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IDENTIFYING FUTURE FARM TRANSFER
CREDIT REQUIREMENTS:
A CANADIAN STUDY

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IDENTIFYING FUTURE FARM TRANSFER CREDIT REQUIREMENTS

A CANADIAN STUDY

Fu-Lai Tung and Wayne D. Jones ^{1/}

1. Introduction

The agricultural production sector in Canada is constantly adjusting in response to changes within (input markets, technology) and beyond (product markets, institutional factors) the farm gate. These adjustments have led to some well recognized structural changes in the sector such as fewer farms, larger farm units and increased capitalization. In general, these developments have had a favourable effect on aggregate production efficiency and farm incomes. The extent of similar development in the future will largely depend on how well the industry solves the various adjustment problems associated with farm structural change.

One area of concern is the sector's increasing dependence on credit as a source of investment and operating capital. The flow of credit to farmers has been increasing rapidly throughout the 1970's and the demand for farm credit is expected to escalate in the future as structural changes combined with general inflation increase both the quantities and prices of the resources used by the production sector. The concern, then is about the adequacy of the capital markets to supply, at a reasonable cost, future farm credit requirements and about the effect of increased credit activity on the industry's future development.

The most critical type of farm credit, in terms of production sector development, is the long-term credit used for farm transfers - that is the transfer of farm real estate ownership to new and expanding farm operators. Farm transfer credit, as it is referred to in this paper, is important for development because it plays a major role in the reallocation of farm real estate which must accompany farm structural change. Federal and provincial government agencies have traditionally been the leading suppliers of farm transfer credit, providing about 80 percent of the long-term credit extended annually.^{2/} Growth in the supply of long-term credit by commercial institutions and private individuals has been slow

^{1/} The authors are economists with the Policy, Planning and Economics Branch, Agriculture Canada. The views expressed in this paper are those of the authors and do not necessarily reflect those of Agriculture Canada.

^{2/} R.S. Rust, "Farm Finance", Market Commentary, Agriculture Canada, December, 1978, pp. 83-94.

because of a reluctance to accept the reduced liquidity and the perceived risks of this market.

Recognizing that; (1) the agricultural production sector can not sustain development without increasing amounts of long-term farm transfer credit; (2) commercial and private sources of farm credit are not expected to significantly increase their shares of the long-term credit market under present conditions; and that (3) to increase government involvement as a source of long-term farm credit will be difficult in view of the scale and priority of other activities competing for public funds, it is necessary to identify future farm transfer credit requirements. This paper is the result of an attempt to project the 1981 credit requirements for the transfer of farm real estate and to examine the implications for new farm operators and the production sector as a whole.

The analysis utilizes a flow rather than stock concept of credit and internal financing is explicitly recognized, as suggested by Melichar.^{3/} Specifically, the paper describes the procedures used to estimate farm transfer activity from census data of the type common to most countries and demonstrates the applicability of a Markov Chain approach to forecasting farm transfer credit requirements from this data. As many countries carry out a periodic agriculture census, the methods employed in the present study may indicate new directions in farm credit analysis.

The paper is organized into three sections. The components that determine farm transfer credit requirements are examined in the first section. In the second, the method used to forecast credit requirements is described. The third section presents the forecast results and some related implications. Data sources and derivation of statistics related to farm transfer activity are discussed in Appendix A. Appendix B summarizes the supply of the farm credit system in Canada.

2. Components Determining Farm Transfer Credit Requirements

Several components contribute to an increase in credit requirements for transfers of farm real estate. The components may be grouped into two broad categories: those that affect the value of farm transfers and those that affect the level of internal capital funds. Examination of these

^{3/} E. Melichar, "Aggregate Farm Capital and Credit Flows Since 1950, and Projections to 1980", *Agricultural Finance Review*, Vol. 33, July, 1972 pp. 1-7.

components provides some help in developing a model to forecast farm transfer credit requirements. This section reviews the relevant trends using data primarily derived from the 1971 and 1976 census of Canadian agriculture. ^{4/}

The total value of farm real estate transferred is determined by the number and size of transfers to both new and expanding farm operators, and the prices of real estate. An increase in real estate prices was the most significant variable influencing the higher total value of farm real estate transferred in 1976 relative to 1971. The real estate price per acre increased, on average, from \$83 in 1971 to \$213 in 1976 for real estate transferred to expanding farm operators (Table 1). The corresponding increase for real estate transferred to new farm operators was \$129 to \$312, somewhat higher than that for expanding farm operators.

