FINANCIAL ARRANGEMENTS OF NEW FARM ENTRANTS

by

Jeffrey Bradford Watt

Thesis
presented to the University of Manitoba
in partial fulfillment of the
requirements for the degree of
Master of Science

Department of Agricultural Economics
and Farm Management

Winnipeg, Manitoba
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JEFFREY BRADFORD WATT

A thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements of the degree of

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ABSTRACT

For farming to continue new farmers should enter regularly. Generally this has been accomplished. However, these new farmers are meeting increased business risk which effectively is erecting barriers to entry. New entrants do not all face the same magnitude of barriers to entry. It is generally believed farm family assistance is instrumental in the establishment of new farmers. The use of internal sources of financing in its many forms may be an increasingly important means for new entrants to begin farming.

To study this, a survey was conducted from May 1984 to September 1984. This survey contacted 396 new farmers. The identity of these new farmers was derived by using two sources. First, provincial agricultural representatives were contacted. They provided 204 names of recent entrants into farming. Secondly, the Diploma class lists for the years 1982, 1983 and 1984 were utilized. This yielded (after elimination of some for certain reasons) 140 Diploma graduates as possible respondents.

The project was divided into two parts. In part one, the survey dealt with more general issues and was the foundation for part two. The purpose of part one was to establish parameters for the population. Five areas were considered: 1) demographic characteristics of the populations, 2) financial assistance from the family, 3) credit sources, 4) limitations that are apparent in the system, and 5) satisfaction and difficulties experienced by the survey populations.
Part two used a second survey conducted on a sample of those who agreed to be interviewed. More specific and detailed financial information was gathered. This was done to derive a more comprehensive picture of the sample population. Questions pertaining to the size and type of farm, the debt load, the assets, the financial stability and family assistance were asked.

From the population contacted, 204 replies were received. It was apparent most were young and had started farming in the past four years. However, because a large number of respondents stated they began farming before 1980, it was decided to compare the differences between pre-1980 and post-1980 entrants.

Two observations about family assistance can be stated: 1) the family does not provide direct assistance i.e. loans, and 2) the family provides indirect assistance e.g. equipment for labour. Thus, assistance was found to be important but not for direct loan assistance.

The second area considered was the hardship this assistance imposes on the family. Family assistance does not appear to place hardship on the farm families. The third area of interest was satisfaction with financial institutions. The financial institutions, both public and private fail to provide adequate credit programs regarded as necessary by the sampled populations. It was felt public institutions fail to provide adequate long term credit. Secondly, private institutions barely provide adequate short and intermediate term credit.

The use of off-farm employment seems to be an important source of additional income. It was found this off-farm income provides the new
entrant with cash to pay for essential family living. In some instances, it was used to purchase luxuries.

Thus family assistance was determined to be an instrumental factor in the establishment of an entrant. Consequently, family assistance may be the most economically viable method of entry for new farmers.
ACKNOWLEDGEMENTS

I would like to thank Rea Josephson, first for his patience regarding my well developed skill of procrastination, and secondly for his support and direction in completing this thesis. I also thank Paul Stelmaschuck and Charles Framingham for their input and ideas.

I also thank Agriculture Canada for the financial support. Lastly, and sometimes least, I thank all the staff and students of the Department of Agricultural Economics with whom I have become acquainted.
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Chapter I
INTRODUCTION

Developments in agriculture during the past few years have resulted in hardship for existing farmers and difficulties for entering farmers. "In recent years farming has advanced from the point of being a method of living only, to the place where it is, in addition, a place of business."¹ Farmers require capital to enter, and to operate an enterprise. "A relatively large amount of capital is required to establish and operate a farm business and, ..., there is always the risk of loss."² The preceding quotes are by Hare forty years ago. Evidently currently perceived problems are not new. However, during this most recent downturn of the agricultural economy, farmers are again being told that the operation cannot be thought of as just a farm but rather as a business. Existing farmers are aware of this but often believe "the way of life" is more important than the business aspect of farming. If Hare believed a relatively large amount of capital is required to establish a farm, then the same must be even more true today.

A generation ago, most who wished to farm eventually were able to do so. The procedure to become established was to work as a hired farm labourer, and thereby save enough money to rent land. After a period of time, then the purchase of land may have been possible. Another alter-

¹ H.R.Hare, Farm Business Management, The Ryerson Press, Toronto, 1946, p.305.
² IBID, p. 62.
native is to inherit or take over an existing farm. The objective of establishing a farm is to derive satisfaction from three areas: 1) the money which the particular type of work yields, 2) joy in the work itself, and 3) the conditions under which one lives. It is essential for the first area to generate an income substantial enough to provide for current needs, future plans and retirement needs. This particular satisfaction may be overlooked when a person decides to begin farming. The other benefits may seem to outweigh the unsecure financial benefits. The beginning farmer may be willing to sacrifice current satisfaction for a few years if he believes future income will improve. Debt repayment, however, cannot usually be postponed to the same degree. Unfor- seen events can create a debt repayment crisis resulting in the newly established farm becoming vulnerable to business failure. The purpose of this research is to learn about the financial requirements of new farm entrants rather than to discuss farm failures; however, in the context of today's farm environment these will be alluded to in this thesis.

Most new entrants have already decided they desire a farm lifestyle. They do not want a nine to five job and the suburban home. The problem then is to have an adequate income. This is not necessarily easy given present costs and returns. A person considering farming as a career should be aware real incomes from farming have dropped considerably in the past few years. Table 1 shows the Average Annual Realized Net Farm Income per Manitoba Farm in 1971 dollars. Realized net income is a measure of cash income available for personal expenses, taxes and rein-

---

3 IBID, p. 8.
vestment after account is taken of all operating costs including depreciation.

Table 1

Average Annual Real Realized Net Farm Income per Manitoba Farm in 1971 Dollars

<table>
<thead>
<tr>
<th>Period</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966-1970</td>
<td>3,744</td>
</tr>
<tr>
<td>1971-1975</td>
<td>6,500</td>
</tr>
<tr>
<td>1976-1980</td>
<td>4,456</td>
</tr>
<tr>
<td>1981-1985</td>
<td>3,065</td>
</tr>
</tbody>
</table>

Source: The Farm Financial Crisis Policy and Legislative Options, A discussion paper, Manitoba Agriculture, November 1984, p. 3.

Accompanying this decrease in income is a large increase in capital expenditure. Though farm land has dropped in price during the last two years it previously increased significantly. "The value of land and capital on Manitoba farms has risen by sixfold over the period 1971 - 1981 ... From $59,000 per (census) farm to $355,000 per (census) farm." 4

This increase in capital requirements can be met with additional debt but the drop in real income results in debt servicing problems with a greater likelihood of failure for beginning farm businesses. The use of internal sources of financing in its many forms may be an increasingly important means for new entrants to begin farming. This is one of the areas studied in this thesis.

4 The Farm Financial Crisis Policy and Legislative Options, A discussion paper, Manitoba Agriculture, November 1984, p. 3.
There are three general sources of capital for a new entrant: 1) debt financing via banks and government institutions, 2) personal cash and assets, and 3) family assistance. Current costs of capital assets, such as land plus a high interest cost for money, make it difficult for new entrants to raise sufficient funds to enter. This in itself is a topic which could be considered a crisis. If new farmers are not able to acquire land and capital assets then how will existing farms be transferred to new owners? New entrants who are fortunate enough to have access to land and capital must also consider falling incomes and the effect this has on returns to that capital.

With absolute cost disadvantages associated with a new firm it seems a new entrant has less chance to have a viable operation. This is especially true given today's low real net incomes. If the new firm is eventually able to reduce average costs to levels equal to an existing comparative firm, then it may survive. However, since large costs may be incurred in the start up stage, the new enterprise may not be able to meet these costs and may subsequently be forced to terminate operations. Thus, there is evidence a financial crisis in agriculture is very real and beginning farmers are most vulnerable to the consequence.

1.1 **STATEMENT OF THE PROBLEM**

As shown above, it is difficult to begin farming at this time. However, there have been new entrants in recent years and they have somehow acquired the resources to establish their farms. How they are able to is not fully understood but it is believed family assistance is an important factor. It is essential for policy makers and money suppliers to know the extent and nature of family assistance for new entrants. The use of existing programs through government agencies is also dependent upon the degree of family assistance. If a person desires to enter, it may be essential for him to utilize the resources available to him via the family operations. Financial programs must be structured so new entrants are not dependent solely upon the use of family resources. If this happens then only those people from families with sufficient resources available will be able to enter farming. Boehlje (1984) states that an operation of $300,000 is not large enough for a transfer to take place before the death of the owner. Estates with values between $300,000 and $600,000 should allow transfer but the parents should not gift much. He feels that operations over $600,000 are large enough to allow new members of the family to enter.6 This may lead to a new order of establishment. Though these numbers are for U.S. farms, they are indicative of the large amount of capital needed. Though this thesis will not attempt to measure capital requirements of entry, these capital requirements and sources as well as the adequacy of current programs for meeting these requirements will be questioned.

---

1.2 **OBJECTIVE OF THE STUDY**

This research attempts to learn about the requirements of new farm entrants, and how they have acquired the capital to begin. It will examine the sources of these funds and see what if any help entrants receive. Further, the research will attempt to determine if existing government programs are meeting established goals as well as the perceived needs of new farm entrants.

The study also investigates the use of private lending institutions and government lending programs to accommodate needs of new entrants. In conjunction with this, the importance of family resources is explored. This type of capital acquisition appears to be important but it may be a hidden form.

1.3 **SCOPE OF THE STUDY**

This thesis only considers new entrants in Manitoba, i.e. those who have started farming full time during the past four years. A larger study would have required more funds and time to complete. Consequently, new entrants in Manitoba are the only ones considered. The study was conducted within the period from May 1984 to December 1984. The purpose is to limit the time frame to better establish a sample population.

There are a number of topics considered in this research. The degree of family assistance is tested in principle and by direct observation. The use of off-farm work is also considered. The use of public and private lending sources is tested generally and also specifically. Thus,
the use of these sources is established and eventually the actual amount of assistance may be determined.

If family assistance is utilized, then its impact on the receiver and the provider is also studied. This examines the hardship the assistance places on the family structure.

Though off-farm work is considered, detailed analysis of the use of this work is not studied. This is an entirely separate area, and could be studied exclusively. This research attempts to determine if off-farm employment is important, not the exact amount of benefits it provides.

The state of the new entrant's business position is not considered, other than by indirect observations. The research will not attempt to categorize farmers by their degree of financial or managerial skill but rather to establish the sources used to enter farming.

The use of questionnaires and personal interviews will provide confidentiality, however some farmers may feel the information should be kept private. This may result in incomplete information. However, the farmers cannot be pressured as this may jeopardize the response rate for other questions.

Another limitation may be the inability to acquire all the names of new entrants. Since the requirements for being a new entrant are both subjective and objective, some new entrants may be missed. i.e. a son entering a family operation on a small scale such that the general public does not know.
The information received is from a farmer's viewpoint which should provide more straightforward responses to questions. The results should thus show grassroots problems and concerns.

1.4 ORGANIZATION OF THE THESIS

The first chapter considers the current economic environment and accompanying problems that new entrants face. It also provides a problem statement as well as the objectives and scope of the study. Chapter two considers background material relevant to entry into farming. This material deals with the farm life cycle, business organization, tax issues and financial problems that new entrants typically confront. Also, it develops the hypotheses that are implemented in the design of surveys. Chapter three discusses the design, implementation and execution of the two separate surveys. Chapter four analyzes the empirical results from the two surveys. Chapter five tests the hypotheses developed in chapter two. Finally, chapter six provides a summary of the study and draws conclusions. Policy implications are also discussed as well as suggestions for future research.
Chapter II

REVIEW OF EXISTING THEORIES AND RELATED MATERIAL

This chapter reviews literature and related theories and develops hypotheses to be tested. The literature is divided into four categories: those related to family farm and farm life cycle, business arrangements, business organizations, and financial problems associated with new entrants.

2.1 FARM LIFE CYCLE

Over the years numerous ideas have provided insight into the process of farm acquisition, development and transfer. Some of these ideas, though not fully accepted now, are still inherent in much of the more recent theory about the Life Cycle of the farm and farm family. Generally, the farm and the owner cannot be separated, and as such

the close house-hold-business relationship of most farms and ranches closely links the life-cycle of the firm to the life cycle of the manager.\(^7\)

This family farm arrangement provides the most common unit in Canadian agriculture. It is a unit consisting of parents and family which operate the farm providing both labour and management expertise.\(^8\) This the-


sis attempts to better understand the importance of the family in assisting the new entrant to become established. In the past it has been shown family assistance has played an important role in the establishment of new farmers. Driver (1961) found this in his work twenty years ago.

Those who started farming by working within the boundaries of their parents farm seem to have had considerably more success in becoming established than those who started farming outside their boundaries.9

Though this is a major premise other factors will be considered. These include the use of external financing to become established, and the use of off-farm employment to facilitate entry. Goals must be considered since they may dictate the method of entry. If a farmer wishes to be independent, family resources may not be utilized. An individual's goals may lead to a choice between maximizing income or net worth. The choice of goals may dictate the farmer's lifestyle which may affect the life cycle. If the farmer chooses to minimize debt, he may do so with a very small operation; but, this will not permit ease of expansion or maximization of net worth. Thus goals of the farmer must be examined before developing the life cycle of the prairie farm.

Given the perceived hardship within agriculture the new farmer must consider all aspects of entry as well as continuance of the farm. With excessive costs and low real incomes associated with farming the continuance of the family farm is in jeopardy. For these reasons the family farm may alter its appearance. The family farm will likely continue; however, the number of family farms may decrease as high costs/low incomes drive out economically inefficient producers. The opportunity for

9 Ibid, pp. 4.
existing large family farms to grow may arise as these economically efficient family farms continue. Nevertheless, keeping the farm in the family is generally accepted as a primary goal of farm families.

Farm people are essentially confronted with two broad challenges: keeping the family farm in agriculture and keeping the farm in the family.\(^{10}\)

2.1.1 Farmers Goals and Entry Ability

Goals are an area seldom considered when entry is discussed; nevertheless, they are very important to the new entrant. The individual's goal hierarchy can lead to different decisions which affect entry. Goals may be many things: profit maximization, maximizing net worth, controlling more land, maximizing the quality of life, minimizing debt load, and many others. Often a predominant goal is maximizing net worth although this may not be so for entry level farmers. Other studies have shown this goal, though rated highly, is not necessarily the highest. A study by Harper and Eastman shows quality of life ranks as the highest goal. They split goals into two groups: family goals and agricultural goals. In both categories quality of life rates the highest. Table 2\(^{11}\) shows the distribution of goals. It is evident quality of life is important to farmers.

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\(^{10}\) J.C. Gilson, "Family Farm Business Arrangements". University of Manitoba, Department of Agricultural Economics, Winnipeg, Bulletin No. 1., pp. 5.

Table 2
Distribution of Goals between the Family and Agriculture

<table>
<thead>
<tr>
<th>Family Goals</th>
<th>Agricultural Goals</th>
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<tbody>
<tr>
<td>1) quality of life</td>
<td>1) quality of life</td>
</tr>
<tr>
<td>2) income</td>
<td>2) remain in agriculture</td>
</tr>
<tr>
<td>3) net worth</td>
<td>3) avoid low profit/high loss</td>
</tr>
<tr>
<td>4) consumption</td>
<td>4) profit</td>
</tr>
<tr>
<td>5) social status</td>
<td>5) net worth</td>
</tr>
<tr>
<td></td>
<td>6) more acreage</td>
</tr>
<tr>
<td></td>
<td>7) new/larger equipment</td>
</tr>
</tbody>
</table>

This work was completed before many of the current problems now facing farmers. As a result these goals may not reflect current problems. A more recent study by Patrick, Blake and Whitaker\(^1^2\) (1983) shows a stable income is most desirable with foreclosure avoidance second. The categories associated with quality of life are rated fifth and seventh out of eight possible responses. This may suggest farmers are more concerned about existence rather than quality of life.

Thus goals can be quite different depending upon the current agricultural situation and the status of the farmer. A new entrant may have a much different goal hierarchy than an older more established farmer. The previous studies may not differentiate between new entrants and established farmers. Consequently, a goal hierarchy for a new entrant may be much different than for an established farmer. Given the instability of current agriculture, the entrant probably should not consider maximizing net worth. Rather goals such as stable income and minimizing the

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risk of bankruptcy may be more important. However, an over-riding goal may be the way of life. Those who are entering farming may or may not come from a farm background. Those from farms, enter to continue the lifestyle to which they are accustomed. Those who are from a non-farm background enter to realize the benefits of farm life. However, this is different than the studies previously discussed. Nevertheless, it must be a major goal.

With the high cost of entry and operation of a farm, those from non-farm backgrounds are at a definite disadvantage. They may desire to farm but are unable to do so because of the cost structure associated with entry. Entry by those who wished for a good way of life may be subsiding especially for the non-farm population. Possibly entry is now regulated by relationship rather than by desire. Family goals thus play an important role in this relationship factor.

Family goals are more likely to include maximizing net worth, lifestyle and keeping the farm in the family. To assist in the realization of these goals the family may assist children with entry. Consequently, farm children may be able to enter more efficiently than non-farm new entrants. Since many parents wish for their children to take-over the farm they often teach their children the necessary skills needed to operate a farm. This transfer mechanism is associated with the parents goal for keeping the farm in the family. With high cost of entry, continuing the family farm may be the only viable way for people to enter farming.
Preparing the child to take over the farm starts at an early age. Consequently, farm children are more likely to continue to farm. Laband and Lentz have found many interesting points about occupational inheritance. They have found "ownership of these (family) farms tend to remain within families across generations. Moreover, sons of farmers tend to become farmers rather than rent or sell the 'family' farm".\(^{13}\) In fact they have shown "farmers are nearly five times more likely to have followed in their father's footsteps than nonfarm proprietors."\(^{14}\) Since farm children will likely continue to farm, family goals are generally met. The advantage farm children have over non-farm children is increased when other factors are considered. These other factors may help the new entrant reach goals such as financial stability, maximizing net worth, etc. Laband and Lentz show acquired skills for an occupation come from two methods: 1) on the job training; and 2) formal or informal education. As a child grows up on the farm, a degree of on the job training is gleaned. It may be more advantageous to continue to farm than to seek other employment. An assumption is children continue to farm because of the reduced cost of physical capital through transfer. This in itself is important, however with the knowledge the child has acquired overtime, transfer of human and physical capital is considerable in agriculture.\(^{15}\) Therefore,

Occupational following in farming is motivated primarily by the transfer of farm specific human capital from father to son, which in turn increases the value of transferred physical


\(^{14}\) Ibid, pp. 311.

\(^{15}\) Ibid, pp. 312.
This specific component greatly exceeds other occupations and as such it may provide for a higher income than for those who do not have this specific capital experience. Thus higher income growths may be expected for those with on-the-farm 'training'. Therefore children of farmers have a better chance for success with farming than people without on-the-farm experience. Not only do farm children have the advantage of reduced cost of physical capital but they also have the bonus of specific human capital which when transferred is very valuable. Thus reaching goals is accomplished more efficiently and expeditiously by new entrants from farm backgrounds.

As a result family goals are met, i.e. continuing the farm. As well new entrants' goals are best met by farm children. Thus family assistance is very important for reaching goals. The assistance provides a more fluid matching of goals. The aforementioned specific human capital is one advantage farm children have over non-farm children. However, there are many barriers to entry for a new entrant. These barriers are greater for non-farm raised entrants. Possibly these barriers may only be overcome by those new entrants from farm backgrounds. This is possible because of the greater likelihood of meeting all goals. A new entrant from a farm family is able to overcome these barriers easier because of the assistance received from the family. Over the past few years land values have increased (though they are now declining somewhat) as well as other capital items. Thus, not only has the amount of

16 Ibid, pp. 312.

17 Ibid, pp. 313.
capital required to farm increased, but also the period of time to accumulate this capital has increased. Specific barriers are outlined by Boehlje and Thomas.

These barriers include ever increasing amounts of land, machinery, livestock and other capital to obtain an efficient unit, increasing managerial skills, the limited risk-bearing ability of beginning farmers, and problems of resource (particularly land) controls.

With off-farm employment not able to totally provide the needed resources to finance entry those new entrants from non-farm backgrounds face a definite disadvantage. Off-farm incomes and wages are not rising as fast as farm input costs. Thus, as the gap widens this method will not realistically be able to finance new entry of farmers who are not from farm backgrounds.

New entrants from farm backgrounds are better able to remove this barrier of entry. This is provided by the family assistance. The assistance meets the goals of the family (transfer of farm), and those of the child (continuance of the farm lifestyle). Not only does the family assistance comply with these two goals but it also facilitates meeting of financial goals. These goals, maximizing net worth, reducing foreclosure risk, stable income, etc. are better met when there is family assistance. The parents are able to provide financial and managerial assistance which gives an undeniable advantage to farm children. This


20 Ibid, pp. 23.
assistance in most cases lowers these barriers and provides for a more successful entry than is possible for non-farm new entrants.

This assistance does not always guarantee successful entry. Even new entrants from farm backgrounds can have problems. Though on-farm knowledge can be considered a capital asset, if the new entrant has not participated in the decision making process he may be lacking necessary managerial ability. Therefore, it is possible to have new entrants lacking the necessary degree of "mental and managerial capability to handle risk entering a high risk industry, usually with a large amount of debt and high leverage which multiplies the risk even further." Yet, the assistance in whatever amount can provide a vehicle to reduce or eliminate barriers of entry which a non-farm raised new entrant cannot duplicate.

Farmers may have viewed quality of life as one of the most important goals. This probably has changed to reflect the present financial problems. Still, farming is a desirable occupation for many. However, for many of the reasons why finance has become more important in the goal hierarchy, entry is hindered. With the increasing costs associated with farming barriers to entry are increasing. Consequently, the ability to enter farming, for those who still wish to, has been severely affected. Nevertheless, there are people who wish to enter farming. The next section will discuss the life cycle of the farm.

\[2^{1}\] Ibid, pp. 23.
2.1.2 Farm/Family Life Cycle

There are numerous theories to explain the life cycle of the agricultural farm family. The most widely used during the early part of this century is the 'Agricultural Ladder'. The order of occurrence has four stages: 1) unpaid family labourer; 2) hired man or non-farm employee; 3) tenant operator; and 4) owner-operator. The phenomenon of wages increasing at a slower rate than farm input costs is not new. Consequently, the person who works as a hired man or off-farm worker may find it difficult to acquire enough capital to begin farming. This theory is mostly associated with the person not the firm; however, it is possible to see the growth of the firm in the ladder. As a tenant operator, the farmer operates land trying to amass enough money to purchase land. As time passes by he does so and eventually pays for the land. His child then repeats this lifecycle system.

A second approach is developed by Driver. His approach uses two main components consisting of operating agreements and transfer arrangements. The operating agreement component had project agreements, apprenticeship and partnership as subcomponents. The transfer arrangement component has transfer arrangements and full ownership as subcomponents.\(^{22}\) His model has three zones I) apprenticeship, II) transition, and III) establishment. Each of these zones was divided into stages. The new entrant in zone I is at home as an unpaid labourer. He continues to receive education both at home and away. Eventually, he moves into zone II where operating agreements are developed with the parents. As the new entrant

passes from one operating agreement to another, or becomes more involved in one type he may move into zone III. In this stage the new entrant begins to operate independently from the parents. Eventually, this farmer has children who initiate the process again. Two variations exist with this model. The young person may decide not to farm with the family. He would then leave before reaching zone II. He would use savings acquired from off-farm employment to establish his own operation. The model would then continue except there are no operating arrangements. Another variation exists if the young person wished to farm with the parents but not on their farm. This would result in operating agreements and special arrangements for mutual use of equipment, supplies, etc. If thought of as a circle, Driver's model would make 1 2/3 revolutions starting at zone I. ²³

The third life cycle theory introduced by Gilson consists of five stages. Stage I is the beginning farmer with a small business and relatively large debt. He is also susceptible to risk and because of many factors, income is low. Stage II has the farmer expanding both with respect to the operation and to the family. Chances are his debts are larger and risk is still very high. Stage III has the farmer in his forties or fifties. He has some children leaving the farm possibly requiring support to go to school. The farmer is determining in this stage if the farm is large enough to accomodate an additional person. Stage IV has the farmer considering retirement and the alternatives associated with retirement. This is the entry point for stage V where there is an overlap of both generations. Hopefully the new farmer will

acquire the parents farm and repeat the five stages. If there is no interest, then the farmer may sell and retire.24

Boehlje establishes a Family-Firm Life Cycle which has three stages during the career of the farmer. The first stage is the entry or establishment stage. In this stage, a number of points must be considered by the prospective farmer. He first must evaluate the opportunities in farming compared with other occupations. If he believes farming is more suited to his requirements he may then consider it as a career. Other points to consider are income potential, accumulating net worth, the life style, work and leisure activities, ability to perform both physical duties and mental responsibilities and the opportunities to obtain sufficient land and capital. The person must then decide if he can establish a viable economic unit. If not, then he should reject the idea.

The second stage is one of growth and survival where the farmer attempts to expand through purchase or lease of capital. In this stage capital and labour requirements increase rapidly. There is still a large amount of debt as well as increasing use of equity funds to finance expansion. During this stage the farm must maintain a debt/equity structure which will guarantee survival during years of low income. The later part of this stage may see the farmer shift from farm expansion to consolidation, and thereby reduce his costs in an attempt to stabilize income.

24 J.C. Gilson, "Family Farm Business Arrangements", University of Manitoba, Department of Agricultural Economics, Winnipeg, Bulletin No. 1.
The third stage is titled the Exit or Disinvestment Stage. This includes two processes: 1) retirement; and 2) transfer. The retirement process attempts to reduce management responsibilities and generate more retirement income. The transfer process uses various arrangements to allow the new entrant to acquire the existing operation.\textsuperscript{25}

By compiling these previous studies this thesis develops a life cycle of the farmer/firm which uses components of each. The first is the Start-up stage where the new entrant has 1) low wealth and liquidity, 2) high risk, and 3) must control sufficient resources for future growth. The second stage is labelled Growth. At this point the entrant 1) fully utilizes his management ability, 2) strives for economic security, 3) tries to maintain a competitive position in the industry. The third stage, Consolidation, has the farmer 1) placing less emphasis on capital accumulation and growth, 2) in a stronger financial position, and 3) still growing to maintain his financial position. The fourth stage is the Transfer of the operation. The farmer will 1) still control resources but let another assume use, 2) reduce the importance of expansion and income generating capacity, 3) strive for a stable retirement income stream, 4) maintain management continuity and production efficiency during transfer, and 5) minimize cost of transferring assets to heirs in an equitable fashion.\textsuperscript{26}

\textsuperscript{25} Ibid, pp.11.

2.2 ARRANGEMENTS TO FACILITATE TRANSFER

This section consists of four parts related to arrangements. First, problems which should be considered before deciding on a business arrangement. Second, considerations in making the transfer will be stated. Third, the various methods of transfer will be discussed and finally, the types of arrangements will be analyzed.

2.2.1 Problems

There are six questions which should be addressed before deciding on a business arrangement. They are:

1. Who is to remain on the farm?
2. Is the business large enough and able to support more than one family?
3. Are there living accommodations for both families?
4. Can the parents retire gradually if desired?
5. Can the child get parental help with respect to management and capital?
6. Are open business discussions possible?\(^\text{27}\)

These problems must be considered otherwise one or both parties may be disadvantaged to an extreme degree. The child needs a good arrangement to facilitate entry and keep peace with the family. The parents need to have an arrangement which will provide an adequate retirement. The last point is crucial because without open discussions, a working

\(^{27}\) J.C. Gilson, "Family Farm Business Arrangements", University of Manitoba, Department of Agricultural Economics, Winnipeg, Bulletin No. 1, p. 8.
arrangement may not be drawn up and all interested parties may have to settle for less than optimal conditions.

