 308, West Block, the Chairman, Geoff Wilson, presiding.

Members of the Committee present: Vic Althouse, Don Boudria, Harry Brightwell, Maurice Foster, Bill Gottselig, Stan Hovdebo, Geoff Wilson.

In attendance: From the Library of Parliament: Sonya Dakers and Len Christie, Research Officers. Ralph Ashmead, Consultant.

The Committee resumed its consideration of the Draft Report on Options for Financial Restructuring of Farm Debt. (See Minutes of Proceedings and Evidence, Tuesday, May 3, 1988, Issue No. 50.)

On motion of Harry Brightwell, it was agreed,-That the document "Proto-type Agricultural Financing Proposal" be appended to the report as Appendix C.

At 6:21 o'clock p.m., Harry Brightwell took the Chair.
At 6:24 o'clock p.m., the Chairman resumed the Chair.
At 6:26 o'clock p.m., the sitting was suspended.
At 8:10 o'clock p.m., the sitting was resumed.
It was agreed,-That the Clerk and the researchers be authorized to make such typographical and editorial changes as may be necessary without changing the substance of the Draft Report.

It was agreed,-That the Committee hold a press conference immediately following the presentation of the Report in the House of Commons.

It was agreed,-That the Chairman be instructed to report to the House to request the following Order:
-That, notwithstanding the usual practices of this House, if the House is not sitting, the report of the Standing Committee on Agriculture on Options for Financial Re-structuring of Farm Debt be deemed presented to the House on the day such report is deposited with the Clerk of the House of Commons.

At 9:28 o'clock p.m., the Committee adjourned to the call of the Chair.

The Standing Committee on Agriculture met in camera at 11:05 o'clock a.m. this day, in Room 307 at West Block, the Chairman, Geoff Wilson, presiding.

Members of the Committee present: Don Boudria, Harry Brightwell, Maurice Foster, Sid Fraleigh, Bill Gottselig, Stan Hovdebo, Geoff Wilson.

In attendance: From the Library of Parliament: Sonya Dakers and Len Christie, Research Officers.

The Committee met to consider its future business.
It was agreed,-That Bill C-112, An Act to amend the Canada Grain Act and other Acts in consequence thereof; and Bill C-132, An Act to amend the Western Grain Stabilization Act be studied in tandem.

It was agreed,-That the Honourable Charles Mayer, Minister of State (Grains and Oilseeds) and officials from the Canada Grain Council and the Department of Agriculture be invited to appear on Bills C-112 and C-132 on Tuesday, July 19, 1988.

It was agreed,-That the following witnesses be invited to appear on Bill C-112 and/or Bill C-132 on Tuesday, July 19, 1988:

Committee of Non-Participants
Prairie Pools, Inc.
National Farmers
Union Western Canadian Wheat Growers
It was agreed,-That the Committee commence clause-by-clause consideration of Bills C-112 and C-132 on Wednesday, July 20, 1988.

The Committee resumed its consideration of the Draft Report on Options for Financial Restructuring of Farm Debt. (See Minutes of Proceedings and Evidence, Tuesday, May 3, 1988, Issue No. 50.)

On motion of Maurice Foster, it was agreed,-That the Draft Report, as amended, be adopted as the Committee's Ninth Report to the House and that the Chairman be instructed to present it to the House.

On motion of Harry Brightwell, it was agreed,-That, pursuant to Standing Order 99(2), the Committee requests that the Government table a comprehensive response to the Report within one hundred and fifty (150) days.

On motion of Bill Gottselig, it was agreed,-That the Committee increase the number of extra copies to be printed of the Ninth Report from 450 to 750 .

On motion of Harry Brightwell, it was agreed,-That the amount of the contract to engage a French text reviser to revise the Ninth Report adopted at its in camera meeting of Wednesday, May 4, 1988, be increased from $\$ 1400$ to $\$ 3,000$ to cover the additional expenses incurred by the increased length of the Ninth Report.

At 12:19 o'clock p.m., the Committee adjourned to the call of the Chair.

Carol Chafe<br>Clerk of the Committee


[^0]:    Source: House of Commons Standing Committee on Agriculture.

[^1]:    Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

[^2]:    Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

[^3]:    Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of

[^4]:    Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture, Ottawa, 1988.

[^5]:    Source: House of Commons Standing Committee on Agriculture, Special Tabulation from Statistics Canada, 1986 Census of Agriculture. Ottawa, 1988.

[^6]:    1 The manageable interest rate is determined from the formula where return on assets multiplied by asset value must at least be equal to cost of debt multiplied by amount of debt. Transposing this formula determines that the maximum interest rate

    $$
    \begin{aligned}
    & =\frac{\text { Return on Assets } \times \text { Asset value }}{\text { Amount of debt }} \\
    & =\frac{4.0 \times \$ 500,000}{\$ 375,000}=5.3 \%
    \end{aligned}
    $$