Increased numbers of transfers or transfer rates also contributed to the increased total value of farm real estate transferred. This was mainly a result of increased transfers to new farm operators. The rate of transfer for new farm operators increased from 4.1 percent in 1971 to 5.6 percent in 1976 while for expanding farm operators the increase was only 0.3 percent (Table 1). These rates imply 18 to 25 year ownership cycles in Canada. The difference in transfer rates between years was influenced by changes in such factors as real farm product prices, demographic characteristics of farm operators, off-farm work opportunities, farm real estate price levels, and capital markets.

The average size of farm transfer was quite constant over the 1971-76 period for new farm operators but a significant gain was observed for transfers to expanding farm operators. (Table 1). The better equity conditions associated with expanding farm operators and the nature of farm credit system may have resulted in this observation.

Internal funds available for the acquisition of farm real estate have a significant effect on credit requirements. Availability of such funds is determined by farmers' ability to manage cash flow generated from net farm income, non-farm income, and depreciation allowances. On average, farm operators used internal financing for 37.5 percent of the

^{4/} As in many countries, research into farm finance issues in Canada is limited by a lack of adequate data. The method employed to estimate farm transfer information for this study is summarized in Appendix A.

total value of real estate transferred in 1971. The remaining 62.5 was financed with borrowed funds (Table 1). The use of internal funds to acquire real estate capital increased to 46.3 percent in 1976. Sufficient data was not available to examine whether the use of borrowed funds for farm transfers varied inversely to the level of farm income. However, in previous studies such an inverse relationship has been found to exist for farm operating expenses and for non-real estate capital acquisition (farm machinery and equipment, livestock and poultry).^{5/}

3. Structure of the Forecasting Model

The forecasting model was constructed from the individual components that determine farm transfer credit requirements as discussed above. The major part of the exercise involved the projection of capital fund requirements for farm transfers which, once adjusted for the availability of internal financing, determine the credit requirements.

3.1 Forecasting Farm Transfer Capital Requirements for 1991

The secular nature of farm transfer activity leads us to postulate that the aggregate effect of socio-economic variables on farm transfers over time can be simulated in a stochastic model. The Markov Chain model is frequently utilized as such a stochastic model because, through the transition probabilities matrix, one is able to estimate the pattern of change in the forecast period without attempting to identify or measure what causes the change. Once the degree of change is estimated, it is then possible to determine if the pattern of change should be altered in order to achieve some specific target outcome. If the pattern of change is to be altered, the next step would be to determine which policies or programs would have the desired affect. The structure of the model and forecasting procedures are presented below in a non-mathematical format.

3.1.1 Forecasting Farm Transfer Numbers

Three elements were required for the forecasting procedure; the transition probabilities, an appropriate base distribution of farm operators, classified by size classes (according to the acres of farm land owned at the beginning and end of a given five year period) and the number of potential entrants for the projection period. The transition probabilities matrices

^{5/} For more detail see: W.D. Jones and F.L. Tung, "Financing Agricultural Development", unpublished Mimeograph, Policy, Planning and Economics Branch, Agriculture Canada, Ottawa, 1976.

for Canada for the 1966-71 and 1971-76 periods are presented in Table 2. Each of the entries in the 1966-71 matrix, for example, is the probability of a farm operator taking a particular course of action between 1966 and 1971 (derived from Table A.1 in Appendix A). Possible courses of action are; entering the industry, increasing or decreasing the size of owned farm land, maintaining the same size, or ceasing production entirely. There are 14 rows and 14 columns in the matrix, representing 13 farm size classes and one row and column to represent farm entrants (not in farming in the initial year) and farm exists (out of farming in the final year).