2.2.2 Considerations

Once these problems are stated, other points must be considered before making the transfer. There are three specific and nine general points. The first specific point asks who is going to remain on the farm. If only one child chooses to remain a problem does not exist. When two or more want to farm, who will get the farm is the question. The second specific point to consider is the time frame of the proposed transfer. The child may want it now while the parents may wish for a later date. The final specific point to consider is the type of arrangement. The various types will be discussed later. The following is a list by Gilson of the nine general points to consider before making a transfer:

1. Are parents provided with an adequate income and home for their retirement?
2. The child who remains on the farm should be compensated for his input into the farm and for his care of the parents.
3. An equitable agreement should be implemented so children who leave are not penalized, or excessively rewarded.
4. Try not to burden the remaining child with excessive debt.
5. Try to keep the farm as an efficient operating unit during the transfer.

Ibid, pp. 22
6. The farm transfer should be based upon the parent-child agreement.

7. If there is no transfer agreement then one must consider all tax, legal and inheritance ramifications.

8. Must have all members of the family knowledgeable about the agreement.

9. Should use professionals to aid with the transfer.²⁹

2.2.3 Methods of Transfer

The following flow chart (Diagram 1) has been developed to show the possible alternatives for a new entrant.

In this model an amalgamation of the ideas discussed previously is developed. This model is for a person who is from a family farm, though there is provision for entrants from non-farm backgrounds. Initially, there is a family farm and assume for simplicity only one child is involved. Of course if more children are involved, the complexity increases substantially. The child can either decide to farm or not. If he decides not to farm, the parents will likely sell the farm and retire. The property is sold to another person, either a farmer or a non-farmer. If the farm is sold to an existing farmer, it would enter into the growth stage of the existing farm. If it is sold to a new entrant then the four stages of firm life will pertain.

²⁹ Ibid, pp. 23.
Diagram 1

Flow Chart Showing Possible Alternatives For A Entrants

1. Family Farm
   - Child Has No Interest
     - Farm Sold
       - Family Retires
       - Farm Without Family
         - Family Farm Sold
         - Child Buys Other Farm
2. Child Has Interest
   - Does Not Want To Farm
     - Test Period
     - Wants To Farm
       - Farm With Parents Multi-Ownership
As an alternative, the child may initially express interest in taking over the farm. It is recommended the child have a two or three year 'test' period to ascertain if this is the occupation desired. Here the child considers his goals and the other points previously stated. After the test period if the child does not want to farm, the previous situation exists. If the child does want to farm, he must decide how he is going to farm. First the child may want to farm, but for some reason an arrangement cannot be made with the family. In this case the child will attempt to acquire another farm and the parents will sell and retire. The second case is where the child wants to farm separately, but not independently. Thus he may buy or rent land and use the family resources to help him get established. The third case is where the child takes over the farm, by purchasing the family farm. This is accomplished through a number of arrangements. The fourth case considers multi-ownership. This may result in the child buying a portion of the farm which will continue to be mostly owned by the family. In each case the child will go through the four stages of firm life cycle.

After considering all of these points if a transfer arrangement is to be considered, a preliminary arrangement is recommended. This should be called a test stage. It will help the child decide if he wants to farm. It will help all concerned to determine if the joint venture will be successful on both personal and business grounds. As shown in Diagram 1, this test stage can lead to four options.

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As stated before, the arrangement decided upon should have as a primary purpose, the parent's rights. There must be income from the enterprise to continue to support the owners through their retirement. The arrangement must also compensate the owners for the capital resources transferred. This may require three alterations to the existing operations. The farm may have to be expanded to support all parties. The managerial skills of the persons involved may have to increase. Finally, there may be a shift in the amount of resources supplied by the various parties.31

Leasing is more significant to the operator of a large sized farm than to a small operator. Leasing will allow an operator to expand his control of assets for less than the downpayment required to purchase land. The leasing arrangement is one way to expand which is more easily accomplished by an existing operation.32 "Expansion should if possible be achieved by increasing the current assets - by taking more land on lease."33

There are numerous methods of transfer, but only the most common will be discussed. Most methods fall under one of the following types. Gilson has seven methods, which encompass Boehlje's six methods, however Boehlje adds factors that should be included. The seven methods are:

31 Ibid, 363.


1. Transfer by laws of inheritance - not a satisfactory arrangement.
2. Transfer by a will - allows for a more equitable distribution (but potentially dangerous).
3. Transfer by agreement of sale - Child operates farm but parents still hold title until all conditions are fulfilled.
4. Transfer by cash or mortgage - This allows the child to have title to the property.
5. Transfer by gift.
6. Option to buy - allows the child to farm though lease, until he has enough cash to begin to purchase.
7. Joint tenancy - child has a financial interest in operation.34

There are eight factors which should be considered when transferring property. They are:

1. Inflation
2. Life expectancy of retiring farmer.
3. The cost of the transfer.
4. Tax regulations ie. income and capital gains.
5. The cash flow after transfer.
6. Estate planning objectives should allow parents to have some control.
7. Security interest - The seller is assured of receiving the proceeds or the property if the buyer defaults.
8. Entrant's security.35

34 J.C. Gilson, "Family Farm Business Arrangements". University of Manitoba, Department of Agricultural Economics, Winnipeg, Bulletin No. 1.
Only after these conditions are considered can a suitable arrangement be agreed upon. A problem may arise because what the child wants may not be what the parents want. Nevertheless, an arrangement must be selected for optimal transfer. Boehlje suggests family backing is almost a necessity for a new farmer to enter. He suggests three forms of family backing: 1) by allowing the new entrant to become a partner and expand the business to provide for both families; and 2) by providing the new entrant with loans and guarantees to allow him to purchase capital, and 3) to employ the new entrant as a farm manager and let him have use of the equipment. The various types of arrangements available are now discussed.

The arrangements can be considered into two groups: short term and long term. The short term arrangements are especially useful for the test period or for a period of indecision by the parties. In this group the child may receive wages or wage equivalents. Thus the child may receive a wage, which must be reasonable, or he may be on an incentive plan. Another possibility is a wage and income sharing plan where the child is striving towards a profit to receive a share in the farm income.

If there is interest in continuing the relationship, longer term arrangements may be introduced. These include joint ownership, rental agreements, incorporation, partnership, and an ownership/wage agreement. The child in all of these situations is actively responsible for a portion of the operation and there is incentive to do well.

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A few points must be considered before the working arrangements are decided upon. One crucial point to consider is the size of the existing operation. This is very important because if the existing operation cannot support an additional family, maybe the arrangement should be re-considered. Benefits exist for large firms which facilitate ease of transfer. A larger farm may be able to accept the new entrant without suffering undue hardship. Because of this, continuity will remain with respect to the management of the operation. A small farm may suffer inefficiencies while the new entrant is acquainted with the management of the operation. A large operation can train the new entrant more effectively. Therefore, the size of the farm should be large enough to take advantage of these economies of transfer.\footnote{38}

Secondly, the farming heir should be eased into the operation at a pace acceptable to him and to his parents. The heir should not be expected to 'run' the operation immediately. Rather he should gain experience with respect to management, finance, and production techniques through the testing stage. Also, the heir must not be held back too long; otherwise, he may become frustrated and want to leave.\footnote{39}

\footnote{37 J.C. Gilson, "Family Farm Business Arrangements". University of Manitoba, Department of Agricultural Economics, Winnipeg, Bulletin No. 1, pp. 11.}


Thus transferring an existing farm operation is anything but simple. For this reason it is important the parties in question consult professionals with respect to legal, financial, and tax implications. For all of these reasons it may seem easier to buy a farm; however, as shown previously, there is a definite advantage to transferring an existing operation.

The next section will consider the various types of business organizations available to farmers. Implications with respect to transfer will be included as well.

2.3 BUSINESS ORGANIZATIONS

The situation today in farming is somewhat unstable. It is becoming increasingly evident to start farming a person needs support from his family. It is becoming more difficult to acquire the needed capital to purchase land, equipment and other assets needed to operate a viable farm. There are few options available to those who wish to start farming. However, these options almost entirely are based upon the new farmer acquiring capital from the family. To start an economically viable enterprise given current costs and prices, it seems a farm must already exist within the family. This existing farm serves to reduce or eliminate barriers of entry. A problem can arise in acquiring the farm from the family if the parents need the disposition of the capital to provide for their retirement. The sale of the farm property is generally avoided, but some existing farmers need it to finance their retirement. The old adage about farmers is even more true today .. 'Live poor, and die rich'. Consequently, many farmers today cannot provide
total support to their children. Thus, in many instances, new entrants are unable to acquire the farm until the parents are deceased. Fortunately, this is not the case in all instances as there are farmers able to retire without the need for disposition of assets. A problem arises with how the child can acquire the farm. He is probably unable to pay the fair market value of the farm, which means parental assistance is necessary. Thus, transfer of ownership can take place at two basic times, either before or after death of the owner.

The other alternative to disposing of property is to sell to non-family members. The majority of this section will be concerned with transactions within arms-length. This generally considers people who are associated with the owner through blood, marriage, or adoption.

The three main types of business organizations: sole proprietorship, partnership and corporation have elements which differentiate each with respect to transfer. These differences must be discussed since tax obligations must be considered when intergenerational transfer is used.

2.3.1 Sole Proprietorship

The first and most common type of ownership is sole proprietorship. With this type, the business is owned by only one person and he is responsible for the business and has the legal rights to the business. As a result the income for the business, considering both revenue and expenses, is included with the individuals personal tax return. This type of business organization is the simplest to set up and operate.

The main disadvantage with a sole proprietorship is the owner can be held liable for all debts of the business. Thus personal assets of the owner can be seized for non-payment of debts incurred. Possibly, transfer arrangements may be neglected in this form of organization. With the firm being directly associated with the proprietor, then it may be more difficult for a new entrant to enter as the proprietor may not be ready or able to transfer ownership. Consequently, formal transfer arrangements may be neglected until death or retirement of the proprietor.

2.3.2 Partnership

The second type of organization is a partnership. It is defined "as a relationship which exists between persons carrying on a business in common with a view to profit, but does not include the relationship between shareholders of a corporation." As stated in this quote, three things must occur for a partnership to exist: 1) two or more people; 2) in business together; and 3) have a profit motive. A partnership to be established must have an agreement either written or oral between the parties or by implication from the conduct of the parties. As well, the partnership must register with the Business Names Registration Act. Most partnership agreements are written to ease future problems.

The purpose of this agreement is to set out the rights and responsibilities of the partners, the capital to be contributed by each partner, the division of profits and losses, the time that each partner will devote to the business, and provisions for termination of the partnership, and provisions for the retirement or death of partners.42

42 Ibid, pp. 22.
Other rights and obligations for partners are set out in the Partnership Act. The existence of 'Fiduciary Duty' between partners, requires the partner to act in good faith. If a partner does any act for the business, his action binds the partnership. As well "every partner is liable jointly and severally with the other partners for all debts and obligations of the firm." Other rights of partners include equal receipt of profits and obligations for losses unless otherwise stated. If a partner incurs liabilities for the sake of the partnership, the partnership must repay the partner. No partner may be paid a salary for acting in the partnership business. As well, all partners may take part in management decisions unless otherwise stated.

When a partnership is to be terminated, certain rules apply. One partner may dissolve the partnership by simply stating he wishes to do so. Also, if a partnership is constructed to perform a function or designed to last for a specified time period, it will terminate on the completion of the project or time period.

In the operation of the business the expenses incurred are allowed as business deductions. However, the profits are divided between partners and are taxed at each of the partner's marginal tax rate. Capital gains if accrued by the partnership will yield a preferential tax rate. A disadvantage with a partnership is the income received by partners is added to their other incomes, thus being charged at the partner's tax rate, not a preferential rate.

43 Ibid, pp. 23.
With these attributes considered, the use of a partnership may be developed. It is a way for new entrants to have a voice in the operation of the farm. The new entrant may provide a small amount of capital plus labour. In exchange, he has the right to a share of the profits as well be liable for a share of the debts. If the farm is constructed so the parents own 90% of the farm through the partnership and the child 10%, if there are any profits the parents could receive 90% of these profits depending upon the partnership agreement. Therefore, if the new entrant increases his ownership in the partnership, his responsibilities and proportion of the profits may increase also. In the initial start up of the partnership the child may be a limited partner. This limits the child’s liabilities. However, a partnership must have at least one general partner, i.e. one who is responsible for all acts by other partners.

There are some problems with partnerships which detract from their benefits. Since a death or withdrawal of a partner may terminate a partnership (if not stated otherwise in agreement), it is not necessarily any more stable than a sole proprietorship. Again, since tax obligations must be considered this form of organization should be well thought out before entered. If the partnership is not of a family orientation, upon death of a partner, the assets may be distributed between the remaining partners and the heirs of the deceased partner. This may result in the partnership not being able to continue.44

44 Ibid, pp. 431.
2.3.3 Corporate Organization

The final form of business organization is the corporation. As discussed in Sections 2.3.4.1 and 2.3.4.2, this form has advantages for intergenerational transfer. A corporation is essentially a person. It is separate and distinct from its owners, the shareholders. Thus a corporation pays its own tax. A corporation does not cease when a shareholder dies. A shareholder owns shares in the corporation and these shares are an indication of the interest the shareholder has in the corporation. "Thus interest is a right to a proportionate part of the assets by way of dividends or distribution of the corporations assets cash value on winding up." Thus, if a person has 2 of the 5 shares in a corporation, upon dissolution of the corporation, he is eligible to 2/5 of the corporation net asset value. Limited liability exists for the amount the shareholder has invested in the corporation. A corporation is composed of directors and shareholders. The directors appoint the president, secretary and treasurer who essentially run the corporation. These officers hire or appoint the other employees of the corporation. A corporation must have a name. As well the corporation must have articles and by-laws.

A number of share classes can be issued which may facilitate transfer of property. Preferred shares contain certain rights not found in common shares. They may command preference with respect to dividends, return of capital or conversion to other types of shares. These shares generally do not increase in value as the corporation prospers. Common

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45 Gerald Ashcroft, "Manitoba Farmers and the Law". University of Manitoba, 1982, pp. 27.
shares do not have any special preferences or rights; however, they will increase in value if the corporation prospers. They will also decrease in value if the company falters. Generally common shares have voting rights. This may allow a parent to retain control of an operation by keeping a number of common shares to keep the majority of the voting rights. Corporations are set up often to take advantage of the limited liability they provide. As well, they may be set up because of tax advantages. Another redeeming fact is the ease of transfer. One shareholder may simply sell his share to another person, rather than specific assets of the corporation. This facilitates uncomplicated changes in ownership.

The corporation does not cease with a death of a shareholder, rather it continues. One advantage with a corporation is the ability to raise capital. A private corporation may have a maximum of 50 shareholders in Manitoba. Each of these could provide funds for the corporations use. Some disadvantages of a corporation include cost of incorporation, and the requirement to file a tax return. Losses incurred by the corporation cannot be used to offset other income gains by individual shareholders. Even with these disadvantages the ability for transfer is far greater than for the other two types of business organizations. Certain numbers of stocks can be transferred or gifted each year. This would allow an increase in the new entrants equity in the corporation. For example, it is much easier to transfer $10,000 worth of stock than to try to transfer $10,000 worth of farm equipment or land.

46 Ibid, pp. 31.
47 Ibid, pp. 32.
The remainder of this section will deal with the two time frames of transfer most important to new entrants, i.e., from the farmer (taxpayer) upon death of the taxpayer, and from the taxpayer to child while the taxpayer is still living. These are especially important to a farm raised new entrant.

2.3.4 Tax Implications of Transferring Farm Property

As noted previously, tax advantages exist for a farm raised new entrant. The following section discusses the mechanisms for transfer with respect to tax considerations. The sections will show how farm raised new entrants are able to acquire existing farms for a lower cost than a non-farm new entrant can afford to pay. Since this section is concerned with the Income Tax Act with respect to transfer of property, some of the terms which are used must be explained to fully understand the relevant sections.

Income must be reported to Revenue Canada by a taxpayer; however, the determination of this is adjusted to include or preclude a number of things. In most cases where a sale of property is concerned a capital gain will ensue. This is a more desirable form of taxable income as only half of the capital gain is taxed at the taxpayers marginal tax rate. Thus, it is wiser to try to have capital gains than to have direct income because direct income will be taxed at the taxpayer's marginal tax rate. This is even more important for a farmer because of the change in the act which allows a farmer to have $500,000 in capital gains tax free. $500,000\(^{48}\) Thus, if the farmer can he should attempt to

\(^{48}\) A minimal tax enters after $40,000. Therefore, if the farmer sells
acquire capital gains rather than direct income.

The income tax act states income for a person is the aggregate of amounts the taxpayer receives from sources inside or outside of Canada, from the office he holds, from being employed, or derived from business or property. This does not yet include capital gains. Taxable capital gains are added to the income of a taxpayer by determining how much capital gains exceeds capital losses. Thus, the taxable capital gain plus income received from a source are added together. This amount minus allowable deductions and any allowable losses from a source is the taxpayer's income.

As stated previously, if one must be taxed it is preferrable to have capital gains because only half is considered taxable. This aspect must be considered when property is transferred from one taxpayer to another.

Another term to consider is child. In the terms of the tax department 'child' does not just mean a child as is commonly thought. For the purposes of later discussion, child includes:

1. a grandchild and a great-grandchild of the taxpayer
2. an illegitimate child of the taxpayer
3. a person who is wholly dependent on the taxpayer for support and of whom the taxpayer was or immediately before such person attained the age of 21 years did have, in law or in fact, custody

something for more than $40,000 he may still pay some taxes.

49 Income Tax Act - Part I, Section 3(a) to 3(e), page 2.
50 Ibid, p.2.
or control

4. a daughter-in-law or son-in-law of the taxpayer, and

5. a child of the taxpayer's spouse and, for greater certainty, an adopted child of the taxpayer.  

Obviously, a child of a taxpayer could be a number of possibilities. Child also refers to children thus more than one child may be involved in the interpretation of the tax act.

For further understanding 'spouse' refers to "a party to a voidable or void marriage as the case may be".  

When considering transfer of ownership one must include gifts. A definition of gift is in order.  

A gift is generally defined as a voluntary transfer of property without consideration. The essential requisites of a gift are: intention and capacity of the donor to make the gift; completed delivery to a donee; and acceptance of the gift by the donee.  

Situations with respect to gifts will be discussed later.

2.3.4.1 Transfer of Farm Property on Death

Two areas considered are: 1) transfer to a child; and 2) transfer to a child upon death of spouse from the spouses trust.

52 Income Tax Act, p. 915.

53 Ibid, p. 915, sec 252(3).

The relevant subsections of the Income Tax Act are Section 70, specifically section 70(9), 70(9.1), 70(9.2) and 70(9.3). Dealing first with transfer of farm property by a farmer to his child the relevant section is sec 70(9). Upon the death of the farmer who is referred to as the taxpayer, essentially the property can be rolled over to the child. This rollover is advantageous for both parties because of the deferral of capital gains tax. This is accomplished by the transfer of assets at either its current depreciated value or its adjusted cost. Thus land may be transferred from the taxpayer (farmer) to his child at the same value as it was valued as of December 31, 1971 or the cost (price) when purchased. Thus the child may acquire the assets at a value usually below market value. There are certain rules which must be adhered to though. One rule is; the property is at the time of death used by the taxpayer or his spouse or his children in the business of farming. Also the child must have been residing in Canada immediately before the death. Finally, there must be evidence to show the child has acquired the property and it is vested indefeasibly in the child within 15 months after the death of the taxpayer. Once it is determined the property can be transferred to the child, a number of regulations as to the method of transfer are initiated. Most importantly sections 70(5)(a) and (d) do not apply. These two paragraphs within the subsection specifically refer to disposing of the property at fair market value. Thus, farm property in this instance does not have to be valued at fair market value. Rather, the cost is deemed to be the following:

1. with respect to depreciable property; the property is transferred at the proportion of the undepreciated capital cost of the asset
2. with respect to land; it is transferred at its adjusted cost base to the taxpayer immediately before his death.\(^{55}\)

Another point is; once the child receives this property he does not have to use it in the business of farming to maintain the rollover. If the capital cost to the child is found to be less than the cost to the taxpayer, it is deemed the child receives it at the taxpayers capital cost and the child receives a capital cost allowance.\(^{56}\) A twist which may catch a number of people is property leased by the taxpayer to another person is not ordinarily eligible for the rollover provision. This is because the property is not being used by the taxpayer in the business of farming. The exceptions are if the taxpayer is leasing the property to a spouse or a child or to a partnership where the members are the taxpayer, spouse and children.\(^{57}\) Another similar problem arises if a taxpayer who owns property is leasing or renting the property to a family farm corporation. This property cannot qualify for a tax free rollover. This is because the corporation is the entity which is actively farming.\(^{58}\) This is not to say a tax free rollover cannot exist if there is a family farm corporation (F.F.C.). Upon the death of the taxpayer his share of the capital stock of a F.F.C. (or the interest in the case of a partnership) is deemed to have been disposed of by the taxpayer immediately before death and acquired by the child at its adjusted cost base to the taxpayer at that time provided:

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\(^{56}\) Ibid, p.2.

\(^{57}\) Ibid, p. 3.

\(^{58}\) Ibid, p. 4.
1. the transfer must be after April 10, 1978
2. established within 15 months in the child and no later than 15 months after death of the taxpayer
3. in the case of a family farm partnership the child by virtue of the inheritance is a partner
4. and the child resided in Canada immediately after death.

Basically, the same rules apply, i.e. the property must have been used in the business of farming.

Thus upon the death of a taxpayer, a child may receive the taxpayer's property at a value less than fair market value and in fact receive it at such a value so as not to be subject to capital gains tax.

The second possibility in this section pertains to the death of a spouse of a taxpayer. Eg. a taxpayer was a farmer and he dies leaving everything to his spouse who places it in a trust. On the death of the spouse, the trust may be disposed of to the child. Again a rollover mechanism is possible. The land is acquired by the child from the trust at its adjusted cost base. Depreciable property is transferred to the child at its undepreciated capital cost.

Both these rollover mechanisms are important in the transfer of property, however both are only considered with post death transfer. This does not facilitate ease of entry while the farmer is alive. Nevertheless, because of the $500,000 capital gains exemption a sizeable portion of the farm's assets may be transferred before death and not be subject to capital gains taxes. After death, the remainder may be rolled over, thus providing farm based new entrants a great advantage over non-farm new entrants.
2.3.4.2 Transfer of Property while a Farmer is Still Living

This section deals with transferring property from a taxpayer to a child while the taxpayer is still alive.

When transferring to a child, depreciable property will be transferred at an amount equal to the stated disposition. But if the stated disposition is greater, than either fair market value or the undepreciated capital cost to the taxpayer, the disposition will be valued at the greater of these two amounts. If the disposition is less than the lesser of these two stated amounts; the disposition will be deemed to have been received at the lesser of fair market value or the undepreciated capital cost of this property with respect to fair market value of that asset's class.

When the property transferred is land, again the child is deemed to have received the property at the proceeds of disposition otherwise determined. But, if the stated disposition is greater than the fair market value or the adjusted cost base, the disposition will be given at the greater of these two possibilities. If the land is disposed of to the child at less than either fair market value or the adjusted cost base, it is deemed to be disposed of at the lesser of these two options.

Therefore a farmer can transfer property during his lifetime to his child and be able to defer most if not all capital gains. The proceeds may be any amount between fair market value and either the undepreciated capital cost or the adjusted cost base depending upon whether the property is depreciable or land. The child receives the property at the same amount the taxpayer (farmer) has disposed of it.
With the new capital gains exemption the parent may transfer property at an amount necessary for meeting his needs without being penalized. As well, he may transfer property to his child at less than market value thereby providing the child with an easier means of entry. The capital gains exemption of $500,000 may be accumulated over time thereby allowing the child and parent to transfer property as the child can afford to do so. The parent can utilize the capital gains exemption, while the child can acquire assets at a value less than market value. The goal of transferring ownership of the farm is met with both parties benefitting.

These sections have shown the advantages a farm "child" has when attempting to acquire an existing farm. Therefore, it is expected new entrants from farm backgrounds will be more able to enter farming than non-farm new entrants.

2.4 FINANCIAL CONSIDERATIONS

A new entrant must consider all financial aspects of farming to be able to decide if farming can provide a secure future. Consequently, studying financial considerations is necessary to establish what a new entrant should expect from farming.

The current media coverage of the financial crisis in agriculture, depicts gloom for farmers, especially new ones. The number of bankruptcies have increased substantially in the past few years. In 1981 there were 14 bankruptcies in Manitoba, by 1984 there was 62 bankruptcies and in 1985 69. There are several reasons accounting for this. High in-

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Interest rates were a major factor in the early 1980's. The price paid for farm land in the late 1970's and early 1980's proved to be too high and land values declined. To make matters worse variable input prices increased and prices received for goods declined. As a result, many farmers are experiencing lower incomes, reduced equity and poor cash flows. These factors along with increased debt loads proved disastrous to many farmers.

The result is that many producers are in severe economic difficulty and in possible danger of losing their farms. A significant portion of these individuals are relatively young producers, who have attempted to establish or expand their farming operations over the past decade.  

During the 1970's farmers were often advised to expand to capitalize on inflation. Unfortunately most people did not correctly forecast future prices, costs and interest rates. Coupling this with pressures for expansion many farmers adopted capital-intensive methods. This resulted in raising overhead and thus risk. Overhead is increased because of more capital-intensive management programs such as money borrowed to buy equipment, fertilizer, and chemicals. This borrowed money must be paid back in both good years and bad. Thus farmers incurred reduced liquidity and therefore a higher risk of failure.  

To operate an efficient unit, a farmer needs to have a farm with sufficient size, capital and technology. This requirement increases the risks associated with acquisition.


The business risks associated with varying farm income and larger farm size clearly supplemented the financial risks connected with leverage as apparent influences on bankruptcy rates.62

A survey conducted by the Farm Credit Corporation shows over 3600 farmers accounting for 17% of the commercial producers in Manitoba could possibly lose their farms. To be in this category a farmer must meet one of the following criteria:

1. Debt expenses are greater than 40% of farm sales,
2. Total borrowings, intermediate and long term are greater than 110% of total investment, or
3. Net worth is less than 15% of total assets.63

Data from F.C.C. shows those farmers with the least amount of equity (0-61%), have an average of 10 years of farm experience. Farmers with the most equity, 77-97% and 97% and over, have 24 and 32 years of farm experience, respectively.64 Obviously the younger farmers are experiencing a precarious financial position.

As farming is a business, concepts of business and financial risk should be considered. Business risk is the risk which is inherent in the firm, independent of the way it is financed. With respect to farming, this would include weather, international effects upon prices received and for costs incurred, general inflation or deflation, and the economy as a whole. This resulting income variation gives agriculture a high business risk. Agriculture also has financial risk associated with

64 Ibid, pp. 5.
This includes the risk of being unable to meet prior claims with the cash generated by the firm, which is determined by the dispersion of net cash flows and the level of fixed obligation, as well as the firm's pool of liquid resources.\textsuperscript{65}

The two types of risk are related because of the degree of business risk inherent in the firm. Since financial risk contributes to overall risk of the firm, a rationing affect of internal capital may result. This may lead to adjustments in debt use and therefore financial risk, changing business risk.\textsuperscript{66}

When discussing financial risk another aspect to consider is the liquidity of assets available for off-setting cash deficiencies. Thus a person who has more liquid assets may accept riskier investments.\textsuperscript{67} The converse is also true, if there is a lack of liquidity then the farmer will tend to be risk averse. Since land is not considered a liquid asset, an increase in the price of land will alter credit. Credit will then be difficult to acquire because more resources must be allocated towards repayment of land debt. Thus, the purchase of land at high values may tend to reduce liquidity which in turn increases financial risk.\textsuperscript{68} As financial risk is related to business risk, a higher degree of financial risk will be evident in the overall business risk of the firm. It may be possible to assume with the increases in land prices in the late 1970's and early 1980's requirements for credit also changed.


\textsuperscript{66} Ibid, pp. 561.

\textsuperscript{67} Ibid, pp. 562.

\textsuperscript{68} Ibid, pp. 563.
With increases in the interest rate, liquidity likely fell making the whole operation more risky. This may be a reason why bankruptcies are occurring.

With new entrants business risk may be even greater for a number of reasons. Since expansion and/or startup are limited by the available cash for purchase, increases in land values requires more capital for the same level of equity by a new entrant. The rate of acquisition and expansion depends upon land price increase and the equity requirement. "Land price increases can only increase the cash equity requirement for land acquisition for the nonowner."69 The new entrant is confronted with many points to consider before purchasing a tract of land. His potential for purchase is based on: 1) the earnings from that land; 2) his income tax bracket; 3) the rate of change in land prices; 4) the available proportion of the earnings for investment; and 5) the cash equity required. With an increase in the price of land large owner-operated farms will benefit most. This results from the large land owner being able to accept low to moderate cash flows from the purchase of land. The increase in the price of the land will compensate him for these cash flows. Thus a land price increase may "create the potential for large owner-operated farms to become much larger and raise barriers to entry into farming of those who have no land ownership base."70 The net results of increasing land prices may be a concentration of agriculture. Thus, it is less expensive to inherit a farm than to buy one.


70 Ibid, pp. 1098.
Another result of this increased financial risk is farmers using shorter term rates. This results from perceived shortages of equipment which they believe may be paid off over a short term. Thus farmers are trying to pay off interest charges as well as the principal resulting in less cash and liquid assets. Financial risk therefore is increased which tends to affect the farm operation. The survival of the farm may be an important problem in today's agricultural economy.71

For firm survival asset liquidity is a financial characteristic often overlooked. The other characteristics of an asset: 1) net income; 2) net cash flow; 3) capital gains; and 4) collateral value are often considered when analyzing a farm's assets. The liquidity value often is not considered. The collateral value and the liquidity value are not necessarily the same. Liquidity value is the value generally received when an asset is sold under duress. Consequently, it generally is less than the collateral value. The avoidance of asset liquidation may have allowed more failures than is necessary.72 A problem faced by new entrants is insufficient assets for liquidation. Generally they need the assets for production or operation of the farm. Thus if a new entrant is faced with financial problems he may not be able to utilize the liquidity value of some of his assets. Therefore financial and business risks are greater for a new entrant than for an existing farmer. An existing farmer has more methods of reducing his financial risk. This may imply a new entrant with backing from the family farm is in a less risky


72 Ibid, pp. 938.
situation than a non-farm new entrant.

The remainder of this section will be divided into three parts: 1) general financial considerations; 2) specific problems with respect to new entrants; and 3) possibilities for new entrants.

2.4.1 General Financial Considerations

In this subsection three main areas will be considered: 1) the debt capacity of a farmer; 2) the farmers abilities with respect to purchases; and 3) investment and management techniques. A farmer generally has debt since it is difficult to purchase real estate and/or equipment without debt instruments. This adds to the farmer's financial risk, however if applied judiciously it may not affect the overall risk adversely.

2.4.1.1 Debt Capacity

To purchase real estate a degree of equity is usually required. This equity may be generated through the owner's earnings or from retained earnings in a business. The degree of equity often limits the leverage a farmer can utilize for purchases. However, this is not the only part of debt capacity. It is also important to consider three other points:

1. profitability of the farm business;
2. ratio of long term to short term debt; and
3. interest rate and term of the loan.73

The most important of these is the profitability of the farm business. This has become apparent in the past few years. Lenders previously based loans on the security of the farm and on the "Family Name". It is now imperative the loan/debt incurred be "based on projected productivity of the loan itself, as well as on the likelihood that the farmer will successfully manage the borrowed funds."74 As a result farmers must now consider many more things than just their equity when applying for a loan. This may be even more pronounced with a decrease in the value of property after the purchase of the property. When a farmer purchases property he has to consider the real interest rate as well. As this increases, the firm "must shift from debt to retained earnings to finance expansion."75 This became all too obvious in the past few years especially for those operators who expanded rapidly in the late 1970's and early 1980's.

Therefore the prudent farmer will analyze his situation with respect to meeting debt obligations. There are six factors a farmer should consider when planning or using debt: 1) management ability; 2) the size of the farm; 3) enterprise diversification; 4) interest rate levels; 5) loan maturity lengths; and 6) ability to defer debt in low income years.76 It must be remembered debt is a useful instrument. However,


the use of it must be properly monitored. If it is not used prudently, a farmer may invest excessively, especially in years of high income. This may be followed by debt servicing difficulties in years with lower incomes. When incomes fall unexpectedly and debt service commitments are high, the result may lead to technical insolvency of the farm.77 This is not a desirable position, however it may be rectified. One method is to sell assets as suggested previously. Another method is to restructure debt to shift from current and intermediate to long term. Nevertheless, maximum debt capacity should be utilized. This is where the debt servicing commitments just exhaust the estimated available income. This amount is not the same as maximum debt, rather it is referred to as the maximum feasible debt. It is a function of management. Better managed farms will be able to service more debt, resulting in a higher maximum feasible debt.78 Thus contrary to current opinion, debt may be a required instrument to expand and prosper, provided it is utilized properly. Farmers experiencing the most rapid financial progress generally have the following six attributes:

1. a good education before launching a career;
2. a high value on investment as opposed to consumption;
3. small families to support;
4. more intensive enterprises;
5. larger operations to obtain economies of size; and

6. low equities and large debt which enabled them to control a large amount of assets.\(^7\)\(^8\)

Therefore debt must be considered by all as a vehicle for advancement, provided it is used with care.

2.4.1.2 Purchase Options

The second part of this subsection deals with purchase options. As shown previously, farmers acquire assets and use debt to advance themselves. Two points must be considered before entering into an enterprise: 1) there must be enough earning power to create adequate capital resources for protection against risks from price movements as well as form the basis for growth; and 2) it must yield a profit large enough to provide the owner with income for support of himself and his family without detracting from firm growth and survival.\(^8\)\(^0\) Generally capital budgeting is used to test the viability of a purchase. The main ingredients of this for a purchaser include his income expectations and his opportunity cost of capital. Other points have surfaced to be important such as interest rates, down payment and the length of the amortization period. Taxes should also be considered when a purchase is made. Other considerations include the length of the planning horizon, and future increases in land values as well as net returns.\(^8\)\(^1\) The purpose is to


\(^8\) Warren F. Lee and Norman Rusk, "Inflation and Crop Profitability. How Much Can Farmers Pay for Land?" *American Journal of Agricultural Ec*
show the different inputs in a capital budgeting analysis. Capital budgeting techniques can be used to evaluate land purchases. Each potential purchaser will have different values and estimates for the components previously listed. The bidders will have different levels of income generating potential, planning horizon, income levels and down payment. Thus one would generally see a new entrant possessing a low downpayment, a long planning horizon, a low income level and probably a low to intermediate income generating capability.\textsuperscript{82} The purchaser needs to acquire land in order to have growth in his income generating capacity. As stated previously, debt is acceptable if it is properly used. Since the purchaser places a great importance on his estimates for future economic trends and financial position in his bid price any deviations would be disastrous.\textsuperscript{83} Thus other methods may be more viable for purchasers who are more risk averse. A particularly appropriate method to reduce ownership costs is the sale-leaseback arrangement. This method will decrease cash flow requirements. Particularly attractive are crop-share rental arrangements which reduce cash requirements even greater. Thus given current financial prospects for agriculture, renting may be the best alternative for a farmer attempting to control more 'assets'.\textsuperscript{84}

\textsuperscript{82} Ibid, pp. 988.
\textsuperscript{83} Ibid, pp. 989.
2.4.1.3 Investment and Management Techniques

Since debt is not necessarily destructive, and purchases are needed for growth, how does a farmer choose an investment and then manage it? He should endeavor to choose an investment which has a high return with a risk which he can accept. Minimizing risk through diversification is the basis for portfolio theory. However with a farm, the degree of diversification is limited. The types of crops grown will be determined by the weather patterns, thus greatly different crops are not possible. As well, a farmer cannot feasibly operate two farms a great distance apart to 'diversify' the geographic risk of the farm. When credit is used it affects portfolio risk. The degree of leverage and the risk measures of borrowing tend to result in higher credit risks. This in turn leads to greater portfolio risk. Portfolio risk is a portion of financial risk which can affect the business risk of a firm. Since a farmer wishes to maximize his returns with minimum risk, he should be risk averse; however, this is not a good method for future growth and expansion. High risk aversion in a farmer may "show little or no growth in farm size and partial idling of production capacity." Thus the prudent farm manager will consider credit risk as an important point with respect to expansion and long range plans.

There are a number of responses a manager may employ to respond to risk in the business. Leverage, liquidity and insurance are the three main financial responses to risk available to farmers. The pace of in-


86 Ibid, pp. 325.
vestment is one response to risk. The postponement of capital expenditures will do three things: 1) delay large financial outlays; 2) reduce cash outflows; and 3) restrain indebtedness. This response is easy to perform, however assets must eventually be replaced for continued productivity. A second response to risk is the pace of disinvestment and withdrawals. There must be a willingness to liquidate assets to meet current financial obligations. It may be difficult especially with beginning farmers since they have few liquid financial assets. More permanent assets disrupt the productivity of the farm and thus should be liquidated only as a last resort. The third method of response to risk is to establish credit reserves with lenders. This may result in better communication and thus allow a carryover of debt and restructuring in adverse situations. The manager should establish acceptable targets for the farm's financial leverage position. Thus the manager should base leverage on risk-return considerations, adequate safety margins on collateral, and on projected repayment capacities. The prudent manager will use public progress to develop credit reserves. The final response to risk is insurance. This allows a farmer to be compensated in case of occurrences placing undue financial stress on the farm. This instrument is best used in response to events which occur infrequently but are very damaging, such as hail.


88 Ibid, pp. 170.

89 Ibid, pp. 171.
With general financial considerations covered, the next subsection will deal with financial considerations with respect to new entrants. New entrants must consider all the previous points plus others because of their precarious financial position.

2.4.2 **Financial Considerations With Respect to New Entrants**

Business failures of developing farms have increased in the past few years due to a number of factors. One of the most important is the increasing amount of capital required to start farming. More money is needed to purchase capital assets such as land and machinery, and new entrants have been required to increase borrowings. Table 3 shows an important item (wheat prices) affecting land prices increasing faster than variable input costs throughout a good part of the 1970's. The resulting trend in land values caused many farmers to enter with the expectation of further increases in land prices. However, they did not foresee the high interest rates and lower commodity prices which subsequently occurred in the 1980's. Loan repayment commitments created havoc with net cash flow on many of these farms. As a result, many beginning farmers who acquired land at high prices are in difficulty. To remedy this situation many farmers are trying to restructure their loan portfolio. The 1983-84 annual report for F.C.C. (Farm Credit Corporation) states a large percentage of the processed loans for 1983-84 were for debt consolidation.90 Not only are farmers trying to restructure their loans, but some are going "further into debt to pay for living expenses and interest payments that should be paid for out of farm sales."91

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Table 3
Indices Influencing Farmland Prices
(1971='100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Index Wheat Prices</th>
<th>Index Variable Input Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>100</td>
<td>100</td>
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<tr>
<td>1972</td>
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<td>1983</td>
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</tr>
</tbody>
</table>

Capital requirements, sources, and adequacy of terms and conditions for repayment are referred to in this thesis. There is considerable evidence successful entry is hindered by requirements to obtain and provide security for necessary borrowed capital and the requirement for equity capital. The latest figures from F.C.C. show the average asset value of its applicants is $487,749. This is a considerable figure and one a young person is not likely to possess. The number of loans F.C.C. approved during 1984-85 was less than the previous year by 54.8%. Of these loans a small amount (5.7 million) was used by the Special Farm Financial Assistance Program (SFFAP) because most of the money allocated to SFFAP was used in the previous year. The average size of loan de-

creased from $135,763 in 1983-84 to $116,123 in 1984-85. This may reflect "the decline in land values and farm assets".\textsuperscript{93}

The average asset value of those who applied for and received loans was less than the previous year ($487,749 vs $497,990) however, the percentage equity level was higher than the previous year (51.2\% vs 48.9\%). F.C.C. states

Under deteriorating economic conditions which limit farmers' ability to repay debts, higher levels of equity are required for farm operations to remain viable.\textsuperscript{94}

Though F.C.C. states the majority of its loans held are for the under 35 age group they do not show this group is declining in numbers. The applicants in other age categories have been increasing in recent years.\textsuperscript{95} This may suggest young farmers do not have the financial ability to secure a loan from F.C.C.. Possibly only older more established farmers are able to acquire loans because they have sufficient equity in their farm. It is possible greater equity and collateral is now required to secure and successfully service farm loans. Beginning farmers may have to reach older age brackets in order to acquire the needed equity to start farming. As well they may be engaged in off-farm employment to help service farm debt. It is also possible new entrants are requesting more assistance from their families. Some families may not be able to give assistance until the existing farmer retires. Thus, new entrants may be applying for loans when they are older given they have worked in the operation for more years and have built up more equity.

\textsuperscript{93} Ibid, p.13.
\textsuperscript{94} Ibid, p.15.
\textsuperscript{95} F.C.C., Annual Report, 1983-84, p. 11.
Kapitany (1982) shows:

Entering farmers are more likely to work off the farm, younger, and better educated. They also have less fixed capital (land, machinery and livestock) and a lower level of output than established farmers.⁹⁶

It requires a large amount of capital to start farming and even more to operate a viable unit. This phenomenon is not new to agriculture as Hare (1946) and Gilson (1959) both state this. As real incomes have fallen (Table 1), the business risk associated with farming has increased. This results in new entrants having to endure greater business risk which may inhibit entry.

The risk involved with being a new entrant is great because of the limited assets available to him. As shown previously, asset liquidity is also a problem. Thus

one of the dominant characteristics of beginning farmers is the limited capability to withstand risk. The beginning farmer typically does not have the equity base nor the experience to cope financially and personally with wide fluctuations in income.⁹⁷

With high interest rates observed during the past few years financing is even more disruptive to the new entrant. Inflation has shifted the risks associated with interest rates from lenders to farmers.⁹⁸ As a result more farmers are experiencing difficulties and even bankruptcies.

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An alternative for these new entrants is to rent land. Though this generally is a more economically viable option, especially for those with cash flow risks, it too is difficult to acquire. There is a fairly high degree of risk associated with cash rent. As a result more established farmers with large equities and liquid assets can bid up rents. This may reduce possibilities for new entrants to expand or even begin. What may happen when a new entrant purchases land is a reduction in his credit reserves so other options are eliminated. To a new farmer this may be disastrous. Input costs are high and a new entrant likely does not have the cash to purchase them. Thus, credit is required for purchase of variable inputs. Therefore, when a new entrant has real estate commitments, other credit may suffer. This in turn may reduce his ability to acquire enough inputs to be efficiently productive.

Diversification can generally reduce risk for a beginning farmer. The beginning farmer can have a higher maximum feasible debt with more labour intensive operations such as hogs or dairy. The new entrant with a grain operation may find his maximum feasible debt is lower which limits his ability to expand. For a beginning farmer expansion is a major objective. However, other problems may require more attention.

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101 Greg Hanson and Jerry Thompson, "Farm Debt Capacity: Evidence from Minnesota". Journal of the American Society of Farm Managers and Rural Appraisers, Vol 44 #1, April 1980, pp. 18.
They may not be able to withstand the cash flow irregularities in the early years especially if land is purchased. If they are not able to acquire enough capital then the possibilities for new entrants are few.

2.4.3 Planning Considerations for New Entrants

From the previous material at least two considerations may mean success or failure for a new entrant: 1) the type of farm ie. hogs, dairy, mixed, grain; and 2) the amount which can be financed. The type of farm is a personal matter, though it appears more intensive livestock operations are more likely to succeed. This decision still requires a limit on the amount of debt a farm can undertake. Therefore, the old problem of choosing a plan to best use credit rises again. The new entrant must have

a financial leverage strategy that attempts to maintain the maximum amount of debt (as a percentage of assets) that can be safely carried in low return years that will present no debt payment difficulties in high return years. This leverage strategy is paramount in the advancement of a farm. To maximize net worth, large use of debt may be the best option. Recognizing this, a method to avoid financial distress is simple: the cash inflows (annual) must meet or exceed the outflows (annual). Or put otherwise:

\[ \text{cash inflows (annual)} \geq \text{cash outflows (annual)} \]

102 Ibid, pp. 18.


104 Ibid, pp. 728.
Thus when a new entrant is considering an investment option he would especially consider his projected cash flow. The farmer will use current interest rates which he would most likely receive from his lending institution. A prospective farmer should consider variables which may change. If he considers inflation, the analysis should be altered. The result may be that inflation will make an investment look attractive, only to result in a disastrous position when inflation slows or even reverses. Thus when land purchase is contemplated the purchaser should consider worst case scenarios as well as the average and best case scenarios. However, basing his decision on worst case may result in slow growth and a non-optimal maximum estimate of net worth.

Considering the drop in real incomes (Table 1), the potential gross cash flow has likely decreased also. This results in less cash available to meet the requirements as stated above. Consequently, entry may be hindered because the new entrant must allocate most of the income to debt expenses.

Assuming the new entrant wishes to expand, he must be able to generate investible funds. The first source of investible funds is disposa-
bile income in excess of consumption. This will increase the availability of funds in the next period. Another method is to borrow funds. This is often a function of net worth at the end of the previous period. Of course cash flow is also important in the borrowing function.\(^{105}\) For a new farmer this is a difficult position. For him the possibilities for establishment are based upon four factors. The first is his amount of equity capital. The more there is, the greater the amount of credit potentially available. This may lead to a larger operation and more net worth in the end.\(^{106}\) The second factor is intra-family financial assistance. The family, depending upon its financial position, can supply funds to the new entrant via four ways: 1) gifts; 2) a saving to the new entrant by buying an asset from the family at below market value; 3) inheritance; and 4) credit extension. These four methods can put a farmer's child at an advantage to a non-farm entrant. The third method is less direct. The number of years the farm has operated can be beneficial to the child. A farm which has existed for a long time will generally have a higher net worth to debt ratio. This will allow easier refinancing of the farm for the next generation. This does not benefit a new entrant from a non-farm background. The final method is savings from non-farm employment. These savings can be helpful in acquiring land, inputs and machinery.\(^{107}\)


\(^{106}\) Driver, pp. 38.

\(^{107}\) Ibid, pp. 40.
"If the traditional owner-operator pattern is to continue to dominate agriculture, growth and economic viability will need to replace a debt-free balance sheet in the hierarchy of goals of farm operations."\textsuperscript{108}

The main strength or weakness of a new entrant may be his management ability. If a new entrant possesses production, marketing, and financial skills which are above average he may survive and eventually prosper. The new entrant should be quick to utilize programs and recognize beneficial actions. With a notion for eased credit terms the ambitious new entrant should be the first to utilize them. Soon after implementation the cash flow and equity advantages are bid into the price of the land. Thus, land prices will rise, erasing any benefits to those who are tardy.\textsuperscript{109} Policies aiding the beginning farmer may tend to hurt him more than help. This depends upon which side of the fence he sits. If he is a child of an existing farmer, entry is still possible and most likely probable. Otherwise it may become even more unlikely for a non-farm new entrant to begin farming.\textsuperscript{110}


\textsuperscript{110} Ibid, pp. 1097.
2.5 **HYPOTHESES**

Given all of the preceding information, it appears a number of areas should be questioned. The first deals with the life-cycle of the farm/farmer. The main hypothesis here asks if new entrants need parental assistance to enter farming? Specifically: Family assistance is not necessary for new entrants to accumulate the capital required to begin farming. It is worded this way because the test will be for independence. The method will be explained in Chapter V.

The second hypothesis concerns itself with hardship arising from family assistance. If there is a degree of hardship, possibly assistance will be reduced or eliminated. This could reduce the chances of a new entrant being able to continue farming. The specific hypothesis is: Family assistance offered to new entrants does not place hardship on farm families. This hypothesis will be tested using information from both surveys. It is hoped more than a yes/no response may be gleaned. Information from survey two should qualify the degree of assistance received.

A second area is concerned with the financial lending institutions. It is not the objective to say one is better than another; rather, the perception of their usefulness is desired. The two main types: private and public, will be considered. Consequently, attitudes about these will be derived. Hopefully, the use of these institutions, i.e. which type is preferred will be determined. There are three hypotheses to be tested in this area. The main purpose is to determine if the institutions are providing adequate service. Consequently, testing with respect to public and to private agencies will be done.
The third hypothesis (first in this area) tests the adequacy of financial institutions to provide needed credit. This is tested by the opinions of the respondents. Consequently, the results will be indicative of this sample population. Specifically, the hypothesis states: new entrants believe financial institutions fail to provide adequate credit programs for their needs.

The fourth hypothesis questions the ability of public lending agencies to provide adequate long term capital. A perceived notion of these institutions is they are the main provider of long term capital. This is to be tested by the following hypothesis: public lending agencies do not fulfill their role as providers of adequate long term capital for new entrants. The converse of this hypothesis is to test the adequacy of private lending institutions. The perceived view is; they provide short and intermediate term credit to farmers. Again this is tested to see if the surveyed population feels the private institutions are meeting their needs. Specifically: private lending institutions do not fulfill their role as providers of adequate short and intermediate term financing for new entrants. As well a picture of the degree of use, ie. the actual amounts received should be developed.

A third major area is off-farm employment. As previously stated off-farm employment is one method of entry into farming and its usefulness is tested. A side aspect of this hypothesis is the use of off-farm employment to strengthen the farm financial picture. It is hoped to discern if off-farm employment is a necessary but not a sufficient condition for entry. This is tested via the sixth hypothesis which is: off-farm employment is not utilized by new entrants to facilitate ease of entry into farming.
Therefore, the three main areas to be tested are family assistance, adequacy of lending institutions and the use of off-farm employment. Chapter V will test these hypotheses and compile the results.
Chapter III

METHODOLOGY

This chapter will be divided into three sections. The first will discuss survey design. The second and third sections will discuss the specific methods used by both surveys. The use of a survey is a common means for extracting from the population information about a subject. Generally the total population cannot be surveyed.

This thesis attempts to gather information on three main areas: 1) parental assistance; 2) the use of lending institutions; and 3) off-farm employment. Other areas considered were: the type and size of farm and the demographics of the new entrants. Referring to Appendix A questionnaire one, the areas were discernible by the grouping of questions. Questions one and two give demographics of the entrants. Questions three through six develop the type of farm. Questions seven through fourteen determined criteria about the new entrants. Questions 15 through 28 deal with parental assistance. Questions 29 to 54 deal with the different lending institutions, the source of loans, the use of these loans and the availability of these loans. Fifty-six and fifty-seven refer to off-farm work.

Referring to Appendix B, questionnaire two was segmented into specific areas. Questions one through fourteen were concerned with attributes of the farm such as size, value and type. Information with respect to expansion was gathered by questions fifteen through eighteen. All of
the parts in question nineteen relate to loans acquired by the new entrant. Information with respect to the size of loan, term of the loan, who it was issued by, the interest rate, its use and the difficulty acquiring the loan was gathered. Off-farm employment was thought to be important therefore a number of questions were asked. Numbers twenty through twenty-nine asked about off-farm employment such as the need for the money, the time spent off-farm and the ability to farm without it. The remainder of the questions (#'s 30-36) asked about family assistance. Therefore information was gathered from a representative sample of the population. The goal of the survey was to be representative.\textsuperscript{111} Surveys have other characteristics such as the direct acquisition of information from the respondents. This may be possible by permitting the respondent to complete a questionnaire by himself or an interviewer. Another characteristic of the survey was the natural setting which it encompasses. Therefore a survey becomes less artificial than a controlled experiment.\textsuperscript{112}

There are three basic ways of data collection: 1) personal interviews, 2) telephone interviews, and 3) self-enumeration.\textsuperscript{113} The first two are effectively the same, although one is face to face and the other is conducted over a distance. Personal interviews are very costly and time consuming. They are best used in instances where the material discussed is complex and/or extensive. Telephone interviews can save much


\textsuperscript{112} Ibid, pp. 9.

of the cost of personal interviews and accomplish many of the same objectives. Self-enumeration is a much cheaper method of collecting information and reduces costs substantially. However, there are drawbacks associated with a mailout questionnaire. Non response and partial responses are common problems. It is possible the wrong person may complete the questionnaire. Each of these limits the effectiveness of the survey. An advantage associated with the questionnaire is its standardization of form resulting in each respondent receiving exactly the same questions and in the same order.

When choosing the type of survey, three considerations must be involved. First, the cost of the survey is important. Secondly, the desired response rate is a factor. Response rates of 80% or more generally require an interview; whereas, rates of 50% may be achieved with a questionnaire. The third consideration is the types of issues involved. If the information required is of an open nature then a questionnaire will suffice. If more private issues are discussed then interviews could be more appropriate.

When developing a survey four types of information can be obtained depending upon the type of questionnaire and questions asked. Potential information includes: 1) the attitudes of the respondents; 2) their beliefs with respect to the scope of the survey; 3) the respondents behavioral characteristics; and 4) the respondents attributes.

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114 Ibid, pp. 105.
115 Isen, pp. 10.
When all these features are considered the hypotheses for the project can be developed. The hypotheses then becomes the basis for the survey. Everything is geared for testing the hypotheses. Measurement of response is important since this allows for statistical testing yielding a definitive account of the information gathered. There are four levels of measurement used in sampling. The first is 'normal', which is essentially a labelling device. There are no values associated with the numbers. The numbers are used to distinguish one response from another. The second measure is 'ordinal'. This type of measurement allows for rank ordering. A variable with a value of 1 is rated differently than a variable with a value of 5. Therefore relative positions of answers may be determined. A value is not placed on the unit, therefore differences between two ordinal values does not have a fixed amount.\textsuperscript{117}

This problem of ordinal measurement is eliminated by the next measurement technique, 'interval'. Real differences between intervals can then be determined. However, it possesses no zero characteristic. This is remedied by using the 'ratio'. This has all characteristics of the above types plus a zero basis point. It is best to use the lowest measurement possible as this will enhance the power to evaluate causal relationships.\textsuperscript{118} Most of the responses in questionnaire one will be allotted 'normal' labels. The exception will be the year of entry. This will be stated by the actual value. Questionnaire two will be similar with most questions coded by 'normal' labels. The exceptions will be specific values such as the size of farm or amount of the loan.

\textsuperscript{117} Ibid, pp. 29.
\textsuperscript{118} Ibid, pp. 31.
Once the hypotheses have been developed the type of survey can be decided upon. There are three basic survey types: 1) descriptive, 2) explanatory studies, and 3) explanatory. The first type seeks to "describe the distribution of some trait(s) in a sample of population." This type of survey is more concerned with what has happened rather than why it happened. The second type of survey tries to establish causal connections between variables. This requires specific ideas about how independent variables may be affecting the dependent variables. The last type is useful when little is known about the topic of interest. This can allow broad topics to be covered and questioned. Thus the relevant groups thoughts can be collected.