The observed transition probabilities matrices for 1966-71 and 1971-76 were different due to the different economic conditions that prevailed in each period. Future structural change (the transition probabilities matrix for 1976-81) in the farm industry will be determined by the future performance of the economy in general and the farm industry in particular. The derivation of the transition probabilities matrix for the 1976-81 period is based on the assumption that future structural change in the farm industry will follow a pattern which would reflect better economic conditions than the former period but less favourable conditions than the latter period. Observations for the 1976-78 period tend to support this assumption. Consequently, it is assumed that the 1976-81 transition probabilities matrix will equal the average of the 1966-71 and the 1971-76 transition probabilities matrices. The last column of Table 2 indicates the number of farm operators by size classes in the base year and the number of potential entrants in that year for both periods. A similar column was established, from 1976 agriculture census data, to represent the base distribution of farm operators for the 1976-81 period.

The number of potential new entrants was needed for both the derivation of transition probabilities and the forecasting procedure. Since no information on potential entrants was available, these numbers must be estimated. The assumptions must be considered carefully since, as indicated by Stanton and Kettunen, the number of potential entrants to an industry has a definite and measurable effect on subsequent projections of entrants and exists when Markov Chains are used.^{6/} In this study, it was assumed that the total agricultural labour force in 1966 represented the number of potential

^{6/} B.F. Stanton and L. Kettunen, "Potential Entrants and Projections in Markov Process Analysis", Journal of Farm Economics, vol. 49 (3): 633-643, August, 1967.

TABLE 2: 1966-71 and 1971-76 Transition Probabilities Matrices of Farm Operators, Canada^{a/}