Some of the survey could be classified as descriptive. This especially applies to questions pertaining to year of entry and age. The first questionnaire is an explanatory survey because the population's thoughts and ideas were gathered. Not enough initial information was known to have an 'explanatory study'. Questionnaire two combines both 'descriptive' ie. loan amounts, farm size etc., with 'explanatory study' to determine causal connections between variables. Together the two questionnaires should: 1) develop knowledge about a topic where there is limited knowledge; and 2) describe the population responding to the questionnaire.

The next step was to determine the unit of analysis in this survey. This was not the variables but rather the specific groups. In this research project, new entrants were the unit of analysis. This step must

119 Ibid, pp. 38.
120 Ibid, pp. 39.
be performed in order to eliminate groups which were not desired in the survey.\textsuperscript{121}

Once the type of survey and unit of analysis are decided upon the next step is survey research design. There are two basic types which are commonly used. The first type is cross-sectional. With this type data is collected only once and within approximately the same time frame. This develops a cross-section of the population. Cross-sectional design is generally used for descriptive purposes. Consequently, it is difficult to use cross-sectional surveys for explanation because of problems with association, time ordering and non-spuriousness. Non-spuriousness refers to variables which are not connected but appear to be.\textsuperscript{122}

The second type of survey design is referred to as longitudinal, arising from collection of data over time. The method used in this thesis was cross-sectional because a single time frame was required. It would have been too costly and time consuming to pursue a longitudinal design. The cross-sectional allows a relatively quick and cost effective method for gathering data. This was necessary for this type of research project.

Once the type of survey design is decided upon the questionnaire can be designed. The questionnaire "most accurately captures the objectives and rationale of the survey."\textsuperscript{123} This can be the most critical component

\textsuperscript{121} Ibid, pp. 40.
\textsuperscript{122} Ibid, pp. 43.
\textsuperscript{123} Ibid, pp. 51.
of the survey, as poor questionnaires can give very little information. Design of the questionnaire is related to the method of collection. Mailout surveys dictate minimal cost incurred by the respondent. This means both monetary ie. postage, and time; should not take an excessive length of time. This should help maximize the response rate.

The length of the questionnaire depends upon the types of survey. A personal interview can withstand a much longer questionnaire than a mailout survey, therefore, the type of survey will dictate the appropriate length of questionnaire.\textsuperscript{124}

In regard to types of questions used, there are seven main characteristics to be considered. They are:

1. complexity
2. nature (open ended or not)
3. purpose
4. sequence
5. tedium
6. non-response -- potential for it
7. threatening stance\textsuperscript{125}

With personal interviews the questions can be quite complex and open-ended. A definite sequence should be used by the interviewer resulting in a low non-response rate. However, threatening questions can often be better answered by mailout surveys or via telephone. The mailout questionnaire contrasts with an interview because the respondent is in com-

\textsuperscript{124} Ibid, pp. 55.
\textsuperscript{125} Ibid, pp. 55.
plete control. The respondent may not be able to understand complex questions and may also change answers after reading the whole questionnaire. There is a high chance of non-response to some questions. As well the possibility exists the wrong person will answer the questions or answer foolishly. Using a phone interview eliminates some problems such as tedium and sequence; however, it does not convey complexities. A phone interviewer cannot use visual aids to induce responses for questions where ranking or selection is important.

This thesis utilized two questionnaires. The first was a mailout type. The questions were ordered in such a manner so the respondent was not subjected to tough questions immediately. As previously stated the questions were arranged in groups, clusters pertaining to different areas of interest. The discussion of the questionnaire design will follow; however, both open and closed questions were utilized. The first questionnaire minimized threatening questions to increase overall response.

The second questionnaire again used open and closed ended questions. The purpose of it was to develop more detailed information about the individual. Consequently, complex and threatening questions were increased. Non-response was minimized by interviewing (personally and by phone) the population. Again it was ordered so a definite sequence was followed.

Format of questions is very important, especially for a mailout questionnaire. The order is important for a proper introduction to the survey, and to lead-in to the next group of questions. When developing order of the questions, the type of information sought must be considered.
Generally, one or more of the following are requested: 1) their attitudes, 2) their beliefs, 3) their behavior, and 4) their attributes.\footnote{126}

The respondents' attributes, attitudes and beliefs were questioned. Consequently, questions were ordered to gather information about each. The respondents' attributes were the subject of the first few questions in each questionnaire. In addition in questionnaire two other attributes were gathered specifically with respect to loans. The respondents' attitudes about their future, agriculture, the lending institutions were gathered. As well, their beliefs about themselves and agriculture were gathered. The attributes were asked first to ease the respondent into the questionnaire. Then, attitudes and beliefs were organized to mix with the subject areas previously stated.

Once the type(s) of information is(are) chosen then the method of questioning can be decided upon. There are two types, open and closed. The open type provides no answer, rather the respondent can construct his own response to the question. The closed type has specific answers where the respondent chooses one. The advantages and disadvantages of open and closed questions are presented in Table 4. Once the type of question is decided upon, the wording of the question must be considered. The following points should be considered when developing a question.

1. is the question double-barrelled -- asking more than one question
2. is the question ambiguous -- avoid jargon or slang

\footnote{126} Ibid, pp. 64.
3. is the level of wording appropriate -- substitutes words for complex phrases
4. is the question too abstract
5. is the question too leading -- increases probability of biasedness
6. are there unconventional phrases or abbreviations -- avoid this
7. is the question too vague or too precise
8. is the question biased -- tend to encourage specific response
9. is the question objectionable
10. is the question too demanding -- may result in non-response
11. does the question require two answers
12. does the question assume too much knowledge -- avoid
13. does the question provide an appropriate time reference
14. does the question provide responses that can be compared
15. have the questions (questionnaire) been pre-tested

The previous points were considered and appropriate measures were taken to guard against all these factors. The type of survey decided upon determines the construction and the methods of implementation. Since a mailout survey was used the following issues were considered. The questionnaire must be neat and professional. Examples of this would be numbering questions, titles for categories and plenty of space for answers.

Table 4

Advantages and Disadvantages of Open and Closed Questions

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tr>
<td>1) unknown number or answer categories</td>
<td>1) may yield collection of worthless/irrelevant information</td>
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<td>2) respondent can answer in detail</td>
<td>2) data not standardized</td>
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<td>3) if potential categories are numerous</td>
<td>3) coding difficult: often subjective; prone to error</td>
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<td>4) issue is too complex for categorization</td>
<td>4) requires superior writing and communication skills</td>
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<td>5) allows respondent to be creative</td>
<td>5) wording may not convey meaning</td>
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<td>6) easier for respondent to answer</td>
<td>6) requires more of respondents time -- lower response</td>
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<td>7) questionnaire larger</td>
<td>8) differences in interpretation go undetected</td>
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<td>9) variations in answers are artificially eliminated</td>
<td>10) more likelihood of transcription error</td>
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</table>

1) standardized answers
2) answers easy to code
3) respondent more clear about question
4) answers are complete
5) makes sensitive issues less sensitive
6) respondent may feel frustrated if inappropriate categories
   with lengthy questionnaire -- repetitions
7) respondent feels more likely to answer correctly
8) respondent feels more comfortable answering
9) respondent feels less threatened
10) respondent feels more confident
11) respondent feels more in control
12) respondent feels more satisfied
13) respondent feels more engaged
14) respondent feels more involved
15) respondent feels more motivated
16) respondent feels more excited
17) respondent feels more interested
18) respondent feels more enthusiastic
19) respondent feels more informed
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1) standardized answers
2) answer easy to code
3) respondent more clear about question
4) answers are complete
5) makes sensitive issues less sensitive
6) easier for respondent to answer
The attitudes of the respondents were questioned by a number of questions. Their beliefs/attitudes about the difficulties in the loan system and thus suggestions for change were questioned. This was best determined by open-ended questions. Question 53 'Do you find any difficulty in the present loan system?' depicts a typical open-ended question. It allows the respondent to give his personal opinion about the subject. The use of it was required because there were too many possible answers and their nature was unknown. However, a problem arises with the answers. There may be too many answers to code effectively. It was relatively straightforward so there should be no problem understanding the meaning. The subject interests most respondents consequently they should complete the question. Since there were only three open-ended question in the first questionnaire, the respondents should not be overwhelmed by them, leading to a higher response rate. Questionnaire two has a few open-ended questions, but they were in conjunction with closed questions. This should result in fairly standardized information so coding should not be a problem.

Most of the questions were of a closed variety. Though this may lead to some misnomers with respect to questions, it was better for the purpose of this research. Question 33 'If you did take out a loan(s), for what purpose was it used for?' had as answers 1) farm equipment, 2) breeding stock, 3) farm real estate and 4) land improvements. This should result in a standard response to this question. The question should have complete answers. There should be limited non-response due to inappropriate categories. Most questions are closed with answers as above or such as 'yes/no'. 
For a mailout survey the order of the questions are especially important. The first question should attempt to relate the first question to the survey's objective. Secondly, the first question should not be too demanding. The third suggestion is to screen the respondents at the beginning. Fourthly, questions covering the same topic should be grouped together. Instructions were clear to minimize confusion. The fifth suggestion is to use transitions to establish continuity of questions or to start a new topic. Finally, place personal questions at the end of the survey.\(^{128}\)

The first question asked was the year the person started to farm. The second question asked was the age of the respondent. Those led into general questions about the farm, ie. own land, have a C.W.B. permit book. Then came the area of independence and family assistance. This led to the area about institutional loans and their use. The next area considered attitudes and drawbacks about the institutional loans. Finally, the area about off-farm employment was considered.

The second questionnaire also attempts to flow from one area to another. The first few questions dealt with attributes about the farm ie. the type, size, type of crops grown, and the value of assets. This led into the area about expansion. From this the area about loan use was considered. The next area considered was off-farm employment. This led to questions about family assistance.

\(^{128}\) Ibid, pp. 83.
Once the questionnaire was developed, it became necessary to determine who should be surveyed. Obviously, the whole population could not be sampled as this would be time consuming and costly. Thus a sample of the population developed through the use of a survey was used. It was an estimate of the whole population, nevertheless an adequate representation. Errors could arise because not all the population was sampled. Two types of errors can be observed: sampling error and non-sampling error. The first refers to incomplete coverage. The second arises from inaccurate measurements, and administrative mistakes. An attempt was made to minimize the chance of committing these mistakes.

There are two types of sampling: 1) probability sampling, and 2) non-probability sampling. The first has units selected by a chance mechanism, i.e. a simple random sample. The second type has four sub-types: i) volunteer sampling, i.e. the respondents have agreed to be in the survey, ii) haphazard sampling -- units that are readily available at the time of the survey, iii) quota sampling -- selection of units to meet certain predetermined conditions, and iv) judgement sampling -- the units selected are typical of all the units in the population. The unit of analysis for this study was new entrants.

With the information available the type of sampling used was haphazard non-probability. Exact selection of units was not possible therefore quota sampling was not utilized even though some preconceived ideas were developed. It was hoped the survey would encompass new entrants (those beginning to farm in the past three years) but a definitive group

129 Ibid, pp. 92.
130 Ibid, pp. 94.
was not readily known.

The steps for constructing a sample survey were developed. First a set of objectives for the survey were outlined. Secondly, a definition of the population to be sampled was needed. The defined population was referred to as the target population. Since the population actually surveyed was generally different than the target, it was called the sample population. Thus, in this survey, the target population consists of new entrants who entered farming in the last three years. In practice the new entrants available will be the sampled population. The next step defines the data to be obtained. The methods of extraction and the amount of data will also be developed. Finally, the defined population was partitioned into non-overlapping, exhaustive parts called units. The sampling frame is then developed from a list of these sampling units.\(^\text{131}\)

Once the questionnaire has been designed and the sample population determined then the survey was implemented. The premise of a mailout survey suggests it provides a cheap, easy, and a quick way to get information.\(^\text{132}\) Relatively high response rates may be possible with proper management. The use of the covering letter was invaluable as it stressed the need for the respondent to complete the survey for a complete analysis.\(^\text{133}\) It stated the responses would be held in confidence. The mailout package contained the covering letter, the questionnaire, a return envelope (postage included) inside an envelope having the Univer-

\(^{131}\) Ibid, pp. 97.

\(^{132}\) Ibid, pp. 135.

\(^{133}\) Ibid, pp. 137.
The questionnaire must have a good mailout date to be effective. Therefore it is prudent to avoid holiday mail and months which are busy. Thus in this survey seeding and harvest months were avoided. Once the initial mailout was completed, it was imperative a follow-up letter was implemented. The suggested time frame includes a postcard reminder after one week and then after two weeks another survey complete with another covering letter.\textsuperscript{134} When the responses were received then recording of the responses would be completed.

Therefore the survey should operate in the following manner. First, the type of information collection method was decided upon. This may be a function of cost and time. Next, determine what was to be determined from the survey. Here, the hypotheses were developed. To do this the questions must be developed properly to determine survey type. In this research the survey type was explanatory (with descriptive questions considered). The relevant unit of analysis (new entrants) must be developed. Next the survey research design is determined.

The next step was the design of the questionnaire. The mailout survey was adequate for the desired responses. Thus questions will be of both open and closed configuration. As stated previously, the survey was a haphazard non-probability survey. The second survey has attributes of volunteer non-probability scope and of probability sampling. Only those who stated they would agree to a second questionnaire were surveyed; however, they were selected randomly.

\textsuperscript{134} Ibid, pp. 143.
3.1 **SAMPLE DESIGN**

A survey was conducted as a test of the population. The population in this instance consists of all new farm entrants in Manitoba.

3.1.1 **Structure of the Sample**

An objective of the study was to determine the financial arrangements of new farm entrants. To do this the target population was a group classified as new farmers. This has been decided as someone who started farming within the last three years. The target population probably represents a large group. The sample population represents the target population. Two sample populations were identified. The first sample consists of diploma graduates from the University of Manitoba for the years 1982, 1983, 1984 known to have started farming. This yielded (after elimination of some for certain reasons) 190 possible respondents.

The second sample was made up of a non-diploma graduates known to have started farming during 1982, 1983 and 1984. As there were more non-graduates entering farming each year than graduates starting farming, this second sample is expected to be more representative of the general public. Agriculture Representatives were contacted detailing the objectives of the survey. From the 22 Agriculture Representatives who responded, 204 names of new farmers were obtained. Any repeated names, from the list of diploma graduates, were singled out and only referred to once as diploma graduates. Similarly, names of husbands and wives were sent only one questionnaire.
The questionnaire was pre-tested by a group of selected respondents who made some observations which led to revisions in the questionnaire. A further pre-test was done by some of the faculty in the Department of Agricultural Economics. Their recommendations were incorporated into the questionnaire design.

The project was divided into two parts. In part one the survey was more general and was the base for part two. The purpose of part one was to establish parameters for the population. Five areas were considered: 1) demographic characteristics of the population, 2) financial assistance from the family, 3) credit sources, 4) limitations that are apparent in the system, and 5) satisfaction and difficulties experienced by the survey population.

Part two resulted in a second survey conducted on a sample of those who agreed to be interviewed for more specific and detailed financial information. This was done to derive a more comprehensive picture of the sample population. Questions as to the size and type of farm, the debt load, the assets, and the financial stability and family assistance were asked.

3.1.2 Design of the Questionnaire and Application of the Questions to the Relevant Hypotheses

The questionnaire design is a critical component of the entire survey process.\textsuperscript{135}

For Part I, mailout was elected. This type was selected for a number of reasons.

1. the cost of interviewing a relatively large sample was prohibitive,
2. the information requested can be asked in a fairly short questionnaire, and
3. ease of tabulating the responses.

The questionnaire used had four pages of questions. This is not an extreme amount and was within accepted guidelines for maximum length. The vast majority of the questions have a simple answer code i.e. yes or no. There are a few questions that have more than two choices and three with open ended questions. Open ended questions were generally avoided for two reasons: a) people may not want to write sentences as an answer, and b) they are harder to organize for analysis.

A provision for separating diploma graduates from the general public was made in the questionnaire. Question 5 and 6 were merely switched so the diploma group received the questionnaire with question 5 reading 'machinery'. This did not pose any problem in tabulation as both have the same answer format. When coding the answers the questions appeared in the order of question 5: livestock; question 6: machinery.

For example question 1 stated 'When did you start farming? (year)... The respondents would then enter the year such as 1981. This would be coded as '81'. The next question asked 'What age group are you in?'. It gave as possible answers 18-25; 26-30; 31-35; 36-40; 41-45; 45+.

Most of the other questions had answers of the yes/no variety.
ample (#10) 'Are you farming on a full-time basis? yes/no. The questionnaire has 60 questions in total, the last three being designed to find persons willing to give more detailed information for part two of the research.

3.1.3 Coding the Variables

Since this questionnaire was designed to be straight forward most questions are of a basic yes/no variety. There are also a few other questions that have a choice of responses. There are also three open ended questions.

A listing of the coded values for the answers for all of the questions is necessary. This allows for tabulation of the variables for analysis. For example, it was possible to determine how many respondents state they are 18-25 years old and own equipment. This was accomplished through the use of contingency tables. If these codings were not done then difficulties would arise differentiating between answers in different questions.

The coding is fairly straight forward but some require explanation.

#1: the last two digits of the date are used (eg. 83)

#2: age groups 18-25 is 1
26-30 is 2
31-35 is 3
36-40 is 4
41-45 is 5
45+ is 6.

#3: asked for municipality. This was later converted of crop district and then to regions. The map (Appendix B) shows the municipalities, crop districts and regions.

#4,5,6: the responses were coded 0 if no; (note: some respondents wrote this in so it was coded) 1 if rent, 2 if own, and 3 if rent and owned.
The two questions 5 and 6 were reversed between the two groups diploma and non-diploma to distinguish the questionnaire for computation. The coding was done as the general public questionnaire (ie. #5 reads 'livestock').

#7-12: were coded as yes=1; no=0.

#13,14: were coded as no=0; maybe=1; yes=2.

#15-25: were coded as yes=1; no=0.

#26-28: were coded as less than 1/2 = 1;
about 1/2 = 2;
greater than 1/2 = 3;
if they wrote none = 0.

#29-32: were yes=1; no=0.

#33: as farm equipment = 1;
breeder stock = 2;
farm real estate = 3;
land improvements = 4;
multiple answer = 5.

#34-43: were yes=1; no=0.

#43: was coded as 0 if the respondent stated none
1 if less than 1/2
2 if about 1/2
3 if greater than 1/2

#44: is yes=1; no=0.

#45: is no=0; about the same = 1; yes=2.

#46-51: yes=1; no=0.

#53: is an open-ended question. The responses were read and five groups were determined. They are:
interest rate = 1;
availability = 2;
payments too high = 3;
no difficulties = 4;
banks alright = 5.

#54: was also read and the response coded as such:
gives too much = 1;
availability = 2;
no response = 3;
interest rates = 4;
not enough = 5;
repayment = 6;
other = 7.

#55: coded as:
private or sale proprietorship = 1;
partnership = 2;
corporation = 3.

#56: is yes=1; no=0.

#57: is very important = 2;
moderately important = 1;
not important = 0.

As there was a typing error in question 52, it was not considered in the analysis. This question should have stated "if yes to question #50" rather than "question #49." Secondly, the four alternatives were not correct. They should have been numbered 46 through 49 rather than read questions 44, 45, 46, 47. Confusion was doubled in this question, therefore, it was felt any answers received would be unsatisfactory or their validity was in suspect. Another typing error resulted in question 45 appearing twice. This was not a problem as obviously the second '45' should have been #47 and was coded as such.

3.1.4 Execution of the Survey

Once revisions had been made to the questionnaire, it was mailed to the sample population. To assure an acceptable response rate a series of follow-ups and a complete re-mailout system was utilized.

As suggested in the ISER Research Manual (p.136) a covering letter was included with the questionnaire (Appendix C). This letter was designed to acquaint the recipient with the objective of the study and give other relevant information.
The mailout date was July 13. Following the procedure detailed in ISER, a follow-up letter was sent two weeks later on July 30. This asked for more cooperation and thanked those who had replied. Approximately two weeks later on August 16, the survey was resent to those who had not responded. Since the name of the respondent was optional, a number of people who had responded received the survey again. This second survey was marked with an asterisk in the right hand corner to identify that it was of the second batch. A mailout package identical to the initial package was utilized, the only difference being the covering letter. It asked those that had filled out a questionnaire to disregard this second one and requested that those who had not completed one do so (Appendix D).

From the 396 possible respondents 117 general public and 87 diploma graduates responded.

3.2 OVERVIEW OF THE SECOND SURVEY

The second part of this survey attempts to get more detailed information from a selected group of the respondents. This was to be done with interviews and another questionnaire.

Since not all of the respondents were expected to agree to a more detailed examination of their operation, a small sample was expected. Given time and money constraints, approximately forty respondents was hoped for. Forty names were selected by a random number generator from those who agreed from survey one. As distance was a factor to consider given time and money constraints, a phone interview would be used if necessary.
Using a phone interview might alter response to certain questions. This could happen if a question needed an explanation but was inadequately provided. For this reason the questionnaire was sent to those who would be interviewed by phone. This would allow them to go through the questionnaire while being interviewed by phone. Return postage and envelopes were included for mailback.

This second questionnaire was designed to extract information about the respondents current financial situation. Thus, questions were asked to obtain specific information about enterprises debt, assets, cash flow viability, levels of family assistance, etc. (Appendix B).

It began with general questions pertaining to the type of operation, the size of operation, crops grown and yields realized. Since this part of the project was developed to determine a financial picture of the respondents much of the remaining questions pertained to assets, debts and acquisition of capital. There are 36 questions in the questionnaire although four of them have more than one part. A mixture of closed and open ended questions were used. The premise being some questions could be better answered in the respondents own words, compared with set answers. This feedback which was required was more attainable through open-ended questions. Since open-ended questions vary greatly, they had to be grouped into similar responses for coding. This posed a small problem but questions were designed to generate answers that could be divided into groups.
3.2.1 Coding the Variables

The coding of the questionnaire followed a similar format to the other questionnaire.

#1) used the following: grain = 1 mixed = 2
    beef = 3 dairy = 4
    hogs = 5 poultry = 6

#2) the TOTAL acres
#3) the CULTIVATION acres
#4) the number, often zero
#5) the number, often zero
#6) the crops grown were coded: wheat = 1 barley = 2
    canola = 3 flax = 4
    rye = 5 oats = 6
    peas = 7 corn = 8
    sunflowers = 9 alfalfa = 0
    mustard = .5

#7) match the yields given with the corresponding crop in #6
#8) the value
#9) the value
#10) the value
#11) yes = 1; no = 0
#12) CWB = 1 Dairy = 2 Hogs = 3 Poultry = 4
#13) size in units if applicable
#14 & 15) yes = 1; no = 0
#16) land base = 1 livestock = 2
    intensive = 3 combination = 4
#17) own funds = 1 borrowed = 2
    gifts and inheritance = 3 all = 4
#18) already = 1 within 5 = 2
    within 10 = 3 economy = 4
#19) MACC = 1 FCC = 2 Bank of Montreal = 3
    Royal Bank = 4 Commerce = 5 Toronto Dominion = 6
    Previous Owner = 7 Credit Union = 8 Family = 9
    Farm Equip Co. = 10 Elevator Co. = 11
#19.1) yes = 1; no = 0

#19.12) no collateral = 1  credit rating = 2  unproven farmer = 3
cash flow = 4  unsecure land = 5

#19.13) land = 1  machinery = 2  livestock = 3
unproven = 4  operating = 5  multiple = 6

#19.14) size of in dollars

#19.151) the years: if <1 = 0; if undefined = 99

#19.152) the amount

#19.153) fixed = 1  floating = 2  neither = 0

#19.154) interest rate

#20) yes = 1; no = 0

#21) spring = percent  summer = percent
fall = percent  winter = percent

#22) days

#23) yes = 1; no = 0

#24) operating = 1  essential = 2  luxuries = 3  all = 4

#25) yes = 1; no = 0

#26) yes = 1; no = 0

#27) yes = 2; no = 0; may be = 1

#29,30,31,32,33) yes = 1; no = 0

#34) positive = 1; no = 0

#35) very = 2; moderate = 1; convenient = 0

#36.1) yes = 1; no = 0

#36.2) yes = 1; no = 0

#36.3) yes = 1; no = 0

#36.4) yes = 1; no = 0

#36.5) yes = 1; no = 0

#36.6) yes = 1; no = 0
3.2.2 Execution of the Survey

This part of the project was to be more direct with the respondent than Part I. Consequently, personal interviews were attempted. Phone calls were made to the 40 respondents who had been randomly chosen from the agreeable respondents. Sixteen had changed their minds when they found out about the nature of the questionnaire. Of the ones who agreed, nine of the interviews were conducted over the phone, fifteen were personal. Of the 40 randomly chosen respondents, 24 questionnaires were completed.

As previously stated those interviewed by phone had the questionnaire also. All completed and returned the questionnaire. The results of this questionnaire were grouped to provide averages which would be representative of the new entrants surveyed. The averages and frequencies of the answers provide a good attempt to obtain a large cross section ie. small to large farms with varying degrees of financial health.

The results of this questionnaire join well with Part I of the survey. The first part of the survey was oriented towards finding a general profile of new entrants. This second part attempted to get a concise picture of their financial position as new farm entrants.
Chapter IV
ANALYSIS

4.1 SURVEY ONE

4.1.1 Description of Survey Respondents

The first part of the survey was mailed out July 13, 1984. The package contained a covering letter, a prepaid return envelope and the questionnaire. The initial response was good; however, possibly a greater response could be obtained. To achieve this, a second mail-out package was sent on August 16, 1984. Approximately two weeks after each package was mailed, a letter asking the population to complete the survey was sent out. From a total of 396 possible respondents, 204 replied (51.5%). Cross tables of the results are given in Appendix E.

Some general characteristics of the respondents can be determined from the survey. There are six age classifications in the survey. It is believed most new farmers are young so this is questioned. The largest group, class #1, which is 18-25 years of age contains 60.8% of the respondents. Twenty-five percent of the respondents are from the class 26-30 years. Thus the survey has 85.8% of its respondents 30 years of age or younger. If the next class is included, an additional 10.8% of the respondents are included. Therefore, most of the respondents are younger than 35 with the majority below 25 years.
A further analysis to determine when these new entrants began farming is included. The premise of the survey is to find new entrants, specifically those who have started in the past 4 years (ie. 1981 to 1984). Some respondents state they began to farm as early as 1967; however, some who began farming in the late 1960's and early 1970's stated they were quite young at the time. Thus, it appears they were farming when they were still children but recently have recently started farming as an occupation.

Of the 204 respondents seven did not answer the question about when they began farming. The numbers indicate 51.5% of the respondents started farming between 1981 and 1984. When those who began farming in 1980 are included, 61.3% of the total started since 1980. These results show most respondents have been farming full time for only a few years. Coupled with the findings from the previous question, it appears this survey has questioned young farmers who have started in the past 5 years. This supports the argument most new farmers are young.

The survey was designed to extract information about new entrants who have started since 1981. The sample population was of a different nature resulting in a large number of 'new entrants' who started before 1981. Therefore, it was decided to compare two groups of 'new entrants', pre-1980 with post 1980 respondents.

A third question is used to determine where the respondents are farming. Since a majority of the farming in Manitoba is in the southern part of the province, it is expected this area would dominate the responses. The 1981 census gives the following distribution of farms:
Brandon region with 26%, Winnipeg region with 40.4%, Parklands region with 18.3%, and the Interlake region with 15.3%. The replying population was distributed as follows: 74 out of 204 (36.3%) farm in the Brandon Region. A further 76 out of 204 (37.3%) farm in the Winnipeg Region. The other two regions, Parkland with 13.7% of the responses and the Interlake with 12.7% are noticeably fewer.

The initial mailout list was developed by contacting agricultural representatives and by the Diploma class lists. The solicited population (totalling 396) was distributed similarly to the census population. The contacted population had the following distribution: Brandon region with 31.8% or 126 potential respondents; Winnipeg region with 39.6% or 157 potential responses; Parkland region with 15.7% or 62 potential responses; and, the Interlake with 12% or 51 potential responses.

Thus a larger response is realized for the Brandon region than the census would suggest. A smaller response (minimal) is observed in the Winnipeg region. The other two regions are both less than the census would suggest however they are representative. Therefore, a good distribution of farms in the province is gathered. (See map defining regions in Appendix E).

A third area of the questionnaire pertains to control of capital, land, livestock and machinery. The population is asked if they own, rent, or have access to assets through some combination of the two. A breakdown of questions 4, 5 and 6 gives a general description of the responding population.
Question 4 asks about land control. Of the 204 possible only 7 did not respond to this question. A near majority state they both own and rent land (46.1%). The number who only rent land exceeds those who only own land but not by an appreciable difference (30.3% vs. 23.6%). Thus it appears most (96.5%) of the respondents control land.

Though it is evident most of the respondents control land, a breakdown by age of these respondents is desirable. As expected, the largest response group is the 18-25 age bracket. What is of importance is the breakdown of this group. It is interesting to note 23.6% of the total population is 18-25 years of age and controls land by renting. As well this group comprises the majority of those renting land (46/59). The group who owns and rents land both and is 18-25 years old comprises 24.1% of the total respondents. What becomes clear is when age increases, less rental and more ownership of land occurs. In addition, an increase in the combined control by rent and ownership occurs. Those beginning since 1980 represent 59.3% of the responses to this question. When comparing before 1980 with after 1980 there is an obvious trend. Most respondents before 1980 rent and own land (68.3%) while 20.5% own and 11.0% rent. This trend reverses for those who started after 1980. Here most rent 42.1%, rent and own 32.2% and own 25.6%. Possibly those who have farmed longer are able to own and rent more resources. It appears rental is more important to farmers who have entered more recently.

The questionnaire also asks about livestock control (#5). A large percentage of missing values occurs in this question. This likely can be construed as a question not applicable to all of the population.
Only 75.5% of the respondents answered this question. However, from the results it appears if a person has livestock, they are owned.

In this question rent implies a lease or some form of payment for usage of the animal. A small number (1.3%) state they rent animals. Further, only 6.6% state they both own and rent livestock. A majority of the respondents state they own livestock (67.1%). Of the total respondents, 25.0% state they do not have livestock. With respect to controlling the use of livestock, the dominant age group is the 18-25 bracket (46.7%). This is to be expected given the structure of the population surveyed.

When the year of entry is considered, 58.8% of the responses are from those farmers who started after 1980. Owning livestock is the main response when the results before 1980 are compared with those after 1980. Apparently, owning livestock is the main method for controlling livestock.

An essential component of farming is machinery and equipment. It is important to find out whether these new farmers control machinery by ownership or by rental agreements. The response is high with 92.6% of the total population responding to this question (#6). Of this total, only 4.8% state they do not have machinery. This is very low. A greater proportion of the respondents own their machinery (44.9%) and a relatively large number both own and rent machinery (32.6%). Only 17.6% say all their machinery is rented. It is obvious most of the respondents own machinery and equipment. This is somewhat surprising considering the age of the respondents and the cost of equipment. However, this may
be a result of the perceived lack of opportunity to rent machinery and equipment.

The three ways available to control equipment are own, rent or own and rent. With this question the 18-25 age group represents 53.4% of the responses. They are the dominant age group, as should be expected. Of the respondents who only own their equipment i.e. don't rent or rent and own, a majority (51.2%) are 18-25 years old. Of the total respondents to this question only 21.1% are 18-25 years old and own equipment. However, this age group is much more dominant with respect to renting equipment. The 18-25 age group represents 75.8% of all who rent. Thus it appears the younger farmers are more inclined to rent equipment.

Of the total responding to this question 60% started farming after 1980. There is a difference between the pre-1980 group and the post-1980 group. The pre-1980 group exhibit a strong tendency to own (62.2%) or rent and own (33.8%). Compare this with the post-1980 group where only 35.1% own and 30.6% rent and own. As well, 27% only rent machinery. Obviously new entrants rely more on renting equipment than established farmers.

One method of determining a beginning farmer's status as a committed farmer is to find out if he has a CWB permit book, a producer quota or a contract for special crops. Table 5 shows results for questions 7 through 10. A high proportion (82.4%) of the respondents hold a permit book. The proportion holding permit books to those who do not rises as the age of the individual increases. Question 8 asks about producer quotas. Most (93.1%) do not have a producer quota. Having a special
crops contract may supplement the quota system, which can be beneficial to new farmers who have problems with their cash flow. For this reason, they are asked (#9) if they have ever held a special crops contract. A fairly even division between yes and no finds (44.6%) having a contract.

Table 5
Farming Status of New Entrants

<table>
<thead>
<tr>
<th></th>
<th>% Response</th>
<th>% Yes</th>
<th>% Yes from 18-25 age group</th>
<th>% Yes Since 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>#7</td>
<td>99.0</td>
<td>82.4</td>
<td>50.5</td>
<td>50.3</td>
</tr>
<tr>
<td>8</td>
<td>98.5</td>
<td>6.9</td>
<td>2.8</td>
<td>2.5</td>
</tr>
<tr>
<td>9</td>
<td>99.0</td>
<td>44.6</td>
<td>26.5</td>
<td>21.3</td>
</tr>
<tr>
<td>10</td>
<td>99.0</td>
<td>77.0</td>
<td>45.5</td>
<td>45.5</td>
</tr>
</tbody>
</table>

Questions 7, 8 and 9 refer to the use of CWB permit books, producer quotas and contracts. Of the thirty-four who state they do not have a CWB permit book, most (28) do not have other contracts. There are 190 respondents who state they do not have producer quotas. What is interesting is of the 190, 81 state they have held a contract for growing special crops. Thus it appears of those having CWB permit books most do have contracts. Yet, a large number of those who do not have producer quotas have contracts. They total 89 of the total 204 respondents.

A group of 31 respondents exist who do not have either a CWB permit book or a producer quota. Of these a majority (25 of 31) do not have
contracts. It may be assumed they are farming under some other means ie. cattle, or they are part of the family farm. There are only six who state they do not have a permit book or a producer quota but have a contract. Apparently most of those responding who do not have a CWB permit book or a quota, do not utilize special contracts.

A final attribute about the respondents is determined; of the 204 possible only 2 did not respond to question 10. A majority (77.0%) say they are farming full-time. As age increases, a greater proportion of respondents say they are farming full-time.

4.1.2 Parental Involvement

Section two of this questionnaire gathers information about the role the family plays in the new entrant's ability to farm. The section is divided into five parts, each describing a specific role: independence, inheritance, loan assistance, significance of assistance, and hardship.

4.1.2.1 Independence

The first part, independence, finds the degree to which these new entrants are depending upon their family. The relevant questions are 11, 12, 13 and 14.

Of the 204 replies, a majority (77.0%) state they do not farm independently of their families. Noticeably the older the respondent the more likely he is farming independently of the family.

Question 12 only applies to those who answered yes to question 11, ie. they are farming independently. As stated previously, a small pro-
portion of the total population farm independently. Of the total farming independently, 63.8% began as an independent farm unit. Of these, most (75.9%) began farming independently since 1980. Of those who are farming independently but did not start independently, 68.8% began before 1980. When the age of the respondent is considered most responses are for the 18-25 age group probably because of the survey sample. Of the total respondents who are 26 or older most (69.2%) began independently. Thus, if the new entrant is farming independently, likely he began independently probably after 1980 and is likely older than 26.

Since the majority surveyed state they did not start farming independently, questions 13 and 14 may be more pertinent. Responses to question 13 show 55.1% believe they will be taking over the family farm. When those who state they may take over the farm are included the total increases to 93.8%. Only 6.1% do not think they will take over the farm.

Question 14 asks the person if they plan to become independent as soon as possible. The greatest response is 'no' with (41.5%) and the other two choices 'maybe' having 26.6% and 'yes' having 31.8%. A point of interest is the age of the population. It is evident those who are younger plan to be associated with the family longer than those who are older. As the respondents age increases, there is more of a tendency towards independence.
4.1.2.2 Inheritance and Gifts

Another important area was inheritance and gifts. A question asks whether an inheritance or a gift helps the new farmer to start farming. Of the total responding there is an even split between those who have received inheritances and/or gifts and those who have not. Those not having received this help account for slightly more than those who have (50.7 vs. 49.3%). If the age categories are included with this question the breakdown is similar with most of the responses from those in the youngest age group. The split between 'yes' and 'no' in each age group is approximately even. Thus it appears half of the new entrants received gifts and inheritances.

Receiving help from the family in other areas is also explored. Four areas are considered: labour, machinery, buildings and loans. The first three are treated by questions 16, 19 and 20 respectively. Question 16 asks the new farmer if he has provided labour for the use of family farm resources. Of the 204 possible responses only one did not respond to this question. A majority (77.1%) provide labour for use of family resources. When this question is grouped by age the same pattern continues, with the overall majority still saying yes. Noticeably, as the respondents age increases, there is less occurrence of labour in exchange for use of resources. With the youngest class, 87.9% state they provide labour for resources. However, the next class shows a dramatic decrease with only 66.7% in this age group claiming they provide labour for resources.
It appears younger new entrants rely heavily upon this method for use of resources. The obvious one-sidedness is evident when classified by age category with 109 of the 201 respondents being 18-25 and providing labour for resource use. When year of entry is considered, most (62.6%) of the responses are from those who began farming since 1980. Of these 83.1% provide labour for use of resources. Approximately two-thirds of those who began farming before 1980 provide labour for use of resources. Thus it appears younger new entrants who recently started farming use this method to control resources more than older respondents who may have been farming longer.

Previously, entrants are asked if they have control of machinery. Question 19 asks if the new entrant is able to borrow machinery and supplies to aid entry. Almost all responded to this question with a majority (85.1%) able to borrow machinery and supplies. The breakdown by age confirms this trend with most age categories stating they can borrow machinery and supplies.

The 18-25 age group is the dominant category with 61.4% of all responses. An important point is the importance this method provides for the ability to enter farming. Of those who are 18-25 years old most (91.1%) state they are able to borrow machinery. When year of entry is considered most (84.8%) new entrants who have started since 1980 are able to borrow machinery. Borrowing of machinery is important for all age categories and is not influenced by year of entry. Nevertheless, a greater proportion of younger new entrants who began farming since 1980 borrow machinery.
A third resource aiding entry is access to family buildings such as graineries, cattle sheds, and machinery sheds. Question 20 asks the entrant about this. A similar pattern to the two previous questions arises with a majority (76.6%) stating they have free use of such buildings. When age is considered those who are 18-25 and have free use, representing 53.2% of the respondents to this question. Within the 18-25 age group, 87.0% of the total receive free use of buildings whereas in the next age group (26-30) only 60.8% receive free use of buildings.

A greater proportion of new entrants who began since 1980 have use of buildings compared with those who began before 1980. The use of buildings apparently is important to the new entrants. As the new entrant's age increases, proportionately fewer make use of this assistance. The use of buildings is dominant for all years of entry, therefore it is important especially in the initial stages of entry.

It appears from these three questions most new entrants are able to use family resources for free or in exchange for labour. Thus as the age of the respondent increases, he relies less on family resources. This is understandable since as the new entrant becomes more established he is able to provide more of his own resources and consequently uses less of his families.

4.1.2.3 Loan Assistance

The fourth type of assistance available is classified as loans. Two areas of assistance are considered: 1) direct loans by the family to the
new entrant; and 2) backing by the family so the new entrant can get loans from institutions.

In this first area the relevant questions are 17 and 18. Question 17 is with respect to operating loans. Of the total responding to this question the majority (66.8%) say they do not receive any operating loans from their family. The results do not change when this question is analyzed by age. In the first age group (18-25), 66.9% state they do not receive operating loans from their family. The response in other age categories decreases but the 'no' answer remains dominant in all age groups. Proportionately more new entrants who began since 1980 do not receive operating loans. Of those who began since 1980, 70.7% do not receive loans, compared with 63% from those who began before 1980.

Question 18 asks if the family provides loans for the purchase of capital assets. A near complete response is achieved with this question. Of those responding 69.3% state they do not receive loans from their family. When this question is grouped by the age of the respondents a similar pattern as in question 17 is evident. Most (44.5%) responses are from the 18-25 age group; however, the negative answer is dominant in all age categories.

Of the total 'no' responses, 64% are from the 18-25 age group. When year of entry is considered a greater proportion receiving loans is found for those who started since 1980 i.e. 76.6% of the new entrants who began since 1980 have not received loans while 57.5% of new entrants who began before 1980 did not receive loans. Thus it appears new entrants who have begun farming since 1980 are not receiving direct loans from
the family in the same degree as those entrants who began before 1980. From these two questions it appears a majority (approximately 2/3) do not receive direct loans from their families.

The second area of this loan group, backing by the family, utilizes questions 21, 22 and 23. Question 21 asks if the family helps by co-signing loans to help the individual start farming. There is a high response to this question. Though a majority (57.2%) state they do not have their family co-sign loans, a sizeable group (42.8%) say they do. The 18-25 age group is the most responsive but noticeably, in the first two age groups (18-25 and 26-30) there is little difference between the yes and the no answer. Of the total in the 18-25 age group 56.5% responded no, 43.3% state yes. From the total in the next age group 52.9% state they do not have their family co-sign loans (47.1% do). These two categories show a sizeable proportion of the new entrants have loans co-signed by their families. The year of entry does not alter this much. Slightly more (58.1% vs. 56.2%) of those respondents who began in 1980 or later do not have co-signed loans. Thus the family appears to still co-sign loans albeit on a slightly smaller scale.

Question 22 asks if the family provides collateral so the new entrant can acquire a loan. This question receives a near total response rate. Of those responding a majority (64.4%) say their family does not provide collateral to help finance loans. Though this majority is evident in all age groups, 35.6% of the respondents still receive this form of assistance.
Though a majority (62.9%) of the responses are from those who began farming since 1980, the proportion who do not have the family providing collateral does not change over the years. Of the farmers who began before 1980, 64.4% did not receive family assistance of this type. Of those who began after 1980, 64.5% did not receive this assistance. Thus it seems this form of assistance is provided for approximately a third of the new entrants.

Table 6 lists questions pertaining to family assistance. The percent responding and the percent stating yes are given. This is a summary of the text material.

The final question in this group, #23, asks new entrants if beginning to farm is possible without assistance from their family. Of the 193 responding to this question a majority (73.4%) state they would not be able to begin farming without family assistance. When this question is grouped by age the younger age groups have a higher need for family assistance. The ability to start farming without family assistance increases as the age of the respondent increases. Those who are 18-25 and are unable to start farming without their family's assistance represents more than two-thirds (67.4%) of the total who could not have started without their family's assistance. A majority (72.5%) of the responses are from those who began farming since 1980. Of this number 77.5% state they would not have been able to begin farming without their family's assistance. This proportion is nearly identical to those who began before 1980 where 73.6% state they would not have been able to start farming without this assistance. It appears family assistance is very important to those who are young and wish to farm.
### Table 6
Types of Family Assistance

<table>
<thead>
<tr>
<th>Types of Assistance</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percent Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm independent of family</td>
<td>11</td>
<td>98.5</td>
<td>22.9</td>
</tr>
<tr>
<td>Inheritance and gifts received</td>
<td>15</td>
<td>98.5</td>
<td>49.3</td>
</tr>
<tr>
<td><strong>Indirect Assistance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>labor for resources</td>
<td>16</td>
<td>98.5</td>
<td>77.1</td>
</tr>
<tr>
<td>borrow machinery</td>
<td>19</td>
<td>99.0</td>
<td>85.1</td>
</tr>
<tr>
<td>access to farm bldgs</td>
<td>20</td>
<td>98.5</td>
<td>76.6</td>
</tr>
<tr>
<td><strong>Loan Assistance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- direct loans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- operating loan</td>
<td>17</td>
<td>97.5</td>
<td>33.2</td>
</tr>
<tr>
<td>- capital loan</td>
<td>18</td>
<td>98.0</td>
<td>30.5</td>
</tr>
<tr>
<td>- indirect backing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- parent co-signs loan</td>
<td>21</td>
<td>98.0</td>
<td>43.0</td>
</tr>
<tr>
<td>- provide collateral</td>
<td>22</td>
<td>98.5</td>
<td>35.8</td>
</tr>
<tr>
<td>- possible to begin farming without the assistance</td>
<td>23</td>
<td>94.1</td>
<td>26.6</td>
</tr>
</tbody>
</table>

#### 4.1.2.4 Significance of Assistance

After determining the proportion who receive assistance, the next step is to estimate the significance of this assistance. In this survey, specific amounts are not obtained; however, ranges are determined. The relevant questions are 26, 27 and 28. The answers for these ques-
tions are 'less than 1/2', 'about 1/2' and 'more than 1/2'. For those stating they have zero control, this is also included.

Question 26 pertains to the proportion of land operated by the new entrant which is acquired via a purchase or is rented from the family. The response rate is lower for this question with only 5.8% of the respondents answering this question. What is evident is the division between the answers. Those with zero land obtained from the family only represent 4.6% of the total. Those with 'less than 1/2' represent 48.6% of the total and those with 'more than 1/2' represent 34.3%. The entrants with 'about 1/2' of their land from the family only constitute 12.5%. As expected most responses are from the youngest age group. The split between under 1/2 and over 1/2 is continued in each age group, with less than 1/2 being the more dominant response in each age group except for the 41-45 age group where 'more than 1/2' is the only response category utilized. It appears approximately half of those responding obtain less than half of their land from their family.

When the year of entry is considered a few observations are possible. Of the sample population 60.8% began farming since 1980. Those who answer 'less than half' constitute a majority (52.9%) of those who began since 1980. The respondents who state more than half represent 31.7% of the total respondents who began since 1980. A trend seems to develop when the two entry groups are compared. The pre-1980 group is fairly evenly split between 'less than half' (40.3%) and 'more than half' (37.3%) while the post 1980 group is more one-sided; less than half (52.9%); and more than half (31.7%). Thus more new entrants acquire 'less than half' of their land from their families compared with those farmers who have been farming for a number of years.
The second question asks what proportion of the machinery the new entrant operates belongs to the family. A high response is observed for this question with 93.6% of the total population answering. The definitive answer for this question is 'more than 1/2' with 60.7% of the total. Only 9% of the respondents state none of the equipment they operate was obtained from the family. The other two categories are quite similar with 'less than 1/2' representing 19.3% and 'about 1/2' representing 15.2%. When this question is considered with the age of the respondent, the youngest age group yields the most response with 62.3% of the total. As age increases the proportion who have acquired more than half of their equipment from the family falls. The other categories, especially the 'less than 1/2' have increased response. The respondents who are 18-25 and have over 1/2 of the equipment acquired from their family compromise 74.8% of the total in this age group. When the respondent is 26-30 having 'more than 1/2' of the equipment from the family represents 46.8% of the responses. In the next age group the answer of 'more than 1/2' represents only 20% of that age group's total response. Thus the category 'less than 1/2' has more responses as age increases. As the age of the new entrant increases, he uses less of the family's equipment and presumably more of his own.

The respondents who entered farming since 1980, constitute 62% of the total responses to this question. The definitive observation is entrants since 1980 receive 'more than half' of their equipment from the family. Of the total respondents who started since 1980 73.3% state 'more than half' as their response to this question. This is considerably higher than the other categories. Also important is the magnitude
of this value compared with pre-1980 entrants. Of those who entered before 1980 only 40.8% receive 'more than half' of their equipment from their family. Thus it appears new entrants are very dependent upon their family for machinery use.

The final question in this area asks what proportion of the total family operation is operated by the new entrant. A lower response rate is incurred with this question as only 162 of a possible 204 answer this question. However, from these results one dominant category is apparent. The majority (60.9%) of the respondents state they operate less than half of the total family operation. Those who operate 1/2 of the total farm only constitute 21.1% and those who operate over 1/2 of the total farm represent 16.7%. Most of the respondents are in the youngest age group; however, the pattern changes as age increases. Though overall 'less than 1/2' has the largest response, the majority of it is made up from those who are 18-25 years old (76.5%). Consequently, once this age group is considered the other categories begin to be more dominant. As age increases the number who have less than half of the total operation falls with respect to those who have more than half. When the respondents are 26-30 years old 'less than 1/2' falls to 52.8% of the total for that age group, while 'more than half' increases to 22.2%. The next age categories shows the dominant response is 'more than 1/2'. This may suggest as the age of the entrant increases the control he has over the total farm increases.

When considering this question by year of entry it is obvious most of the 'less than 1/2' responses are from those who have started in the last 4 years. Of those who started in 1979 and earlier and control more
than half, the number of responses are greater than those who control less than 1/2. However after this the number of responses increases quickly in the 'less than 1/2' categories. From 1980 to 1984 there are 81 responses in the 'less than 1/2' category while in the 'more than 1/2' category there are only 10 responses. From this it appears most new entrants control less than 1/2 of the total family operation.

4.1.2.5 Hardship

If the new entrant receives assistance from his family, does this place a hardship on the family? To answer this, questions 24 and 25 are used. Question 24 asks if the assistance has been a serious hardship on the family. A high response rate is recorded for this question with only 13 not answering. The division is very distinct between those who feel the assistance is not a serious hardship and those who feel it is. A large majority (88.4%) of those answering feel the assistance received is not a serious hardship on the family. Although most responses to this question come from the 18-25 age group, no difference in this trend is observed when the question is grouped by age. A majority (62.4%) of the respondents started since 1980. Of these 91.4% state the assistance is not a serious hardship. This is only slightly different than those respondents who began before 1980 where 84.3% state their assistance is not a serious hardship.

Question 25 asks if the assistance places a moderate hardship on the family. The response rate for this question is lower but still 87.7% of all respondents answered this question. The division between answers is not as pronounced as in the previous question. The 'not' response is
still the dominant answer; however, the split is not as large. Most (61.4%) state the assistance is not a moderate hardship but 38.6% state it is a moderate hardship. Of the total respondents to this question 62.5% began farming since 1980. A majority (61.8%) feel the assistance does not place a moderate hardship on their family. Most respondents find the assistance is not a moderate hardship on their families.

Table 7 lists responses to a number of questions pertaining to the significance of the family assistance and of the hardships it places on the family. Again, it is a summary of the material included in the text.

4.1.3 Evaluation of Credit Sources

There are three sources of funds available to start farming: the new entrant’s family, his or her own means, and external sources of funds. In most cases, outside credit is a major source of capital for new entrants. There are two main types of external credit: 1) government grants and loans; and 2) loans from private institutions or individuals.

4.1.3.1 Government Sources

Government loans and grants are considered first. Four areas are discussed: 1) type of loan; 2) type of grant; 3) purpose of the loan or grant; and 4) the proportion of the total capital derived from government sources. Questions 29, 30, 31 and 32 gather information about government loans. They are all straightforward questions asking the population if they have a loan from the different government agencies.
Table 7
Family Assistance: Significance and Hardship

<table>
<thead>
<tr>
<th>Significance of Assistance</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of land acquired from the family and operated by the new entrant</td>
<td>26</td>
<td>85.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Proportion of the machinery which belongs to the family</td>
<td>27</td>
<td>93.6</td>
<td>4.7</td>
</tr>
<tr>
<td>Proportion of total operation which is operated by the new entrant</td>
<td>28</td>
<td>78.9</td>
<td>1.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hardship</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percent Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>serious hardship</td>
<td>24</td>
<td>93.1</td>
<td>11.6</td>
</tr>
<tr>
<td>moderate hardship</td>
<td>25</td>
<td>87.7</td>
<td>38.6</td>
</tr>
</tbody>
</table>

Question 29 asks the population if they have a loan from the Farm Credit Corporation (FCC). A complete response is realized for this question. Of the total responding to this question only 18.8% have a F.C.C. loan. When this question is grouped by age of farmer nothing unusual appears. The absence of respondents with FCC loans is evident. When grouped by the year of entry the trend continues. Noticeably of the 105 farmers surveyed who started farming in 1981 or later, 94 (89.5%) do not have a FCC loan.
Question 30 asks if a loan is acquired from the Manitoba Agriculture Credit Corporation (M.A.C.C.). The response rate again is very high (203/204). Compared with the previous question a higher percentage (38.4%) have M.A.C.C. loans than F.C.C. loans. The majority of the responses are from the 18-25 age group; however, there is evidence older farmers use M.A.C.C. loans more in proportion to younger farmers. Of the total responding who are 18-25 years old, 34.1% have a M.A.C.C. loan. In the next age category, 41.2% of this total have a M.A.C.C. loan. The third category (31-35), 54.5% had a M.A.C.C. loan. Thus, even though the majority of the respondents do not have M.A.C.C. loans it appears older farmers have utilized this source more frequently. When loans are compared by the respondent's year of entry it appears up to and including 1979, the split between no loan and having a loan is approximately equal (38 versus 36, respectively). However, from 1980 to 1984, there is a 2 to 1 ratio (83 to 41) of not having a loan to having a loan. This seems to indicate new entrants are not acquiring M.A.C.C. loans as often as before. Nevertheless, more respondents have M.A.C.C. loans than F.C.C. loans. Also, more of the younger entrants have M.A.C.C. loans than the corresponding age groups having F.C.C. loans.

Question 31 asks about use of the Small Business Development Bonds (SBDB loans). A high response rate (94.1%) suggests most have heard of this type of loan. However, the results indicate 186 of 192 do not have this type of loan. Grouping this question by age does not indicate any discrepancies to the trend. Grouping by year of entry indicates the same results. It appears this type of loan is not utilized by new entrants.
The final question in this area is #32. This asks if the farmer has acquired any other loan guaranteed or subsidized by a government agency. Although most respondents answered this question, most (92.6%) say they do not. Breaking this question down by age and year does not provide any more information. The only conclusion is most do not have loans guaranteed by government agencies.

With respect to government grants, a question is asked if the entrant has received any government grants. The response rate to question 34 is near complete however, of the total who responded, 90.6% say they do not have grants by the government. The 'do not' answer is so dominant that grouping by age or by year of entry does not show any discrepancies to this pattern. Therefore, of those who responded to this questionnaire, most do not have grants from the government.

Those who have acquired loans from government sources are questioned to determine what proportion of the total money borrowed to begin farming came from government loans. Answers available are in the format of 'less than 1/2', 'about 1/2, and 'greater than 1/2'. Of the 138 who state they have a government loan, all completed this question (#43). The breakdown is close to even between less than and greater than. Those who state 'less than 1/2' of the total money borrowed to begin farming came from government loans comprise 45.6% of the total respondents. The group who state 'more than 1/2' as an answer comprise 47.1% of the total. The remainder state approximately half of the total money borrowed by them is from government sources. When this question is grouped by age the same pattern continues. The responses are divided similarly in each age group. When grouped by the year of entry, a sim-
ilar pattern exists and no deviations are apparent. Thus it seems a
near even split between 'less than 1/2' and 'more than 1/2' exists.