Farm Size Class by Acres of Owned Farm Land	Exits from farming	Less than 10 acres	10-69	70-129	130-179	180-239	240-399	400-559	560-759	760-1,119	1,120-1,599	1,600-2,239	2,240-2,879	2,880 and over	Total	No. of Farm Operators at beginning of period
66-71 Transition Matrix																
New entrants	.8404	.0323	.0263	.0249	.0228	.0089	.0206	.0095	.0063	.0046	.0019	.0007	.0003	.0005	1.0000	551,000 ^{b/}
Less than 10 acres	.5248	.2570	.0368	.0290	.0447	.0093	.0465	.0214	.0152	.0094	.0037	.0012	.0001	.0004	1.0000	35,960
10- 69	.5002	.0336	.3861	.0477	.0163	.0064	.0064	.0019	.0007	.0004	.0002	.0001	.0000	.0000	1.0000	45,295
70- 129	.4043	.0144	.0419	.4349	.0477	.0337	.0179	.0035	.0011	.0004	.0002	.0000	.0001	.0001	1.0000	76,385
130- 179	.3710	.0157	.0168	.0533	.3956	.0376	.0698	.0230	.0092	.0060	.0016	.0005	.0000	.0000	1.0000	66,440
180- 239	.3434	.0099	.0141	.0550	.0607	.3969	.0965	.0178	.0035	.0014	.0004	.0002	.0000	.0002	1.0000	33,225
240- 399	.3023	.0127	.0076	.0160	.0409	.0314	.4537	.0798	.0348	.0157	.0036	.0010	.0003	.0002	1.0000	74,330
400- 559	.2462	.0114	.0047	.0039	.0252	.0092	.0790	.4524	.0994	.0541	.0101	.0018	.0003	.0003	1.0000	37,970
560- 759	.2189	.0114	.0032	.0030	.0130	.0041	.0466	.0694	.4562	.1387	.0797	.0046	.0006	.0006	1.0000	26,100
760-1,119	.1912	.0119	.0029	.0024	.0104	.0017	.0267	.0406	.0741	.4994	.1155	.0183	.0037	.0010	1.0000	20,575
1,120-1,599	.1716	.0110	.0023	.0017	.0081	.0011	.0170	.0222	.0392	.1273	.4729	.1063	.0152	.0041	1.0000	8,565
1,600-2,239	.1843	.0103	.0034	.0017	.0068	.0000	.0102	.0136	.0153	.0598	.1263	.4369	.0007	.0309	1.0000	2,930
2,240-2,879	.2021	.0109	.0000	.0000	.0054	.0000	.0109	.0109	.0054	.0273	.0766	.1331	.3607	.1527	1.0000	915
2,880 and over	.2350	.0150	.0000	.0000	.0100	.0000	.0150	.0150	.0050	.0150	.0250	.0400	.0750	.5500	1.0000	1,000
71-76 Transition Matrix																
New entrants	.8337	.0330	.0309	.0238	.0235	.0081	.0205	.0097	.0070	.0055	.0025	.0010	.0003	.0005	1.0000	615,400 ^{b/}
Less than 10 acres	.5186	.2461	.0417	.0300	.0420	.0100	.0441	.0240	.0195	.0159	.0053	.0018	.0005	.0005	1.0000	33,120
10- 69	.4793	.0370	.3963	.0497	.0176	.0079	.0070	.0026	.0012	.0010	.0003	.0000	.0001	.0000	1.0000	39,025
70- 129	.3889	.0166	.0493	.4362	.0508	.0335	.0192	.0035	.0012	.0005	.0002	.0001	.0000	.0000	1.0000	57,000
130- 179	.3753	.0152	.0215	.0536	.3825	.0419	.0680	.0236	.0113	.0078	.0023	.0009	.0001	.0000	1.0000	51,525
180- 239	.3215	.0111	.0186	.0581	.0634	.3950	.0160	.0195	.0049	.0017	.0002	.0002	.0000	.0000	1.0000	26,660
240- 399	.3233	.0107	.0100	.0173	.0442	.0329	.4172	.0780	.0381	.0203	.0060	.0013	.0004	.0003	1.0000	61,225
400- 559	.2806	.0117	.0057	.0072	.0297	.0093	.0839	.3960	.0983	.0606	.0138	.0025	.0004	.0004	1.0000	34,495
560- 759	.2543	.0118	.0040	.0032	.0182	.0038	.0511	.0666	.3975	.1392	.0405	.0076	.0012	.0008	1.0000	25,065
760-1,119	.2232	.0097	.0034	.0025	.0156	.0023	.0297	.0414	.0708	.4414	.1262	.0276	.0041	.0021	1.0000	21,750
1,120-1,599	.2082	.0109	.0026	.0016	.0125	.0016	.0187	.0208	.0364	.1135	.4222	.1182	.0229	.0099	1.0000	9,605
1,600-2,239	.2081	.0072	.0014	.0014	.0100	.0014	.0143	.0120	.0244	.0588	.1363	.4004	.0875	.0359	1.0000	3,485
2,240-2,879	.2127	.0090	.0045	.0045	.0136	.0000	.0136	.0090	.0181	.0226	.0543	.1403	.3349	.1629	1.0000	1,105
2,880- and over	.2324	.0219	.0044	.0000	.0044	.0000	.0088	.0088	.0132	.0132	.0307	.0351	.0658	.5613	1.0000	1,140

^{a/} Calculated from Tables A.1 and A.2
^{b/} Estimates of potential new entrants.

new entrants in that year. (551,000, as indicated in the first cell of the last column of Table 2). This estimate was then employed to calculate the transition probabilities of new entrants and the probability that the potential entrants would remain outside the farm industry (the first row of the transition probability matrix). An overestimate of potential entrants would underestimate the probabilities of new entrants and vice versa. Those who entered the farm industry in the 1966-71 period were no longer potential entrants in the next period while exiting farm operators were considered as new potential entrants for the next period. Consequently, the number of potential entrants in 1971 equalled the potential entrants in 1966 plus exiting farm operators minus new entrants. This iterative procedure was extended for the 1971-76 period to determine the potential entrants in 1976. An overestimate of potential entrants in 1976 would overestimate the number of new entrants in the 1976-81 period, assuming the transition probabilities of new entrants was accurate. The approach was tested for Canada for the 1971-76 period and the results indicated that errors were less than one percent when compared to the actual number of farm operators reported in the 1976 Census of Agriculture.^{2/}