Farm loans are obtained for specific purposes. In the questionnaire,
question #33 provides a method to indicate the purpose of the loan. Of
the 138 farmers who obtained government loans, 135 replied to this ques-
tion. Four possible answers are provided; however, many circled more
than one. This is tabulated as a multiple use loan. The multiple use
category is the most prolific with 51.8% of the responses. The other
two categories with a significant response are farm equipment with 19.3%
and real estate with 21.5% of the total. The others, breeding stock
with 5.2% and land improvements with 2.2% are low. Given many of the
multiple use loans include land, those with land may be considered as a
land loan. Of the total number of loans seventy are for multiple use.
Of those seventy, sixty-one have land as one of the multiple uses.
Thus, there is a total of sixty-one plus twenty-nine land loans for a
total of ninety loans for real estate purposes. This represents 66.7%
of the total loans. Grouping this question by age shows the 18-25 group
is the most responsive, likely because of the characteristics of the
survey population. The same pattern exists through every age group. If
the responses are grouped by the year started, the same pattern ensues.
Thus it seems most new entrants acquire a government loan for multiple
use, land acquisition and machinery purchases.

4.1.3.2 Private Sources

The second type of external credit is from private institutions. A
number of questions are asked to develop a picture of this type of cred-
it arrangement. The five questions are 44, 46, 47, 48 and 49. Question 44 is straightforward asking if the entrant borrows funds from a private institution for operating the farm. A high response (201 out of 204) is obtained for this question. The definitive answer appears to be 'yes' with 156 out of 201 (77.6%). When this question is grouped by age nothing unusual happens. The 'yes' response is dominant in each age category. Similarly, when the answers are grouped by year of entry no other pattern is evident. Thus, most new entrants use private sources.

The second question, #46, asks if the loan is acquired to purchase farm equipment. A high response (93.6%) is recorded for this question. The 'no' response is the major answer given with (54.4%) stating they have not acquired a bank loan to purchase equipment. However, the split is close with 45.6% stating they have. When this question is grouped by age it is obvious the majority of the 'no' response is derived from those 18-25 years old. Of the 102 'no' answers, 74 of these are from the 18-25 age group. The 'yes' category is dominant in all age categories except this one. This may suggest younger farmers do not utilize private sources to the same extent as older farmers. When answers are grouped by year of entry, most of the 'no' responses (76) are from 1980 to 1984. The 'yes' response is similar when before 1980 is compared with after 1980 (47 to 39). It appears almost 2 to 1 of the respondents who have started farming since 1980 do not have loans for farm equipment.

The third question (47) asks if the entrant has acquired a loan for the purchase of breeding livestock. A lower response is recorded but this is understandable since a small number of those surveyed have live-
stock. Evidently most (83.0%) do not have a loan to buy breeding stock. The pattern continues when the answers are grouped by age and by year of entry. Thus most do not have a loan for this purpose.

Question 48 asks if a loan is acquired to purchase real estate. A lower response is realized for this question (76.5%). However, of this total (156) the majority state they do not have a loan from a private institution for the purchase of land (80.1%). This trend is evident when the answers are grouped by the age of the respondent. The first two categories (18-25) and (26-30) indicate mostly negative response. However, in the older categories, the split is approximately half and half. This may suggest older farmers are able to acquire loans easier than the younger farmers. When answers are grouped by the year of entry the majority of the no responses are from those who have started farming since 1980 (69.4%). Thus it seems new entrants do not use private institutions to purchase land. Only 11 of those who responded to this question have purchased land using this loans source since 1980.

The final question (#49) asks if the entrant has used the loan from the private institution to undertake land improvements. Again a low response is realized with only 76.5% answering this question. Of those who answered, the dominant response is 'no', with 90.4%. When grouped by age there is little difference with this result. When grouped by year of entry the trend is still apparent. Thus, few new entrants use loans for land improvements.

It is obvious from this section most (80.9%) of the new entrants do not have F.C.C. loans, a majority (61.6%) do not have M.A.C.C. loans
and most others do not have loans from other government sources. Of the 138 respondents who have government loans, slightly more (47.1% versus 45.6%) receive over one-half of their loan money from government sources. Most new entrants also utilize loans from private sources (156 of 204). Generally they do not use these loans for purchases of land (only 31 of 156 do so). Given most of the government loans are for multiple use with land as the major reason, land acquisition represents 66.7% of government loans. This is much greater than for private sources. Table 8 summarizes the preceding material about credit sources.

4.1.4 Limitations and Preferences

If a person has a loan, he must consider the limitations of the loan and how well the loan suits his needs. Limitations will be considered first with the relevant questions being 37, 40, 41 and 42.

Question 37 asks if meeting the repayment terms of loans from government agencies is a problem for the farm or family. The loan in question is a government loan. Of the 146 answers a slight majority (56.3%) state they do not feel the loan is difficult. This fairly even split is apparent when the answers are grouped by age. When grouped by year of entry, 65% who replied 'no' started farming in 1980 or later. Thus, most do not believe the loan is a hardship, however this majority is slight.
Table 8
Evaluation of Credit Sources

<table>
<thead>
<tr>
<th>Public Institutions</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percent Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>loan from FCC</td>
<td>29</td>
<td>99.0</td>
<td>19.1</td>
</tr>
<tr>
<td>loan from MACC</td>
<td>30</td>
<td>99.5</td>
<td>38.4</td>
</tr>
<tr>
<td>loan from SBDB</td>
<td>31</td>
<td>93.1</td>
<td>3.1</td>
</tr>
<tr>
<td>gov't guaranteed loan</td>
<td>32</td>
<td>98.5</td>
<td>7.4</td>
</tr>
<tr>
<td>received gov't grants</td>
<td>34</td>
<td>99.0</td>
<td>9.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private Institutions</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percent Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>operating loan</td>
<td>44</td>
<td>98.5</td>
<td>77.6</td>
</tr>
<tr>
<td>farm equipment loan</td>
<td>46</td>
<td>93.6</td>
<td>45.6</td>
</tr>
<tr>
<td>livestock breeding loan</td>
<td>47</td>
<td>88.2</td>
<td>17.0</td>
</tr>
<tr>
<td>real estate loan</td>
<td>48</td>
<td>76.5</td>
<td>19.9</td>
</tr>
<tr>
<td>land improvement loan</td>
<td>49</td>
<td>76.5</td>
<td>9.6</td>
</tr>
</tbody>
</table>

Question 40 asks the population if larger loan limits would mean less assistance is required from their family. Only 74.5% of respondents answered this question; however, a majority (69.5%) feel a higher limit would not have affected the amount required by them from their family. This definitive response is apparent in all age categories. It is also evident when the answers are grouped by year of entry. When those who entered after 1980 are compared to those who entered before 1980, more feel the assistance would still be necessary (73.3% vs. 65%). There-
fore, family assistance may be necessary in whatever amount and form. It appears even if loan limits are larger, the new entrant still wants/needs the family assistance.

The third question (#41) asks if less equity is required for the loan would the new entrant require less assistance from the family. The response is also low with only 71.1% answering this question. The majority (57.9%) state assistance would be required even if equity requirements were lower. Age has little affect on this result as the 'yes' answer is more prolific in each age group. The split between 'no' and 'yes' (34 versus 44 responses) when the answers are grouped by year (after 1980) shows this question is divided fairly evenly.

The final question, #42, asks if smaller repayment terms would require less family assistance. Of those responding 82 out of 132 (62.1%) state lower repayment terms would mean less assistance from the family. Age of the respondent has no bearing on this trend as the majority in each age group respond 'yes'. When grouped by year there is nothing different with the results. Therefore a majority, though small, feel lower repayment terms mean less assistance from the family.

The second part of this section deals with loan preferences. Two questions are utilized to establish the entrant's preferences about loans, (#45 and #51).

Question 45 asks if the entrant finds bank loans more suited to his ability for repayment than government loans. Of the 149 responses (73.0%), the major response is 'about the same' with 54.4% of the total. The other two responses are very even, with 'no' providing 24.8% of the
total and 'yes' providing 20.8%. This three way split is evident when the responses are grouped by age. It seems most feel repayment terms are about the same between banks and government.

The second question asks if the entrant has acquired bank loans because he is unable to acquire a loan from a government source. A fairly high response 88.2% is gathered for this question. The dominant answer is 'no' (140 out of 180 responses). This dominance occurs when the responses are grouped by age and by year. If the entrant has a bank loan, he did not get it simply because he could not get a government loan. Table 9 summarizes the limitation and preference discussed in the preceding text.

4.1.5 Satisfaction and Difficulties

The two areas in this section are satisfaction with lending agencies and difficulties in the present system. Question 38, 39 and 50 are used to discuss satisfaction. Question 38 asks if interest rates on government loans should be subsidized. A high response is incurred for this question with 95.6% answering. Of those answering, a majority 89.7% state interest rates should be subsidized to make it easier for new entrants to begin farming. This response is evident through all age groups and when grouped by year of entry. Thus, most favour subsidized interest rates for government loans.
Table 9
Existing Credit Sources: Limitations and Preferences

<table>
<thead>
<tr>
<th>Limitations</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percent Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>meeting repayment terms is a problem for the farm/family</td>
<td>37</td>
<td>100</td>
<td>43.7</td>
</tr>
<tr>
<td>larger loan limit would mean less assistance required from the family</td>
<td>40</td>
<td>74.5</td>
<td>69.5</td>
</tr>
<tr>
<td>less equity required for the loan would ease the family from providing assistance</td>
<td>41</td>
<td>71.1</td>
<td>42.1</td>
</tr>
<tr>
<td>smaller repayment term would lessen family assistance</td>
<td>42</td>
<td>95.7</td>
<td>62.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preferences</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>No</th>
<th>Yes</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>bank loans more suited to the new entrant than those from government</td>
<td>45</td>
<td>73</td>
<td>24.8</td>
<td>20.8</td>
<td>54.4</td>
</tr>
<tr>
<td>forced into bank loan because unable to secure a gov't loan</td>
<td>51</td>
<td>88.2</td>
<td>22.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question 39 asks the entrant if he feels repayment periods should be lengthened. A large number responded to this question (188 out of 204) but there is no definitive response for either answer. The majority (55.8%) feel repayment periods should be lengthened; however, a sizeable
group feel they should not (44.2%). This split is even less observable in the first two age groups and especially in the 26-30 group. Many feel lengthening repayment periods is not helpful. When grouped by year entered this relatively even split is noticeable for those who started in 1980 or later. Fifty-four state loan repayment periods should not be lengthened and 62 state they should. Thus, this suggested change in loans is not agreeable to all.

The third question (#50) asks the respondents if they prefer to borrow from banks instead of government agencies. A fairly high response is gathered for this question (84.8%). The responses are quite even with 91 out of 173 (52.6%) stating they prefer to borrow from government agencies and 82 out of 173 (47.4%) preferring to borrow from banks. This even split is still evident when the answers are grouped by age of the entrants. No one age group exhibits a strong preference for either institution. When the answers are grouped by year started the results are similar. Thus, it seems borrowing money from banks is preferred by about half of the population.

In the questionnaire, two questions #53 and #54 are included to let the population list difficulties they feel are evident in the current financial system. Question 53 asks the population to discuss difficulties they find in the present loan system. There is a fairly low response rate to this question (68.6%); however, three categories of difficulties appear to be the most important. Most responses are about interest rates. Of the total, 39.3% feel interest rates are a major difficulty with the current system. This is also evident when the answers are analysed by age and by year. The second highest response is
for availability with 20% stating there is insufficient loan availability. Repayment also is important with 9.3% of responses. Thus, three areas presenting difficulties are interest rates, availability and repayment.

Question 54 asks for changes to lending programs. The response is high with 190 of a possible 204 answering this question. The majority (57.4%) state availability of loans should be increased. Interest rates are considered to be a problem and should be changed. Of the total, 37.9% feel interest rates are too high and should be altered. Repayment of loans is the only other suggested change but it only constituted 4.7% of the responses. Thus, the same areas which are believed to be difficulties are the ones that should be changed. However, availability is the most desired change. Table 10 summarizes the respondent's satisfaction and difficulties with the current credit system.

4.1.6 Off-Farm Employment Characteristics

Question 56 asks the respondent if either he or his spouse works off-farm. A high response is achieved with 202 of 204 responding. Of the respondents, 64.4% state yes to this question. Thus, approximately two-thirds of the surveyed population or their spouses work off-farm.

Question 57 asks if this money is important in the operation of the farm. A response from only 147 is recorded with a majority (55.1%) feeling the money is very important. A further 23.8% believe the money is moderately important. Thus, 78.9% feel the money is important to the operation of the farm.
Table 10
Current Credit System: Satisfaction and Difficulties

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percent Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>interest rates on government loans should be subsidized</td>
<td>38</td>
<td>95.6</td>
<td>89.7</td>
</tr>
<tr>
<td>repayment periods should be lengthened</td>
<td>39</td>
<td>92.2</td>
<td>55.8</td>
</tr>
<tr>
<td>prefer to borrow from banks rather than govt institutions</td>
<td>50</td>
<td>84.8</td>
<td>47.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difficulties</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percentage Answering</th>
</tr>
</thead>
<tbody>
<tr>
<td>difficulties in present system</td>
<td>53</td>
<td>68.6</td>
<td>interest rate: 39.3, poor access: 20, repayment: 9.3</td>
</tr>
<tr>
<td>suggested changes</td>
<td>54</td>
<td>93.1</td>
<td>lower interest: 37.9, more access: 57.4, lower repayment: 4.3</td>
</tr>
</tbody>
</table>

Tables 11 and 12 separate Diploma and non-Diploma responses for selected questions. Though there were occasional differences, generally the responses were similar. The analysis for survey one was conducted
by using both groups and a single population. Analysis by Diploma and non-Diploma was not necessary as most questions showed similarities between responses by Diploma and non-Diploma.

4.2 **SURVEY TWO**

The second survey is used to derive more detail in certain areas and a better picture of those new entrants questioned in the first survey. As stated previously there are only 24 responses to this second survey. Cross tables of the results are in Appendix G.

The results from this questionnaire have been divided into five areas: 1) farm characteristics; 2) future plans; 3) existing loans; 4) off-farm work; and 5) family assistance. Farm characteristics is grouped into general characteristics and financial characteristics.

4.2.1 **Farm Characteristics: General**

The first area uses questions 1 through 7 and questions 11 through 14. Question one asks what type of farm the new entrant operates. All answered this question with the majority stating they are from a grain farm (14 of 24). Most of the others state they are from a mixed farm (8 of 24) with the rest from beef farms. This distribution is somewhat expected given Manitoban agriculture; however, having results from those who operate dairy, hog or poultry operations would have been beneficial.
Table 11
Types of Assistance: Comparison Between General Public and Diploma Graduates

<table>
<thead>
<tr>
<th>Question Number</th>
<th>General Public</th>
<th>Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>% yes</td>
<td>% yes</td>
<td></td>
</tr>
<tr>
<td>Have received inheritance and gifts from family</td>
<td>47.8</td>
<td>51.2</td>
</tr>
<tr>
<td>Loan Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family provides loan to purchase land, bldgs, mach, livestock</td>
<td>34.5</td>
<td>25.0</td>
</tr>
<tr>
<td>Family co-signs notes or loans to help start farming</td>
<td>42.7</td>
<td>42.9</td>
</tr>
<tr>
<td>Family provides collateral to secure loan to help start</td>
<td>40.9</td>
<td>31.8</td>
</tr>
<tr>
<td>Loan Source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>from FCC</td>
<td>25.6</td>
<td>9.3</td>
</tr>
<tr>
<td>from MACC</td>
<td>53.9</td>
<td>17.4</td>
</tr>
<tr>
<td>gov't loan provided there is enough money to meet needs</td>
<td>56.8</td>
<td>34.9</td>
</tr>
</tbody>
</table>
### Table 12

Financial Characteristics: Comparison Between General Public and Diploma Graduates

<table>
<thead>
<tr>
<th>Financial Information</th>
<th>Question</th>
<th>Answer</th>
<th>General Public</th>
<th>Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of money</td>
<td>43</td>
<td>0</td>
<td>13.3</td>
<td>24.2</td>
</tr>
<tr>
<td>borrowed to start</td>
<td></td>
<td>&lt;1/2</td>
<td>33.3</td>
<td>45.2</td>
</tr>
<tr>
<td>farming came from</td>
<td></td>
<td>1/2</td>
<td>8.6</td>
<td>1.6</td>
</tr>
<tr>
<td>government sources</td>
<td></td>
<td>&gt;1/2</td>
<td>43.8</td>
<td>29.0</td>
</tr>
<tr>
<td>Bank payments more</td>
<td>45</td>
<td>no</td>
<td>27.1</td>
<td>19.6</td>
</tr>
<tr>
<td>suited to ability to</td>
<td></td>
<td>same</td>
<td>50</td>
<td>62.7</td>
</tr>
<tr>
<td>repay than repayments</td>
<td></td>
<td>yes</td>
<td>22.9</td>
<td>17.6</td>
</tr>
<tr>
<td>to gov't agencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefer to borrow from a bank or credit union</td>
<td>50</td>
<td>yes</td>
<td>48.5</td>
<td>47.0</td>
</tr>
<tr>
<td>Borrowed from bank/credit union because unable to get a gov't loan</td>
<td>51</td>
<td>yes</td>
<td>28.8</td>
<td>11.9</td>
</tr>
<tr>
<td>Work off-farm</td>
<td>56</td>
<td>yes</td>
<td>64.6</td>
<td>63.9</td>
</tr>
<tr>
<td>Importance of off-farm employment income</td>
<td>57</td>
<td>not</td>
<td>21.3</td>
<td>20.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moderate</td>
<td>19.1</td>
<td>31.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>very</td>
<td>59.6</td>
<td>48.3</td>
</tr>
</tbody>
</table>
With the small sample size the lack of these farm types may be unavoidable. The next two questions refer to the land base. Question 2 asks for the size of the farm. The range is 160 to 5000 acres with the mean being 958 acres. When question 2 is compared regarding type of farm it is a relatively even distribution exists. There are farms of almost every size suggesting a wide range of farmers have been interviewed. Unfortunately, with the low response rate, mixed farms are more thinly distributed over the acreage sizes. Similarly, when question three is grouped by the type of farm a pattern arises similar to question two. The mean value of cultivated land is 754 acres, with the minimum value being 40 acres and the maximum 3000 acres. An almost identical distribution as question 2 appears with responses in most farm sizes. In both questions 2 and 3 no one farm size is dominant. Thus, it appears a wide selection of farms have been surveyed.

Question four and five refer to the livestock portion of the farm operation. Not all farms have livestock; however, for those that do the information is gathered. Only sixteen of the twenty-four respondents answered this question. Of the responses, only one states they have no livestock on the farm. The maximum number of head is 200 with a mean value of 63. Of the sixteen who responded ten have fifty or fewer animals. The other six responses are distributed evenly up to the maximum value by approximately twenty head increments. The split between grain farms and mixed farms is even with 7 in each category. What is unusual is only two of the responses are from beef farms, both of which are relatively small, one having only 26 head and the other having 80 head.
Question five asks about the productivity of the livestock operation. Since it appears the respondents are mostly raising beef, question five refers to the turnover of beef on that operation. The largest value is 1800 head which is unusual given the previous question has a maximum value of only 200. Generally, the numbers are relatively small with eleven of sixteen selling fifty head or less per year. The distribution between grain, mixed and beef is the same as question four.

Questions six and seven ask about the type of crops and the associated yields. It is apparent wheat, barley, canola and flax are the most common. Other crops such as alfalfa, peas and sunflowers appear more than once. The average yield for wheat is 31.6 bushels/acre with a maximum of 50 bushels/acre. Barley has an average of 54.7 bushels/acre with a maximum yield of 75 bushels/acre. Canola has an average of 20.5 bushels/acre with a maximum value of 30 bushels/acre. Flax produced an average of 19.5 bushels/acre with a maximum yield of 23 bushels/acre.

Questions eleven through fourteen contain some additional information about the farm. Question eleven asks if the entrant has a producer quota. The majority state they do not (20 of 23). Generally, fewer farms have quotas and with this small sample few responses to this question were expected. Question twelve asks if they do have a quota, then what type is it. Of the three responses who have a quota two state the quota is with the Canadian Wheat Board. Obviously few have quotas.

Results of question thirteen are negligible since of the total who state they have a quota, only one has a quota not with the Canadian Wheat Board. Question fourteen asks about problems in acquiring the quota, with all three stating no problems are encountered.
4.2.1.1 Farm Characteristics: Financial

The previous material contains only general characteristics about the farm. The next area contains some general financial information. The relevant questions are eight, nine and ten. Question eight asks for the estimated value of the livestock. Of the sixteen responding to this question, the split between grain (7), mixed (7) and beef (2) is the same as question 4. The range is considerable varying from zero to $300,000. There are thirteen responses of less than $100,000. Ten of these responses have $25,000 or less in livestock. As might be expected those respondents who have mixed or beef farms have more capital in livestock than those who classify themselves as grain farmers. All of the respondents who have more than $25,000 in livestock are from mixed and beef farms, with a mixed farm having the greatest value.

Question nine asks for the estimated value of the total farm operation. The response is high for this question (22 of 24) with values ranging from $28,000 to $1.5 million with a mean of $303,181. The majority of the responses are from grain farms (55%). They dominate the higher values except for one mixed farm which is the maximum level. Fourteen of the twenty-two respondents value their farms at a quarter of a million or less, with nine of these below $150,000.

Question ten asks for the value of the machinery. The range is again considerable with values from $0 to $900,000 with a mean of $147,572. Twenty-two responses are recorded for this question and most (12) are from grain farms. For a value of $100,000 or more, grain farmers have five responses versus four responses from mixed farms. As well, there
are 13 responses of below $100,000 with grain farmers having the lowest amount.

4.2.2 *Future Plans*

This section contains four questions pertaining to the new entrant's plans for expansion. Given today's unstable agricultural world, the future in farming is somewhat unsure. The four questions pertaining to this section are fifteen, sixteen, seventeen and eighteen.

Question fifteen asks the new entrant if he plans to expand. A high response rate (22 of 24) is compiled for this question. Of the twenty-two who responded twenty replied they intend to expand. There is no discernible distinction between the type of farm, with all types planning to expand. Thus most of the new entrants are optimistic about the future and plan to expand. Since most plan to expand, the next question is relevant. Question sixteen asks what area(s) the respondents plan to expand. This question also has a high response rate (22 of 24) with a similar breakdown by the type of farm. A sizeable group (8 of 22) wish to only expand the land base. This is especially evident with grain farms. Expanding the livestock operation only receives one response. Half of those who responded state they wish to expand in all areas. Of the seven mixed farms who responded three say they hope to expand in all areas.

Question seventeen asks how this expansion will be financed. Options available are: 1) own funds; 2) borrowed funds; 3) gifts and inheritances; and 4) all. Apparently most do not expect gifts and inheritances.
Only six expect funds from "all" sources. The majority (11 of 20) state borrowed funds will be the method of financing the expansion. Only three of twenty plan to use their own funds.

Finally, a question to ascertain the time of expansion is included. Again, the type of farm (ie. beef, grain, mixed) does not factor into the question. The results show five of the twenty two have already started to expand. Further, fourteen plan to expand within five years. Only two plan to wait for up to ten years before starting to expand, while one plans to wait until the economy improves.

Of the new entrants surveyed almost all plan to expand, using borrowed funds, and within five years. Over a third plan to concentrate on increasing their land base, while most of the rest plan to expand in all aspects of the operation.

4.2.3 Existing Loans

This section considers the loans new entrants have. The questionnaire has provisions for identifying up to five different loans. Not all respondents have five loans however all will be reported. There are nine questions to be described.

For question 19.1 (the first loan) the source of the loan is asked. Of the twenty-four possible, twenty responses are recorded. The most used source is M.A.C.C. with 7 of 20 responses. Next, the Royal Bank and Credit Unions each have 4 responses, with F.C.C. coming third with three responses. One response is recorded for the Bank of Montreal and the Canadian Imperial Bank of Commerce. The second question about this
first loan asks the new entrant if there are any problems acquiring the loan. Of the 20 responses, nineteen state they experienced no problems. Since the next question only applies to those entrants who have difficulties, the resulting low response is expected. The one response states actual cash flow is the reason for problems in acquiring the loan. Question 19.13 asks for the use of the loan. Of the twenty responses to this question seven are for land purchases, four are for machinery purchases, three are for operating, and one is for livestock. Five of the responses are coded as multiple use.

The next question asks for the approximate size of this first loan. The range is from $4,000 to $800,000 with the mean being $93,775. Of the twenty responses six have loans for $10,000 or less. There are sixteen responses with initial loans of $100,000 or less. The other loan levels are spread out with one at $150,000, two at $200,000 and one at the maximum level. The fifth question for this first loan group has four parts, all relating to repayment conditions. Question 19.151 asks for the length of the loan. There are eighteen responses to this question with a minimum of one year and a maximum of thirty years with a mean of 15.7 years. The largest response is from both five years and thirty years, each with 4. Three loans are for twenty-five years and two loans are for three years. All other "years" have one loan each. There are eight loans with five years or less. There are only thirteen loans when up to twenty-five years is included. Thus, 44% of the respondents have loans for less than five years. Question 19.152 asks what the approximate annual payment is for the loan. There are fifteen replies to this question with the minimum payment being $1500 and the
maximum being $102,000. The mean loan repayment is $14,927. There are five loans of $5000 or less, eleven loans of $10,000 or less and fourteen loans of $25,000 or less. Obviously, most loan repayments are smaller than the $102,000 recorded by one respondent. Question 19.153 asks if the interest rate is fixed or floating. Twenty answers are recorded for this question with thirteen stating the interest rate is fixed. Question 19.154 asks what interest rate the entrant is currently paying. There are twenty responses to this question. The interest rates range from 0 to 15% with a mean of 11.05%. There are two respondents who state they do not have an interest rate, i.e., pay no interest. Two of the respondents pay 10% or less; however, most (8 of 20) of the answers are for those who pay 13%. There are twelve respondents who pay between 11 and 13% interest.

Question 19.2 receives eighteen responses. Again M.A.C.C. has the greatest number of loans with seven. There are three loans each for C.I.B.C. and the Credit Unions. Question 19.21 asks the entrants if they have any problems acquiring these loans. Of the eighteen responses eleven state no problem has occurred. Of the seven who have problems, four state no collateral is the reason, while credit rating, unproven farmer and unsecured loan are each noted once. Eighteen answers are recorded for the next question which asks for the use of the loan. The largest group (6 of 18) use the loan for a land purchase. Machinery acquisition is next with four, then livestock, operating, multiple usage and other each have two. Question 19.24 asks for the approximate size of the loan. The range is $2000 to $200,000 with a mean of $33,400. Loans of $10,000 or less comprise six of the responses, and a further
six have loans between 10,000 and $25,000. Seventeen of the eighteen
loans are for $100,000 or less. The next question asks for the time
period of the loan. Fourteen responses are observed for this question
(19.251). Five are for five years and less, four are between five and
ten years and three are between ten and twenty years. The maximum is
thirty years with a mean of 10.75 years. The approximate annual payment
on these loans range from $0 to $27,000 with a mean of $6,435. Of four-
teen for this question four state they pay $7,000 a year. There are
five entrants paying less than $5000 and eight between $5000 and
$10,000. Of the eighteen answers to this question (19.253), ten state
the interest rate is fixed. Question 19.254 has sixteen responses of
which five state they have an interest rate of 13%, four more have an
interest rate of 12% and three state they have 0% interest rate. There
are eleven loans with interest rates between 11% and 13%.