Given (1) the estimated transition probability matrix for the 1976-81 period, (2) the base distribution of farm operators by size class in 1976 and (3) the number of potential new entrants in the base year (1976); the numbers of farm operators, new entrants, and exiting farm operators by size class for the projection period are estimated as the product of the transposed matrix and the vector (components 2 and 3 above). The number of farm transfers for 1976-81 period, then equals the number of new operators plus the number of continuing operators that expanded their farm size (in terms of land base). The results are presented in Table 3.

3.1.2 Forecasting Farm Transfer Values

Farm transfer capital requirements are equal to the total value of real estate transfers. Two steps were required in the projection of capital requirements in 1981. The first step was to project the total amount of real estate to be transferred to either new or expanding farm operators. This

^{2/} It should be noted, however, that this approach would not work as well at the provincial level since exiting farm operators may migrate out of the province and consequently may not be potential entrants in the subsequent period.

TABLE 3: Estimated Number of Farm Transfers to New and Expanding Farm Operators by Farm Size Class Between 1966-71, 1971-76 and 1976-81, Canada

Farm Size Class	New Farm Operators			Expanding Farm Operators ^{a/}		
	1966-71	1971-76	1976-81 ^{b/}	1966-71	1971-76	1976-81 ^{b/}
(Acres Owned)			- Numbers -			
Less than 10 acres	17,805	20,290	20,960	-	-	-
10 - 69	14,510	18,990	18,324	1,320	1,380	1,322
70 - 129	13,740	14,655	15,624	3,200	2,935	2,999
130 - 179	12,565	14,475	15,174	5,990	4,975	4,527
180 - 239	4,925	4,995	5,401	5,710	4,710	4,053
240 - 399	11,365	12,615	13,180	11,170	9,160	8,127
400 - 559	5,255	5,960	6,108	9,155	7,605	6,636
560 - 759	3,475	4,310	4,243	7,750	7,195	6,131
760 - 1,119	2,490	3,395	3,279	7,680	7,865	6,759
1,120 - 1,599	1,020	1,540	1,415	4,075	4,925	4,388
1,600 - 2,239	405	610	579	1,620	2,205	2,118
2,240 - 2,879	150	200	193	555	710	792
2,880 & over	250	335	322	335	515	536
Total	87,955	102,370	104,802	58,560	54,180	48,388

^{a/} An Expanding farm operator is defined as an operator who, over a specified period, increases the amount of farm land owned.

^{b/} Projected from the model specified in the text.

Source: Compiled from unpublished 1966-71 and 1971-76 Census Match Data, Statistics Canada.

was obtained using the average acres of farm land per transfer and the number of transfers for each size class.

The change in average acres of farm land per transfer between 1961-1971 and 1971-1976 varied by size class (Table 4). It was assumed that the change in average size of transfer between 1976-1981, for each size class, would follow the trends established between the two earlier periods. The number of transfers in 1981 was assumed equal to the average annual number of transfers for the 1976-81 period, derived from the forecast results presented in Table 3. Total acreage of farm land to be transferred in 1981 was then estimated by summing across farm size classes, the product of the average size of transfer and the projected number of transfers to both new and expanding farm operators (Table 5).

The price of real estate is expected to increase during the 1976-81 period due to the general rate of inflation and increases in land productivity. Over the last decade, land price increases attributable to land productivity increases and general inflation varied by period. The observed annual land price increase of 6.6 percent between 1966 and 1971 was estimated to be an aggregation of 5.6 percent land productivity increase and 1.0 percent general inflation (Table 6). For the period 1971-76, the observed annual land price increase of 13.0 percent, however, was mainly attributed to general inflation (10%).

TABLE 4: Estimated Average Size of Farm Land Transferred to New and Expanding Farm Operators by Farm Size Class in 1971, 1976 and 1981, Canada

Farm Size Class (Acres Owned)	New Farm Operators			Expanding Farm Operators ^{a/}		
	1971	1976	1981 ^{b/}	1971	1976	1981 ^{b/}
Less than 10 acres	1.8	1.8	1.8	-	-	-
10 - 69	33.1	32.6	32.1	27.5	27.5	27.5
70 - 129	97.3	96.4	97.3	60.5	62.1	63.7
130 - 179	155.8	156.2	156.6	84.8	86.3	87.8
180 - 239	203.7	203.9	204.1	86.7	87.2	87.7
240 - 399	308.4	309.1	309.8	162.1	161.8	161.5
400 - 599	468.8	469.1	470.6	215.8	222.3	229.0
560 - 759	638.6	640.2	641.8	281.4	292.1	303.2
760 - 1,119	881.7	886.1	890.5	380.3	401.6	424.1
1,120 - 1,599	1,276.5	1,274.9	1,273.2	519.7	536.1	553.0
1,600 - 2,239	1,820.5	1,818.2	1,815.8	736.5	736.6	791.7
2,240 - 2,879	2,482.2	2,458.5	2,434.9	946.0	1,048.7	1,162.6
2,880 & over	6,459.0	5,933.9	5,451.5	2,359.5	2,151.9	1,962.5
Total	218.6	228.3	222.4	250.6	289.3	303.3

a/ An expanding farm operator is defined as an operator who, over a specified period, increases the amount of farm land owned.

b/ Estimates are based on the assumption that the rate of increase in average size of farm land transferred for each size class in 1981 will be equal to the rate of increase or decrease observed between the 1966-71 and 1971-76 period.

Source: Compiled from unpublished 1966-71 and 1971-76 Census Match Data, Statistics Canada.

TABLE 5: Estimated Total Acres of Real Estate Transferred to New and Expanding Farm Operators by Farm Size Class in 1971, 1976 and 1981, Canada

Farm Size Class	New Farm Operators			Expanding Farm Operators		
	1971	1976	1981 ^{a/}	1971	1976	1981 ^{a/}
(Acres Owned)	- '000 acres -					
Less than 10 acres	6.3	7.2	7.5	-	-	-
10 - 69	95.9	123.9	117.6	7.2	7.6	7.3
70 - 129	267.3	282.6	304.0	38.7	36.4	38.2
130 - 179	391.5	452.1	475.2	101.5	85.9	79.5
180 - 239	200.8	203.7	220.5	99.0	82.1	71.1
240 - 339	701.1	779.8	816.6	362.2	296.4	262.5
400 - 559	492.7	559.9	574.9	305.1	338.2	303.9
560 - 759	443.8	551.8	554.6	436.2	420.2	371.6
760 - 1,119	439.1	601.6	584.0	584.1	631.7	573.3
1,120 - 1,599	260.4	392.7	360.3	423.6	528.0	485.3
1,600 - 2,239	147.5	221.8	210.3	238.6	336.7	335.4
2,240 - 2,879	74.5	98.3	94.0	105.0	148.9	184.2
2,880 & over	322.9	397.6	351.1	158.1	221.6	210.4
TOTAL	3,843.8	4,673.0	4,660.7	2,949.3	3,133.9	2,935.2

^{a/} Projected from the model specified in the text.

Source: Compiled from unpublished 1966-71 and 1971-76 Census Match Data, Statistics Canada

TABLE 6: Components of Land Price Increase Between 1966 and 1976, Canada

Period	Land Price Increase Components		
	Land Price Increase <u>a/</u>	Land Productivity Increase <u>b/</u>	General Rate of Inflation <u>c/</u>
- annual compound rates of change -			
1966-71 (low inflation)	6.6%	5.6%	1.0%
1971-76 (high inflation)	13.0%	3.0%	10.0%
1961-76 (moderate inflation)	7.2%	2.2%	5.0%
1976-81 (low)	4.0%	3.0%	1.0%
1976-81 (moderate)	8.0%	3.0%	5.0%
1976-81 (high)	13.0%	3.0%	10.0%

a/ Derived from Farm Input Price Index, Statistics Canada

b/ Calculated as total output divided by total land input.

c/ Calculated as residual of land price increase minus land productivity gain.