Question 19.3 refers to loans acquired from the new entrant's pa-
rents. Fourteen loans are recorded for this question. However, not all
respondents used this category for parental loans. Of the new entrants,
thirteen state they do not have a problem acquiring the loan. The other
cited no collateral as the reason. The loans are used for a number of
activities with the purchase of land the most common (5 of 14). The
purchase of machinery is the next most common with four, multiple usage
having three and operating having two. Question 19.34 asks for the size
of this loan. The range is from $3000 to $154,650 with a mean of
$36,482. Eight of the loans are for $10,000 or less with two more loans
between $10,000 and $25,000. The respondents state the loans are for
many different time periods with indefinite being the most common (4 of
There are six loans for five years or less and two each at fifteen and twenty years. It appears most (10 of 14) are for either short term or indefinite time spans. There are only nine answers for question 19.352, with the repayment amounts ranging from $1800 a year to $60,000 a year. Three are for $2000 a year, five are for $5000 and less and two are for approximately $11,000 a year. Question 19.353 asks if the loan has a fixed or variable interest rate. Of the twelve loans, six state a fixed interest rate exists. Interest rates vary from 0% to 13% with 6.82% as the mean.

Questions about a fourth loan prompted only seven responses. Of these loans two are from farm equipment manufacturers, with one each from F.C.C., Bank of Montreal, Canadian Imperial Bank of Commerce, a previous owner and the family. Four of the seven respondents state there is no problem acquiring the loan. The reasons for problems include poor collateral and poor cash flow. The loans are used for land (1 of 7), machinery (4 of 7), and operating (2 of 7). The loan amounts range from $0 to $100,000 with a mean of $32,285. Of these seven loans five are for $25,000 or less. These loans are for various lengths of time; however, one year and five years are each noted twice. Only three responses are recorded for question 19.452. The three repayment amounts are $5250, $10,000 and $32,000 a year. Of the seven loans, two state there is a fixed interest rate, three state a variable rate and two state no interest rate applies. The last question has six loans with three of the six stating an interest rate of 12% and one stating a rate of 16%.
The last loan group (19.5) yields only two responses, one loan from a farm equipment manufacturer and one from the family. Both respondents state no problems exist in acquiring the loan. Thus there are no reasons for having problems in this loan group. Both loans are for machinery purchases. One loan is for $25,000 and the other is for $60,000. The $60,000 loan is for three years and the $25,000 loan is for five years. The annual payments for the $25,000 loan are $5000 a year. The annual payments for the $60,000 loan are $22,000 a year. A fixed interest rate of 10% is applied to the $60,000 loan while a 10% floating rate is applied to the $25,000 loan. Table 13 shows the distribution per question.

Table 13

Distribution of Responses per Loan Group

<table>
<thead>
<tr>
<th>Loan Group</th>
<th>Responses</th>
<th>Range</th>
<th>Mean Amount</th>
<th>Mean Years</th>
<th>Mean Payment</th>
<th>Mean Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>4000-800000</td>
<td>93775</td>
<td>15.7</td>
<td>14927</td>
<td>11.05%</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>2000-200000</td>
<td>33400</td>
<td>10.75</td>
<td>6435</td>
<td>9.6%</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>3000-154650</td>
<td>36482</td>
<td>8.3</td>
<td>13761</td>
<td>6.8%</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>5000-100000</td>
<td>37667</td>
<td>2.8</td>
<td>15750</td>
<td>6.12%</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>25000-60000</td>
<td>42500</td>
<td>4.0</td>
<td>13500</td>
<td>11.0%</td>
</tr>
</tbody>
</table>
Therefore new entrants have loans and most are for sizeable amounts of money. Of the sixty-one loans, nineteen are for land purchases, eighteen are for machinery purchases, nine are for operating and three are for livestock. There is one who states the loan is for improvements and ten who use the loans for multiple use. One loan is for zero dollars and is deleted.

The sum of the loans held by this sample population is $3,298,450 with an average loan value of $54,974 based on 60 loans. Twenty one of a possible twenty four respondents answered the preceding questions about loans. The number of loans held by each individual varies from 1 to 3 with the average being just less than three (2.857). Summed values range from a low of $8,000 to a high of $1,185,000. The average value of a loan per entrant is $157,069. This amount may be inflated because of one entrant with loans totalling $1,185,000.

There are eleven different sources for these loans. Each one will be discussed briefly. Manitoba Agriculture Credit Corporation (M.A.C.C.) provides 14 of the 60 loans to these new entrants. The range of loan size is $10,000 to $200,000 with the mean being $74,050. The sum of these loans is $1,092,700 which constitutes 33.1% of the total loans obtained by this sample population. The most common uses are for land purchases with eight of fourteen, and multiple use with four. Given the multiple use loan often includes land purchase, the land acquisition category is the most prolific with 12 of 14 loans. Farm Credit Corporation has four of the sixty loans. The range is from $4000 to $80,000 with a mean of $62,500. The sum of these loans is $250,000 which is 7.6% of the total. The most common use is again land with three of the responses.
The Bank of Montreal has three loans ranging from $6000 to $10,000 with a mean of $8,667. The sum of these loans is $16,000 which represents 0.5% of the loans. The loans are used for operating (2 of 3) and machinery purchases.

The Royal Bank provides six loans to new entrants. The range is from $10,000 to $800,000 with the mean being $194,167. The sum of these loans is $1,165,000 which represents 35.3% of the total value. These loans are used for multiple use (2), machinery (2), land purchases (1), and livestock (1).

The Bank of Commerce has five loans ranging from $2000 to $70,000 with a mean value of $22,200. The sum of these loans is $111,000 which represents 3.4% of the total. These loans are used primarily for operating (2 of 5) and machinery (3 of 5).

The Toronto Dominion Bank has one loan for $9,600 which represents 0.3% of the total. Its use is for land purchase. One previous owner supplied a loan for land purchase. The amount is $20,000 which represents 0.6% of the total. The Credit Unions of Manitoba provided ten of the sixty loans. The amounts range from $2,000 to $25,000 with the mean being $11,450. The sum of these loans is $114,500 which represents 3.5% of the total. Four of the ten loans are used for machinery purchases, three are for operating loans, with one each for livestock, improvements and multiple use.

The family unit provides eleven loans to these new entrants. The range is from $3,000 to $154,650 with the mean being $28,059. The sum of the loans is $308,650 which represents 9.4% of the total. Five of
these loans are for land purchase and a further four loans are for machinery purchase. The other two loans are for multiple usage.

An elevator company provides a loan for $60,000 for an operating loan. This amount represented 1.8% of the total loan value.

Farm equipment manufacturers provided four loans ranging from $5,000 to $100,000 with a mean of $35,125. The sum of these loans is $140,500 which represents 4.3% of the total. In this instance all loans are used for machinery purchases. The one loan for $100,000 distorts the average as the other three loans only total $40,500.

Evidently the new entrants use loans from many sources with considerable variation in the amounts. What is surprising is the low usage of F.C.C. with respect to other sources as it only provides four loans with a total value of $250,000. In contrast, the family provided over $300,000 and the Royal Bank provided over one million. M.A.C.C. is the most used source for loans. As well, the Credit Unions provide an important source of funds, albeit in a smaller amount. Table 14 shows the distribution between the sources of the loans.

4.2.4 Off-Farm Work

With the high cost of entering and operating a farm, many people feel they need to work off-farm to make ends meet. Questions 20 through 29 pertain to the off-farm situation of current farmers. This area is relevant since learning from the first survey off-farm work is important in the operation of the farm. Of the twenty-four possible respondents to question 20 an even split occurs between the grain and mixed farms, with
Table 14

Distribution between the Sources of the Loans

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>PRIVATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCC</td>
<td>MACC</td>
</tr>
<tr>
<td># Loans</td>
<td>4</td>
</tr>
<tr>
<td>Range</td>
<td>4000-80000</td>
</tr>
<tr>
<td>Mean</td>
<td>62500</td>
</tr>
<tr>
<td>Total</td>
<td>250,000</td>
</tr>
</tbody>
</table>

| % Purpose | | | | | |
| Land      | 75 | 57.1 | 8 | 17 | 45.4 |
| Equipment | 0 | 0 | 36 | 67 | 36.3 |
| Operating | 0 | 7.1 | 28 | 17 | 0 |
| Multiple  | 25 | 28.5 | 12 | 0 | 18.1 |

the two beef farms stating they both work off-farm. Question twenty-two asks for the approximate number of days the entrant works off-farm. The mean for this question is 127 days, with a minimum of 0 days and a maximum of 320 days. Of the seventeen who responded to this question eight work 100 days or less, five work between 100 and 200 days and three work more than 200 days. Only one person works more than 300 days.
The next question asks if the new entrant's spouse works off-farm. Only fifteen of twenty-four answered this question. This may imply the nine others are not married. Of those who answered, a near even split between yes (8) and no (7) occurs. However, when scrutinized more closely it is interesting to note (5 of 8) grain farmers' spouses work off-farm. This is in contrast to mixed farms where five of seven spouses do not work off-farm. It appears off-farm employment for spouses of grain farmers is more likely. Possibly it is easier for spouses of grain farmers to work off-farm as mixed farmer's spouses may be more busy with farming operations.

A poor response for question 24 reduces its importance. Of the twenty-four possible respondents only seven answered this question and five of these are grain farmers. It appears operating the farm and essential farm living comprise most of the answers (4 of 7). Thus off-farm employment is important for more than just luxuries.

Question twenty-five asks if working off-farm interferes with farming. Seventeen of twenty-four responded to this question. The split between types of farms is similar to previous questions. Few (4 of 17) feel working off-farm does not interfere with the operation of the farm. Only one believes off-farm work interferes; however, most (12 of 17) believe working off-farm partially interferes with the on-farm work.

The next question asks if there are off-farm employment opportunities in the entrant's location. Nearly all responded to this question with a majority (14 of 22) stating there are no off-farm employment opportunities.
Question twenty-eight asks the new entrant whether he would have been able to start farming if he had not been working off-farm. Fourteen answered this question, with the definitive answer being 'no' with 10 of the 14 responses. Only three of the fourteen responded 'maybe'. Obviously, most feel they need this off-farm work.

The next question asks if the farmer would quit off-farm work when he is more established in the farm operation. Seventeen answered this question with the definitive answer being 'maybe' (10 of 17). Only two state they will quit off-farm work. Obviously, off-farm work is essential to the establishment of a farm. Not only is it essential but the new entrants are not willing to give it up. Table 15 summarizes the material given in the preceding text above on off-farm employment characteristics.

4.2.5 Family Assistance

This final section deals with family assistance the new entrant receives. Questions 30 through 36 asks for this information.

Question 30 asks if assistance has been received from the family. A total response is achieved for this question with the dominant answer being yes (22 of 24). No distinction is made between types of farms as all seem to have family assistance. The next question asks if the new entrant could have started to farm without the family's assistance. A high response (23 of 24) for this question is recorded with most (21) stating they could not have started to farm at the present time.
Table 15
Survey 2: Off-Farm Employment Characteristics

<table>
<thead>
<tr>
<th>Off-Farm Employment Characteristics</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>- Percentage Answering -</th>
</tr>
</thead>
<tbody>
<tr>
<td>work off farm</td>
<td>20</td>
<td>100</td>
<td>yes</td>
</tr>
<tr>
<td>spouse works off farm</td>
<td>23</td>
<td>62.5</td>
<td>54.2</td>
</tr>
<tr>
<td>essential living</td>
<td></td>
<td></td>
<td>53.3</td>
</tr>
<tr>
<td>use of money earned</td>
<td>24</td>
<td>29.2</td>
<td>does not</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>does off-farm work interfere</td>
<td>25</td>
<td>70.8</td>
<td>does</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>does not</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>employment opportunities exist</td>
<td>26</td>
<td>91.7</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36.4</td>
</tr>
<tr>
<td>able to work if not been working off-farm</td>
<td>28</td>
<td>58.3</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>maybe</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>quit off-farm work once established</td>
<td>29</td>
<td>87.5</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>maybe</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>
Question thirty-two asks the new entrants if they could have started farming, but on a smaller scale, without family assistance. Twenty-one answers are recorded for this question. There is a change in this question compared to question thirty-one. In the previous question 8.7% state they could have started farming without family assistance. However, in question thirty-two more feel they could have started farming on a smaller scale (23.8%). The next question asks if the new entrant plans to be more independent of the family farm. Of the 23 new entrants, most (19) state they wish to be more independent of the family farm in the future.

Question thirty-four asks if the new entrant has a work sharing arrangement. Twenty-three answers are recorded for this question. A majority (15 of 23) state they have a work-sharing arrangement. There is no distinction between the type of farms. The next question asks the new entrant how important family assistance is to them. They have a choice of three answers: convenient, moderate and very. A total of twenty-two responses to this question are recorded with a majority (14 of 22) stating the assistance is very important. Seven of the twenty-two state the assistance is moderately important. Obviously family assistance is very important for entry into farming. Most new entrants wish to be more independent later; however, they could not have entered without this support.

The next question (36) is divided into seven areas: 1) outright gift; 2) subsidized interest rates; 3) collateral; 4) machinery/work sharing agreement; 5) free or cheap use of inputs; 6) underwriting loans; and 7) other. Question 36.1 has only eight responses of which seven state they
have received outright gifts. Nine new entrants answered question 36.2 with seven stating they receive subsidized interest rates. Most of these responses (7 of 9) are from grain farms. The next question is answered by eight new entrants with seven stating they receive collateral or backing for bank loans. The fourth part of question 36 asks about machinery/work agreements. A high response (16 of 24) is achieved for this question. The definitive answer is 'yes' with fifteen of sixteen. The split between type of farm is similar to past patterns.

Question 36.5 asks the new entrants if they receive free or cheap use of buildings and inputs. Of the thirteen who responded twelve state they receive this type of assistance. The next question asks if the respondent's family helps when the new entrant experiences losses or is unable to meet loans. Six entrants answered this question and four of these state they do not receive this form of assistance. Of the two entrants who do, they are both grain farmers. The final question asks if the new entrant receives any other types of assistance. Eleven respondents state they receive other forms of assistance, such as livestock and vehicle purchases.

Obviously many forms of assistance are provided by the family, with most new entrants utilizing them. Given these findings it appears a new entrant needs family support to enter farming. Table 16 lists the different forms of family assistance received by this sample population.
Table 16
Survey 2: Family Assistance

<table>
<thead>
<tr>
<th>Family Assistance</th>
<th>Question Number</th>
<th>Percent Responding</th>
<th>Percentage Answering</th>
</tr>
</thead>
<tbody>
<tr>
<td>assistance received by family</td>
<td>30</td>
<td>100</td>
<td>91.7</td>
</tr>
<tr>
<td>able to start work without assistance</td>
<td>31</td>
<td>95.8</td>
<td>8.7</td>
</tr>
<tr>
<td>able to start but on smaller scale with assistance</td>
<td>32</td>
<td>87.5</td>
<td>23.8</td>
</tr>
<tr>
<td>wish to be more independent</td>
<td>33</td>
<td>95.8</td>
<td>82.6</td>
</tr>
<tr>
<td>have work sharing agreement</td>
<td>34</td>
<td>95.8</td>
<td>65.2</td>
</tr>
<tr>
<td>how important is family assistance</td>
<td>35</td>
<td>91.7</td>
<td>convenient 4.6 moderate 31.8 very 63.6</td>
</tr>
<tr>
<td>types of assistance</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>outright gifts</td>
<td>33.3</td>
<td></td>
<td>87.5</td>
</tr>
<tr>
<td>subsidized int. rates</td>
<td>37.5</td>
<td></td>
<td>77.8</td>
</tr>
<tr>
<td>provide collateral</td>
<td>33.3</td>
<td></td>
<td>87.5</td>
</tr>
<tr>
<td>machinery for work</td>
<td>66.7</td>
<td></td>
<td>93.8</td>
</tr>
<tr>
<td>use of buildings</td>
<td>54.2</td>
<td></td>
<td>92.3</td>
</tr>
<tr>
<td>help if experience losses</td>
<td>25.0</td>
<td></td>
<td>33.3</td>
</tr>
<tr>
<td>other types of assistance</td>
<td>45.8</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>
Chapter V
HYPOTHESIS TESTING

5.1 DISCUSSION

In chapter two the six hypotheses are stated. It is essential to test these hypotheses to prove or disprove them to make conclusions with respect to the thesis. If the conclusions are not properly substantiated they may not be reliable. The substance of the given conclusions is then questionable. Therefore, testing hypotheses is an essential element of research.

The six hypotheses are stated with relevant questions required to accept or reject the hypotheses. Each hypothesis has questions to be statistically tested for significance. To support or refute each hypothesis, questions will be considered from survey two.

Hypothesis one states: Family assistance is not necessary for new entrants to accumulate the capital required to begin farming. The relevant questions for testing this hypothesis are: #’s 15 through 23 from survey one. In support questions 30, 31, 32 and 35 from survey two will be examined.

The second hypothesis states: Family assistance given to new entrants does not place hardship on farm families. Questions 24 and 25 from survey one are used to test this hypothesis.
Hypothesis three states: New farm entrants believe financial institutions fail to provide adequate credit programs for their needs. The first survey questions public and private sources. From survey one, questions 29, 30, 35, 39, 40, 41 and 42 are used to test this hypothesis with respect to public lending agencies. To test this hypothesis with respect to private lending institutions questions 44, 45, 50, 51 and 53 are used.

The fourth hypothesis states: Public lending agencies do not fulfill their role as providers of adequate long term capital for new entrants. To test this hypothesis questions 33 and 43 are used. The fifth hypothesis states: Private lending institutions do not fulfill their role as providers of adequate short and intermediate term financing for new entrants. Four questions from survey one are used to test this hypothesis. They are #’s 46 through 49.

The final hypothesis states: Off-farm employment is not utilized by new entrants to facilitate ease of entry into farming. From survey one questions 56 and 57 are used. From survey two, questions 20, 23, 24 and 28 are used to support this hypothesis.

5.2 Statistical Method

This section discusses the method of statistical estimation used in this thesis. The objective is not to make inference about the population but rather to prove or disprove independence. This will result in acceptance or rejection of a hypothesis. Therefore a method of statistical inference, ie. "making statements about the value of unobserved
and perhaps unobservable characteristics in a population based on results obtained from a sample survey.\textsuperscript{136} is used.

The method for testing the six hypotheses compares observed results with expected results. This comparison attempts to determine if the observed results are similar to expected results if the stated conditions about the population are in fact true.\textsuperscript{137} This is tested by examining the probability the observed value will occur if the hypothesized conditions are in fact true.

When developing the test procedure the first step is to develop the null hypothesis. The previously stated hypotheses are considered as the null hypotheses for further discussion. These null hypotheses are tested with respect to the observations made in the survey sample. The null hypothesis is either true or it is not true. If it is true, the hypothesis is accepted. If it is not true, the null hypothesis is rejected. There is a chance of committing an error in hypothesis testing. If the null hypothesis is rejected but it in fact is true, a type I error is committed. If the null hypothesis is not rejected but should be because it is false, a type II error is committed.\textsuperscript{138} The probability of rejecting the null hypothesis when it is true, a type I error, is labelled $\alpha$. The probability of committing a type II error is labelled $\beta$. Therefore, the probability of rejecting the null hypothesis when it is false is $1-\beta$, referred to as the power of the test. Thus $\alpha$ and $\beta$ are related. When testing the null hypothesis, $\alpha$ is generally assigned a

\textsuperscript{136} Ibid, pp. 212.  
\textsuperscript{137} Ibid, pp. 222.  
\textsuperscript{138} Ibid, pp. 224.
pre-set level. This is the significance level of the test. The rationale is to maximize the probability of committing a type II error while the probability of committing a type I error is fixed at a pre-set value.  

Testing the stated hypotheses consists of tests of independence. The values derived in the survey are compiled in contingency tables. These tables consist of rows and columns relating one question to another. The test is for independence between the rows and the columns. Table 17 shows a typical contingency table from the results of survey one.

Table 17
Table of Age by Q4

<table>
<thead>
<tr>
<th>frequency</th>
<th>Q4</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>46</td>
<td>27</td>
<td>47</td>
<td>120</td>
</tr>
<tr>
<td>A</td>
<td>2</td>
<td>3</td>
<td>11</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>46</td>
<td>90</td>
<td></td>
<td>195</td>
</tr>
</tbody>
</table>

139 Ibid, pp. 226.
The value in row 1, column 1, equals 46. This represents the number of
responses meeting the criteria required to fill that position, i.e. 46
respondents are in the 1st age class and own land. There are certain
probabilities a unit of the population will be in the cells. If the
probability is known for a cell, it is possible to determine what to ex-
pect for that cell. Independence of the components in the table may be
tested. If the expected probability is similar to the observed value
there is support for the idea independence exists. The next step is to
determine the degree of agreement or disagreement between the observed
and expected number. This is accomplished using

\[(O_i - E_i) \sum_{E_i} \]

where:  \(O_i = \) observed # in the ith cell
        \(E_i = \) expected # in the ith cell
        \(i = \) # of cells in the table.

This statistic when computed represents a probability distribution which
approximates the chi-square test with \((r-1)(c-1)\) degrees of freedom,
with r rows and c columns.\(^{140}\) The next step is to check the Chi-square
test against the critical value from tables. If the test statistic ex-
ceeds the critical value from the table the null hypothesis is reject-
ed.\(^{141}\)

The approximation is a good one, providing accurate probabili-
ty level assessment if the expected numbers in each cell of
the contingency table are greater than or equal to 5.\(^{142}\)

\(^{140}\) Ibid, pp. 249.
\(^{141}\) Ibid, pp. 250.
\(^{142}\) Ibid, pp. 253.
5.3 RESULTS

As stated previously there are a number of questions from both questionnaires. Hypothesis one: Family assistance is not necessary for new entrants to accumulate capital to begin farming, uses questions #15 through 23 from questionnaire one. Question #'s 30, 31, 32 and 35 from questionnaire two provide additional information.

A definite pattern emerges from this selection of questions. The questions associated with loans must all be accepted when tested (at a 75% confidence interval). This represents independence between family assistance and capital accumulation. This complements the 'no' response predominant in these questions. Most of the new entrants surveyed do not have their family providing loan instruments. This manifests itself in the acceptance of the hypothesis under these particular question (#'s 15, 17, 18, 21 and 22). Therefore, the hypothesis family assistance is not necessary for a new entrant to accumulate capital is accepted, but only with respect to loan instruments provided by the family.

When the other questions are considered this hypothesis must be rejected. Therefore, it seems new entrants receive assistance via less direct mediums. They receive assistance through labour exchange, borrowing of equipment and supplies, and free use of assets. Overall, question 23 sums up this first hypothesis. It determines if the new entrant would have started to farm without the assistance received from the family. This individual question is rejected. This rejection coupled with the fact most (73.6%) respondents state they would not have been able to start farming, results in hypothesis one being rejected.
Therefore, family assistance appears to be necessary for new entrants to accumulate the capital required to begin farming. Dependency exists between family assistance and acquiring sufficient capital to enter.

The four questions #30, 31, 32 and 35 from questionnaire two all lead to the conclusion assistance is very important to the new entrant. A large majority (91.7%) state their family helped them to start farming (#30). The next question (#31) shows the new entrants would not be able to farm without the assistance. Of the responses to this question 91.3% state entry would not have been possible without family assistance. Question 32 asks if the new entrant could have started but on a smaller scale without this family assistance. A majority (76.2%) state they would not have been able to begin even on a smaller scale. The last question (#35) asks if assistance is very important, moderately important, or convenient but not essential. A majority (63.3%) feel the assistance is very important. As well a sizeable group (31.8%) feel it is moderately important. Therefore, a large group exists who believe assistance is important for entry. Though these four questions do not differentiate between the types of assistance, this assistance is very important and necessary for successful entry.

The second hypothesis: Family assistance given to new entrants does not place hardship on farm families, is tested via the use of two questions (#24 and 25) from questionnaire one. In this instance the majority in each question state a hardship does not exist (85.5% for #24 and 61.7% for #25). This should lead to the a priori belief the hypothesis will be accepted. When these questions are tested, this happens i.e. hypothesis two is accepted. Therefore, there appears to be independence
between assistance provided and hardship on the family. Therefore family assistance does not place a hardship on the family.

The third hypothesis: New farm entrants believe financial institutions fail to provide adequate credit programs for their needs, is tested by a number of questions. Since this hypothesis encompasses both public and private institutions, the questions are segmented into two groups. Public institutions are tested via questions 29, 30, 35, 39, 40, 41 and 42. A pattern emerges which is distinct. Even though relatively few respondents utilize government loan agencies (19.1% for F.C.C. and 38.9% with M.A.C.C.), questions 29 and 30 result in a rejection of the hypothesis. This suggests F.C.C. and M.A.C.C. are utilized by new entrants for entry into farming. However, the hypothesis is accepted when it is tested by the other questions. The other five questions #35, 39, 40, 41 and 42 all result in acceptance of the hypothesis. These questions pertain to providing enough money to start farming, repayment terms, loan limits, and equity requirements. The surveyed sample population appears to be dissatisfied with the current programs. Consequently, the acceptance of the hypothesis does not contradict the a priori belief about the hypothesis. Therefore from the question in survey one, the third hypothesis is accepted, with respect to public agencies.

Testing the third hypothesis with respect to private loan sources uses questions 44, 45, 50, 51 and 53. From the collected results most (77.6%) use short term money from banks for operating. This question (#44) is the only one which rejects this hypothesis. The other questions all lead to acceptance of the hypothesis. The other questions
pertain to attitudes about bank loans, i.e. more suitable, easier to acquire, better terms. Consequently, this hypothesis: financial institutions (private) fail to provide adequate credit programs for new entrants must be accepted. Apparently financial institutions are not providing adequate credit programs for new entrants.

A primary concern expressed by the respondents is the availability of loans. The respondents generally have acquired loans but, they believe the availability of these loans should be improved. Suggestions include, relaxing the repayment schedule, reducing interest rates and making the loans more available through amended equity requirements.

Hypothesis four: Public lending agencies do not fulfill their role as providers of adequate long term capital, is tested via questions 33 and 43. Question 33 tests for the purpose of the loan, i.e. land, buildings etc. With 21.5% of the respondents stating real estate, it is expected the hypothesis will be accepted, and it is. Question 43 considers the proportion of capital acquired from government agencies. The split is close with 47.1% having more than half and 45.6% having less than half. This question also leads to the acceptance of this hypothesis. From this it appears public lending agencies do not fulfill their role as providers of adequate long term capital for new entrants.

Of the total number of loans surveyed (60) in questionnaire two, 26.7% are provided by M.A.C.C. and F.C.C. for land. (Included in this are loans for multiple use which include land purchase.) Of the total number of loans provided by M.A.C.C. and F.C.C. most (88.9%) are for land purchase. However, public agencies only provide a small majority
(53.3%) of the loans used for land acquisition. Therefore, the acceptance of this hypothesis with respect to public institutions is not disputed.

Hypothesis five: Private lending institutions do not fulfill their role as providers of adequate short and intermediate term financing for new entrants, is tested by questions 46, 47, 48 and 49. They ask if private institutions provide money for the purchase of equipment, livestock, real estate, and improvement. Therefore testing of private institutions for long term credit is inferred. The test determines these questions should be rejected except for livestock. Thus private institutions are providing short and intermediate term loans. This coupled with the results of #44 (hypothesis 3) show private institutions are utilized for short to intermediate length loans. The number using bank loans for equipment is approximately half (45.6%). Of the total number of short and intermediate term loans (31) from survey two 77.4% are provided by private institutions. Of the remainder 16.1% are provided by the family and 6.5% are from public agencies. Therefore, private institutions are providing most of these short and intermediate loans. A rejection of the hypothesis private lending institutions do not fulfill their role as providers of adequate short and intermediate term financing is warranted. However, it is rejected with reservation because of results in hypothesis three showing private institutions fail to provide adequate credit. Therefore, banks may provide short and intermediate term loans but many feel they could improve their function, especially availability of loans to new entrants.
Hypothesis six: Off farm employment is not utilized by new entrants to facilitate ease of entry into farming, is tested by questions 56 and 57 from questionnaire one. Question 56 asks the respondent if either he(she) or his/her spouse works off the farm. The second question asks if the money is important for the operation of the farm. Both questions result in rejection of this hypothesis. With the results from the survey off-farm employment is very important to the establishment of a new entrant's operation.