It was assumed that the annual growth rate in land productivity for 1976-1981 account for a moderate three percent increase in land prices as observed for the 1971-1976 period. General inflation is less stable than productivity gains and thus less predictable. Three annual compound rates of inflation were used in forecasting to 1981, based on three different inflation periods; 1 percent for 1966-71 (low), 5 percent for 1966-76 (moderate), and 10 percent for 1971-76 (high). The estimates of farm real estate prices per acre in 1981 were, therefore, calculated using low (4 percent), moderate (8 percent), and high (13 percent) annual compound rates of inflation. These estimates were used to determine real estate prices for each farm size class in 1981 based on observed 1976 prices. The results are presented in Table 7. The total value of real estate transferred (capital requirements) for the projection year 1981 was then estimated as the product of the price of real estate (Table 7) and the acres of real estate transferred (Table 5). The results are presented in Table 8.

TABLE 7: Actual and Estimated Price of Farm Real Estate Per Acre by
Size of Parcel and by Type of Farm Operator; 1966-1981, Canada

Farm Size	1966	1971	1976	1981 ^{a/}		
				Low ^{b/}	Moderate ^{c/}	High ^{d/}
(Acres Owned) - Dollars per Acre -						
<u>Expanding Farm Operators</u>						
Less than 10 acres	-	-	-			
10 - 69	380	757	1,638	1,993	2,407	3,018
70 - 129	277	412	969	1,179	1,424	1,786
130 - 179	124	170	440	535	646	810
180 - 239	138	195	538	654	790	991
240 - 399	82	112	321	391	472	591
400 - 559	67	84	227	276	334	418
560 - 759	61	73	191	232	281	352
760 - 1,119	58	68	175	213	257	322
1,120 - 1,599	53	63	162	197	238	298
1,600 - 2,239	50	57	151	184	222	278
2,240 - 2,879	44	57	157	191	231	289
2,880 & over	45	50	118	143	173	217
TOTAL	68	83	213	259	313	392
<u>New Farm Operators</u>						
Less than 10 acres	-	184	434	528	638	860
10 - 69	-	824	1,839	2,237	2,702	3,388
70 - 129	-	311	753	916	1,106	1,387
130 - 179	-	134	342	416	502	630
180 - 239	-	194	462	562	679	851
240 - 399	-	95	255	310	375	469
400 - 559	-	81	206	250	303	379
560 - 759	-	72	186	226	273	343
760 - 1,119	-	70	177	210	254	319
1,120 - 1,599	-	63	164	199	241	302
1,600 - 2,239	-	64	155	188	228	285
2,240 - 2,879	-	53	170	207	250	313
2,880 & over	-	55	128	156	188	236
TOTAL	-	129	312	380	458	575

a/ Estimates are based on the assumption that the price of farm real estate is determined by the rate of increase in land productivity and the general rate of inflation.

b/ Estimated on the basis of annual compound growth rate of 4 percent in increase of real estate price in which 3 percent is attributable to expected increase of land productivity and 1 percent is attributable to general inflation.

c/ Assumes annual compound growth rate of 8 percent; 3 percent increase in land productivity plus 5 percent increase in general inflation.

d/ Assumes annual compound growth rate of 13 percent; 3 percent increase in land productivity plus 10 percent increase in general inflation.

Source: Derived from unpublished 1966-71 and 1971-76 Census Match Data, Statistics Canada.