To support or refute this, questions 20, 23, 24 and 28 are used from survey two. These questions ask if the respondent works off farm (#20); does the spouse work off the farm (#23); are the earning used for farm operations or for living (#24); and, if off-farm work is not available then would the new entrant be able to start (#28). The first question determined 50.0% of the new entrants work off-farm. Question 23 determines about half (53%) of the spouses work off farm. The use of funds is mostly for operating the farm and essential living expenses. Apparently most (92.9%) would not have been able to begin farming without the assistance of this off-farm money. The respondents from survey two view off-farm employment as a necessary entry device. Survey two substantiates the statistical testing done on survey one. This hypothesis is rejected, i.e. dependence between off-farm employment and entry ability.

Table 18 gives the question numbers, the Chi-square values, the critical values and whether the question can be accepted or rejected.
### Table 18

Summary of Hypothesis Tests

<table>
<thead>
<tr>
<th>Hypothesis Number</th>
<th>Question Number</th>
<th>D.F.</th>
<th>Observed Value</th>
<th>Critical Value at 75%</th>
<th>Null Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>4</td>
<td>0.969</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>4</td>
<td>32.927</td>
<td>5.39</td>
<td>reject</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>4</td>
<td>1.723</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>4</td>
<td>2.171</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>4</td>
<td>15.060</td>
<td>5.39</td>
<td>reject</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>4</td>
<td>19.255</td>
<td>5.39</td>
<td>reject</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>4</td>
<td>3.669</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>4</td>
<td>2.111</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>4</td>
<td>14.668</td>
<td>5.39</td>
<td>reject</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>4</td>
<td>3.213</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>4</td>
<td>3.854</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td>3 public</td>
<td>29</td>
<td>4</td>
<td>6.583</td>
<td>5.39</td>
<td>reject</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>4</td>
<td>5.796</td>
<td>5.39</td>
<td>reject</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>4</td>
<td>4.116</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>4</td>
<td>1.499</td>
<td>5.39</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>3</td>
<td>1.120</td>
<td>4.11</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>3</td>
<td>2.868</td>
<td>4.11</td>
<td>accept</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>3</td>
<td>3.934</td>
<td>4.11</td>
<td>accept</td>
</tr>
<tr>
<td>3 private</td>
<td>44</td>
<td>4</td>
<td>9.039</td>
<td>5.39</td>
<td>reject</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>8</td>
<td>8.153</td>
<td>10.22</td>
<td>accept</td>
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Chapter VI
CONCLUSIONS AND RECOMMENDATIONS

This chapter is organized into two main parts. The first, conclusions, will discuss the findings from the results in chapters four and five. Four areas are considered: 1) family assistance; 2) role of financial institutions; 3) non-farm new entrant problems; and 4) role of off-farm employment. The second part, recommendations, will attempt to provide suggestions for enhancing and/or remedying the conclusions. As well, some recommendations are made about future research needs.

6.1 CONCLUSIONS

6.1.1 Family Assistance

The main conclusion diagnosed from this research is dependence of new entrants upon family assistance. Without this assistance the chance of successful entry is reduced. The respondents to the questionnaires state emphatically the assistance is necessary for entry. Most state the assistance, in whatever form is not just necessary, but it is required for entry. As shown in chapter two, it is very difficult to begin farming, even for entrants from family farms. Presently, farm income is low; however, in a few years incomes may possibly approach peak levels. Though it was not tested, family assistance seems to be necessary to allow the new entrant to weather the low income years.
The assistance seems to provide the needed equity so the new entrant does not have to use as much debt to purchase assets. This reduced leverage increases the new entrant’s ability to weather bad economic conditions. With lower debt a farm raised new entrant has a superior advantage compared with a non-farm new entrant. With increased equity (reduced leverage) a new entrant may farm with less risk than a non-farm new entrant. In turn, the new entrant will be more able to survive bad years and more easily prosper in good years.

Family assistance may be the only viable instrument a new entrant can rely on for stabilizing his income. Though this was not directly tested it seems this higher equity which is associated with a family farm sponsored new entrant may provide this stabilization. The present government programs do not provide for a new entrant's stable income. The concern and hardship farmers are currently facing probably would be less if government programs fully stabilized incomes. The equity provided by family assistance increases income stability which is not provided by other means. This is not suggesting the government programs are inadequate, but possibly they could be improved.

In most instances, a new entrant does not possess enough equity to weather large variations in prices, yields and costs which are inherent in agriculture. Through family assistance which can be in many forms such as direct loans, free use of resources, gifts and others a new entrant has a better chance at survival. The degree of assistance may not be as important as the actual assistance itself. For example, a new entrant who has free use of equipment does not have to consider this particular cost. Having the use of assets for a low or a zero cost pro-
vides a large benefit to new entrants which enables more successful entry.

Therefore, family assistance is found to be extremely important in the entry of new farmers. Not only does it seem to provide a mechanism for raising income but it meets the goals of the participants. It enables the child to continue with a lifestyle he enjoys, as well as he is able to reduce the business risk of his operation. The family farm continues in the family, as well the assistance provides a method for the older generation to exit and the younger to enter smoothly. Therefore, this family assistance is utilized for providing a mechanism of entry for new entrants. Family assistance meets the goals of both the new entrant and the family. Since assistance is beneficial to both parties the assistance is not considered a hardship on the family. In conclusion, family assistance is necessary for successful entry of new entrants.

6.1.2 Role of Financial Institutions

Both types of financial institutions, public and private, are considered in this thesis. The overall conclusion is neither meets all the requirements new entrants feel they require. Complaints about interest rates are expected given the time frame of the research. However, complaints about poor availability were not expected. This complaint is recorded for both types of lending institutions. The new entrants are unable to acquire loans as easily as more established farmers because of a number of factors such as low equity, unproven farmer, and erratic cash flow.
Two observations are recorded about public lending institutions. First, they do not seem to be meeting the new entrants needs. Second, they are not being utilized by the new entrants to a degree presumed.

Farm Credit Corporation (F.C.C.) was established in 1959 as a Crown Agency reporting to parliament through the Minister of Agriculture. Its role is to provide financial services to enable Canadian farmers to establish, develop and maintain viable farm enterprises.\textsuperscript{143}

It seems the emphasis has shifted from "establish, develop", to "maintain" for this public institution. Given the problems in the past few years with falling prices, increased costs and weather, this choice may be explainable. However, the time may return when the first two objectives should have a higher priority.

Private institutions are slightly better accepted. Though most new entrants feel there is a need for more accessibility from private institutions, there is also a greater use of these private institutions. A problem does not seem to exist acquiring short term loans from private institutions. Again interest rates are listed as a problem. Still, most new entrants have loans from private institutions for short and intermediate terms. New entrants want greater accessibility, especially for intermediate uses. This is understandable since intermediate term loans may require more collateral and greater financial stability.

Overall financial institutions could improve their services, especially availability for new entrants. Without adequate and available financing new entrants can not establish, develop or maintain an operation.

\textsuperscript{143} F.C.C., \textit{Annual Report}, 1984/85, pp.1.
6.1.3 **Problems for Entrants who are not from Existing Farms**

Without family assistance the non-farm new entrant must overcome a large hurdle. He is unlikely to have the equity required to stabilize his income in bad years. As well, he probably does not have the equity to enable him to use financial instruments effectively, if at all.

A case can be made to suggest the lack of family assistance is a substantial barrier to entry. For all of the reasons why a family farm backed new entrant can use assistance for successful entry, a non-farm new entrant faces incredible obstacles with entry. The chances for a person working and amassing the needed capital to purchase a viable farm unit is remote. With capital costs possibly in the tens of thousands, if not hundreds of thousands, off-farm employment may only provide superficial financial assistance for entry. Generally the non-farm new entrant has little chance for entry except on a very small scale. He must adjust his time frame to accept the fact he may not have an economically viable unit for many years. This may result in a multi-generational procedure to establish a viable farm unit. In conclusion, non-farm new entrants may establish an economically viable farm but it may take a longer time frame to do so.

6.1.4 **Off-farm Employment Characteristics**

For the new entrant off-farm work is a method to supplement income. As stated previously it used to be a vehicle for establishment. Now its use is more for smoothing out the income wave. Off-farm employment is necessary for a new entrant, but it is not sufficient for entry. The
use of off-farm employment enhances farm income rather than supplying
capital to purchase a farm. The additional money is often used to pur-
chase necessary home items, and for meeting farm obligations. The use
of it is not just for the purchase of luxury items.

Interestingly, the new entrants desire to continue to work off-farm.
This may suggest two possibilities. First, the new entrants may have a
desire to finance expansion or pay down debts faster than the farm has
the ability to do so. Second, the new entrant may desire the additional
income to enhance lifestyle expectations. The use of this additional
money for vacations, and luxury goods may be the reason for off-farm em-
ployment long after the money is no longer needed for farm purposes.
This off-farm work is being utilized at least to the same degree Kapita-
ny (1982) determined. Thus off-farm work is initiated to help with farm
and family debts; then, continued to enhance lifestyle.

6.2 RECOMMENDATIONS

6.2.1 Family Assistance

Given the conclusions about family assistance it appears necessary to
allow entry. Probably it is the most expedient and effective means for
entry into farming. The new entrant has reduced entry costs, reduced
business and financial risk and personal and family goals are met. For
this reason, there should be incentives to continue in this fashion.
However, with incentives for intra-generational transfer, ie. the con-
tinuance of the family farm, a risk develops for the possibility of a
new landed gentry ie., a new social class. This new class will consist
of established farmers. A group who possibly are wealthy, or at worst,
not poor. This class will be privileged in the sense they are the only ones able to enter and continue farming. With current commodity prices, this may not seem appealing; however, if agriculture has a resurgence then these operators may greatly benefit. While not attempting to determine if this is good or bad, it is a possibility. The intra-generational transfer of farm assets seems to be the most expedient and effective method of acquiring both human and physical capital.

A system of incentives which allows existing operators a vehicle to exit and others a vehicle to enter may be appropriate. Allowing for greater gifting and capital gains exemption are possibilities. Another recommendation may be to speed up the transfer of farms by providing older, established farmers a method to retire which does not require complete liquidation of their assets.

6.2.2 Financial Institutions

As previously stated in the conclusions, availability must be increased. Possibly greater competition is needed in the financial system. The economy may dictate interest rates but it does not dictate the degree of availability. Possibly the financial system should restructure itself to enable entry, and establishment of farms. If F.C.C. intends to lend only to those with average asset values near a half million dollars, possibly it should rewrite its objectives. Otherwise, it should establish better programs to allow the establishment of farms.

The banks may provide adequate short term lending; however, they may need to become more involved in longer term loans. Possibly the banking
industry should be more open, i.e., more institutions available to choose from. If this is not practical an effort should be made to enhance competition so the farmer/consumer receives the best and least expensive service possible.

6.2.3 **Non-Farm New Entrants**

This group has a definite disadvantage as they generally are unable to enter farming. Non-farm new entrants may have to re-evaluate their goals. They may have to wait until they are older before they can hope to control a farm. A possible solution is to provide incentives for existing farms to hire and train these people. This may allow these non-farm new entrants the chance to acquire needed knowledge about farming. If other incentives are made available so exiting farmers are encouraged to sell to non-farm new entrants possibly these people can enter. However this may jeopardize the family farm. Which is more important: the continuance of the family farm or the ability for entry by outside people?

6.2.4 **Off-farm Employment**

Off-farm employment is needed by all new entrants. However, it is not available to all. This may suggest a geographical distribution of employment opportunities unfavourable to new farm entrants. The only recommendation is for the development of more jobs. Failing this, incentives to travel to other locations may be needed. Possibly farmers should be compensated if they must travel to get off-farm employment if this employment is necessary for them to continue farming. Obviously,
off-farm employment is necessary, and it may become more necessary in the future. Therefore, job availability is recommended, either by training, travel incentives or regional development.

6.2.5 Future Study

A study could determine whether incentives for existing families for transfer is cheaper or more costly than incentives for entry by the non-farm population. Associated with this, various types of incentives could be developed and analyzed.

A study of the current financial system may be in order. Is it meeting consumer requirements or is it dictating what the consumer needs? The possibility for developing a revised system is suggested, one which is more competitive and more responsible to the consumer.

A study could determine the amount needed for a viable farm unit. This probably will vary by location and by farm type. It could provide insight into the amount needed to establish a farm. It could also determine which type of farm is more likely to succeed.

Establishing the costs associated with increasing rural employment opportunities is possible. The direct costs i.e. creating jobs in towns, could be compared to indirect costs i.e. travel expense incentives. The cost of training farmers for specialized work could be studied as well as the cost of displacing non-farm workers.

Assistance is required for entry however the amount is undetermined. A study could determine the costs of this family assistance and the most likely methods of assistance.
BIBLIOGRAPHY

Ashcroft, Gerald, 'Manitoba Farmers and the Law', 1982 University of Manitoba.


Boehlje, Michael and White, T. Kelly, "A Production Investment Decision Model of Farm Firm Growth". American Journal of Agricultural Economics.


Gilson, J.C., "Family Farm Business Arrangements". University of Manitoba, Department of Agricultural Economics, Winnipeg, Bulletin No. 1, 1961.

Hanson, Gregory D. and Thompson, Jerry L., "A Simulation Study of Maximum Feasible Farm Debt Burdens by Farm Type". American Journal of Agricultural Economics, Nov. 1980, Vol 62.

Hanson, Greg and Thompson, Jerry, "Farm Debt Capacity: Evidence from Minnesota". Journal of the American Society of Farm Managers and Rural Appraisers, Vol 44., #1, April 1980.


Income Tax Act, 1983


Lansing, John B. and Morgan, James N.,


---------------------------------------- no. 236.

---------------------------------------- no. 349.


The Farm Financial Crisis Policy and Legislative Options, A discussion paper, Manitoba Agriculture, November 1984.

Appendix A

QUESTIONNAIRE I
(01) When did you start farming? (year) .................................................. 

(02) What age group are you in? .................................................. 18-25
     26-30
     31-35
     36-40
     41-45
     46 and over

(03) What municipality are you from? ..............................................

(04) Do you own or rent land? .................................................. own/rent/both

(05) " " " " machinery? .................................................. own/rent/both

(06) " " " " livestock? .................................................. own/rent/both

(07) Do you have a C.W.B. permit book? .............................. yes/ no

(08) Do you hold a producer quota? (egg, milk, etc.) ......... yes/ no

(09) Have you ever had a production contract?
     i.e. special crops ................................................. yes/ no

(10) Are you farming on a full time basis? .............................. yes/ no

   NOTE: Family refers to either your's or your spouses parents or
   relatives for the remainder of these questions.

(11) Is your farming operation completely independent of other members of the family? ........ yes/ no

(12) If yes to question 11, did you START
     as a completely independent farm operation? ........ yes/ no

(13) If no to question 11, do you plan to
     eventually take over the family farm? ............... yes/no/maybe

(14) If no to question 11, do you plan to become
     a completely independent farm operator
     as soon as possible? ........................................... yes/no/maybe

(15) Have inheritances or family gifts helped you to get started farming? .......... yes/ no

(16) Do you provide labour in return for
     equipment or other farm resource? ...................... yes/ no

(17) Has your family provided loans to enable
     you to operate the farm? .................................... yes/ no

(18) Has your family provided loans to purchase
     land, buildings, machinery, or livestock? ............ yes/ no
(19) Have you been able to borrow machinery or farm supplies from the family to help you get started farming? ......................yes/ no

(20) Have you had free use of such things as farm buildings to help you get started? ................yes/ no

(21) Has your family co-signed notes or loans to help you start farming? .........................yes/ no

(22) Has your family put up their collateral to secure farm loans to help you start farming? ........yes/ no

(23) Would you have started farming without the family support and assistance you received? ..........yes/ no

(24) Has helping you get started farming been a serious hardship on your family? ......................yes/ no

(25) Moderate hardship? ..........................................................yes/ no

(26) What proportion of the land you operate has been obtained from the family? (circle best)......less than 1/2 about 1/2 more than 1/2

(27) What proportion of the machinery used to operate your farm belongs to your family ..........less than 1/2 about 1/2 more than 1/2

(28) If you are farming with your family, what proportion of the total operation is yours? either rent or own. ...........................................less than 1/2 about 1/2 more than 1/2

(29) Have you taken out a farm loan from F.C.C.? ............yes/ no

(30) Have you taken out a loan from M.A.C.C.?.............yes/ no

(31) Have you taken out a S.B.D.B. loan? ......................yes/ no

(32) Have you taken out any other kind of loan that has been guaranteed or subsidized by government agencies? ..................yes/ no

(33) If you did take out a loan(s), for what purpose was it used for? (circle all appropriate) ..........farm equipment breeding stock farm real estate land improvements

(34) Have you received any government grants to
help get started in farming? ..................yes/ no

(35) Have the government farm loans provided enough money to meet your particular needs to get started farming? ..................yes/ no

(36) Should farm loan limits be increased? ..................yes/ no

(37) Has meeting the repayment terms of this loan meant problems for your farm/family? ..................yes/ no

(38) Should interest rates on government farm loans be subsidized to make it easier for beginning farmers to meet their payments? ..................yes/ no

(39) Do you feel that repayment periods should be lengthened to make it easier for beginning farmers to meet their payments? ..................yes/ no

(40) If the amount available for a loan had been higher, would you have required less assistance from your family? ..................yes/ no

(41) If less equity was required to get the loan would you have required less assistance from your family? ..................yes/ no

(42) If REPAYMENT TERMS on government loans could have been given lower annual payments, would you have required less assistance from your family? ..................yes/ no

(43) What proportion of the money you borrowed to start farming came from government farm loans and grants? ..less than 1/2 about 1/2 more than 1/2

(44) Do you borrow short term money from a bank or credit union to operate your farm? ..................yes/ no

(45) If you have a bank or credit union loan, have you found payments more suited to your ability to repay than payments on government agency loans? .....yes/no/about same

(46) Have you taken out longer term farm loans from a bank or credit union to purchase farm equipment? .....yes/ no

(47) breeding livestock? ..........yes/ no

(48) farm real estate? ..........yes/ no

(49) land improvements? ..........yes/ no

(50) Do you prefer to borrow from a bank or credit union instead of a government agency? ..................yes/ no

(51) Did you take out any of the above loans from banks or credit unions because you were unable to
get a government agency farm loan? .................yes/ no

(52) If yes to question 49, which loan? (from above).......'44'
    '45'
    '46'
    '47'

(53) Do you find any difficulties in the present loan system? (use spaces)

(54) Can you suggest changes to lending programs?

(55) What kind of farm business arrangement do you have?
    please comment on your arrangement.
    By yourself ________________________________
    partnership ________________________________
    corporation ________________________________

(56) Do either you or your spouse work off farm? ............yes/ no

(57) Is the money received from off farm employment
    important in the operation of the farm? ............very important
    moderately
    not important

(58) Would you agree to an interview where you would be asked more detailed questions? .................yes/ no

NOTE: Any information gathered by this questionnaire or by the interview will be confidential and your answers will not be made available to anyone.

(59) If you agree to be interviewed we require your name ________________________________
    address ________________________________
    phone number ________________________________

(60) Do you want us to send you the results of the survey, which will be in the form of totals or averages? ....yes/ no
Appendix B

QUESTIONNAIRE II
INTERVIEW NUMBER.

(01) What type of farm is it? .................................................
    (How most of the income is earned)

(02) How large is the farm in acres? ..........................

(03) How much of the farm is cultivated? ........................

(04) How large is the livestock operation? ..................
    eg. # of head, # of birds, quota size

(05) How productive is your livestock operation? ............
    ie. # of cattle sold/year, lbs of milk/cow, etc.

(06) What are the major crops that you grow? ................

(07) What are your average yields? .............................

(08) What is your estimated value of your livestock? ........

(09) What is your estimated value of the farm? ..............
    (land and buildings)

(10) What is the estimated value of your machinery
     and farm equipment? ............................................

(11) Do you have a producer quota of some form? .............yes/ no

(12) If yes, of what type is it? ....................................

(13) What is the size of the quota? ..............................

(14) Did you have any problem acquiring the quota? ............yes/ no

(15) Do you plan to expand your farm? ...........................

(16) In what way do you plan to expand the farm? ...
    land base
    livestock
    more intensive

(17) How will you finance this expansion? .......................own funds
    borrowed
    gifts & inheritance

(18) When do you expect this expansion to begin? ............already started
    within 5 yrs
    within 10 yrs.
    when economy improves
(19.1)  LOAN ACQUIRED FROM ________________________________

.11 Was there any problem in getting this loan(s).............yes/ no

.12 If so, is it because of any of the following reasons? ......no collateral
   credit rating
   unproven farmer
   cash flow

.13 What was the loan used for? (all appropriate)............land
   machinery
   livestock
   improvements

.14 What is the approximate size of the loan? .................______

.15 What are your repayment conditions such as:
   (a) number of years the loan is held for? .................______
   (b) approximate annual payment...principle+interest? .....______
   (c) Is the interest rate fixed or floating? .................______
   (d) The interest rate that you are paying now (approx)?...______
(19.2) .................. LOAN ACQUIRED FROM ........................

.21 Was there any problem in getting this loan(s) .......... yes/ no

.22 If so, is it because of any of the following reasons? ... no collateral
credit rating
unproven farmer
cash flow

.23 What was the loan used for? (all appropriate) .......... land
machinery
livestock
improvements

.24 What is the approximate size of the loan? ............... ........

.25 What are your repayment conditions such as:
(a) number of years the loan is held for? ................ ........
(b) approximate annual payment... principle+interest? ..... ........
(c) Is the interest rate fixed or floating? ................ ........
(d) The interest rate that you are paying now (approx)? .. .......
Was there any problem in getting this loan(s)? ..............yes/ no

If so, is it because of any of the following reasons? ...no collateral
credit rating
unproven farmer
cash flow

What was the loan used for? ..............................(a) . . . land
(b) machinery
(c) livestock
(d) improvements
   a and b
   a and c
   a and d
   any three
   all

What is the approximate size of the loan? ....................... 

What are your repayment conditions such as:
(a) number of years the loan is held for? ............... 
(b) approximate annual payment...principle+interest? ...... 
(c) Is the interest rate fixed or floating? ............... 
(d) The interest rate that you are paying now (approx)?... 

(19.4).................LOAN ACQUIRED FROM ________________________

.41 Was there any problem in getting this loan(s)............yes/ no

.42 If so, is it because of any of the following reasons? ...no collateral
credit rating
unproven farmer
cash flow

.43 What was the loan used for? (all appropriate).........land
machinery
livestock
improvements

.44 What is the approximate size of the loan? ................._______

.45 What are your repayment conditions such as:
   (a) number of years the loan is held for? ................._______
   (b) approximate annual payment...principle+interest? ......_______
   (c) Is the interest rate fixed or floating? .................._______
   (d) The interest rate that you are paying now (approx)? ______
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(19.5).................. LOAN ACQUIRED FROM

.51 Was there any problem in getting this loan(s)..............yes/ no

.52 If so, is it because of any of the following reasons? ...no collateral
credit rating
unproven farmer
cash flow

.53 What was the loan used for? (all appropriate)..............land
machinery
livestock
improvements

.54 What is the approximate size of the loan? .................

.55 What are your repayment conditions such as:

(a) number of years the loan is held for? ................

(b) approximate annual payment...principle+interest? ....

(c) Is the interest rate fixed or floating? ...............

(d) The interest rate that you are paying now (approx)?...
(20) Do you work off the farm on a fairly regular basis? ......yes/ no

(21) What is the ratio of farm to off-farm work each season?...spring
    summer
    fall
    winter

(22) What is the approximate numbers of days off-farm you work each year?____

(23) Does your spouse work off farm? .........................yes/ no

(24) If yes, does your spouse contribute the earnings toward...operating the farm
    essential family livir luxuries

(25) Does working off farm interfere much with farming? ........yes/ no
    How

(26) Are there off-farm employment opportunities in
    your area that will go along with farming?..............yes/ no

(27) If so, what are they? ..............................................

(28) If you were not working off farm, would you have
    been able to start farming?...................................

(29) Will you quit off-farm work when you are more
    established in farming? .................................yes/ no

(30) Did your family help you to get started farming? ..........yes/ no

(31) Could you have started at this time without their help?....yes/ no

(32) Without their help, would you have been able to start
    anyhow, but on a smaller scale? ............................yes/ no

(33) Do you plan to become more independent of the family? ...yes/ no
    HOW:

(34) In the operation of the farm, do you have a work
    sharing agreement; if so what are the details:______________
(36) What types of assistance do you receive?

(1) outright gift

(2) subsidized interest rates

(3) collateral or backing of bank notes

(4) machinery/work agreement

(5) free or cheap use of bldgs, equipt., inputs

(6) underwriting losses ie. through gifts loans, injection of capital.

(7) other: 
Appendix C

FIRST COVERING LETTER
Dear Sir/Madam

A study to assess the Financial Arrangements of new farm entrants is to be conducted this year, by The Dept. of Agricultural Economics and Farm Management of the University of Manitoba.

This study will attempt to estimate the amount/extent of family assistance in the form of gifts, free use of resources, and free or subsidized capital taking place to assist new entrants to get started in farming. It will also look at the use of available government lending and/or grant programs, and capital acquisition from the private agencies like Banks and Credit Unions. Terms of loan arrangement(s), such as repayment conditions and interest rates will be analysed to try and see if they are appropriate for this group. We are also interested in the limitations that credit availability has on getting started in farming. The results will be made available to the government to assist in developing future lending programs and policies.

Please assist us by completing the following questionnaire and indicate if you are willing to complete a more detailed form. This second questionnaire may or may not be accompanied by an interview. The material gathered from the second questionnaire will be both confidential and anonymous. The only thing we require is your name from the first survey so that we can get in touch with you to send out the second questionnaire. Your name may be picked to be used in the second survey and you may or may not be picked to be interviewed if you do not wish to be interviewed please indicate. It would be beneficial to interview a sample of entrants and your cooperation would be appreciated.

Thankyou for your time and help.

Sincerely,

R.M. Josephson, Assoc. Prof.

J.B. Watt, Graduate Student

Dept. of Agricultural Economics
University of Manitoba
Appendix D

SECOND COVERING LETTER
Dear Sir/Madam

About two weeks ago we sent you a letter asking you to complete a questionnaire to help us with our research about the financial requirements to start farming. The response that we have received has been fairly complete. However the receipt of as many replies as possible is required. We have not yet received your reply and need it to make the survey as complete as possible. This may be blamed on the mail service, however, if this is not the case, then we must urge you to complete the questionnaire and send it to us.

If you have already complied then we thank you and we will let you know the results of this project as soon as completed.

Sincerely,

R.M. Josephson, Assoc. Prof.

J.B. Watt, Graduate Student

Dept. of Agricultural Economics
University of Manitoba
Appendix E

MANITOBA CROP REPORTING DISTRICTS AND STUDY REGIONS
Contacted = Cd
Census = Cs
Replying = R

Manitoba Crop Reporting Districts And Study Regions