TABLE 8: Estimated Real Estate Capital Value Transferred in 1971, 1976 and 1981 by Size of Farm and Type of Operator, Canada^{a/}

Farm Size Class (Acres Owned)	1971	1976	1981 ^{a/}		
			low	Moderate	High
		-	\$'000	-	
<u>New Farm Operators</u>					
Less than 10 acres	5,786	15,654	19,906	24,053	30,160
10 - 69	395,236	1,138,287	1,315,803	1,589,316	1,992,822
70 - 129	416,265	1,062,881	1,392,503	1,681,341	2,108,517
130 - 179	261,709	773,421	988,499	1,192,852	1,497,006
180 - 239	194,652	470,821	619,493	748,462	938,057
240 - 399	331,703	995,212	1,265,792	1,531,200	1,915,021
400 - 559	198,434	577,139	615,443	870,943	1,089,398
560 - 759	159,489	514,110	615,043	743,434	934,058
760 - 1,119	154,006	518,868	613,179	741,655	931,448
1,120 - 1,599	82,667	322,064	358,518	434,186	544,088
1,660 - 2,239	90,116	171,828	197,644	239,696	299,621
2,240 - 2,879	19,559	83,510	97,269	117,475	147,079
2,880 & over	88,340	254,025	273,842	330,015	414,274
Total	2,477,402	7,279,768	8,476,491	10,244,628	12,841,500
<u>Expanding Farm Operators</u>					
Less than 10 acres	-	-	-	-	-
10 - 69	31,152	66,654	72,545	87,615	109,855
70 - 129	93,120	227,463	225,189	271,984	341,126
130 - 179	99,434	274,463	212,663	256,785	321,975
180 - 239	114,771	391,872	232,432	280,766	352,201
240 - 399	225,634	720,892	513,187	619,500	775,687
400 - 559	192,255	638,820	409,410	507,546	635,193
560 - 759	182,900	685,684	431,265	522,351	654,333
760 - 1,119	232,704	946,160	610,564	736,691	923,013
1,120 - 1,599	160,963	776,673	478,040	577,531	723,127
1,600 - 2,239	75,006	455,774	308,531	372,250	466,150
2,240 - 2,879	36,020	210,231	175,873	212,705	266,111
2,880 & over	45,627	194,928	150,422	181,988	228,262
Total	1,469,856	5,618,466	3,880,121	4,627,712	5,797,033

a/ Projected as per the procedures presented in the text.

Source: Derived from unpublished 1966-71 and 1971-76 Census Match Data, Statistics Canada.

3.2 Forecasting Farm Transfer Credit Requirements for 1981

The forecasts of farm transfer credit requirements were based on the assumption that farmers will require credit following the recent pattern of farm real estate financing. As indicated in Table 1, the proportion of credit used to finance transfers was 62.5 percent in 1971 and 53.7 percent in 1976. With no other reference points available, it was decided that the ratio of average credit to capital requirements between 1971 and 1976 (55.7 percent in shown in Table 1) would be used to forecast 1981 credit requirements from the three alternative estimates of capital requirements.

4.0 Results and Implications

The forecasts of farm transfer capital and credit requirements for 1981 are presented in Table 9. Estimates of total capital requirements range from \$2,461.3 to \$3,727.7 million while credit estimates range from \$1,370.7 million to \$2,076.3 million. Based on moderate gains in land productivity and a moderate rate of inflation, the forecast of \$1,656.7 million in farm credit represents an increase of \$272.6 million over the farm credit extended in 1976. This moderate increase translates into a 4 percent annual increase compounded over the 1976-81 period which is much lower than the 1971-76 estimated annual compound rate of increase of 23 percent. While the low estimate actually represents a decrease in credit use for farm transfers of \$13.2 million, the increase of \$692.2 million indicated by the high estimate is considered much more likely to occur. ^{8/}

^{8/} The annual compound rate of increase in credit use for farm transfers over the 1976-81 period is estimated at 8 percent for the high forecast.

TABLE 9: Forecast Capital and Credit Requirements in 1981, Canada

	1981		
	low	Moderate	High
- Million Dollars -			
I. Forecasted Capital Fund Requirements			
New Farm Operators	1,695.3	2,048.9	2,568.3
Expanding Farm Operators	766.0	925.5	1,159.4
Total	2,461.3	2,974.4	3,727.7
II. Forecasted Credit Requirements			
New Farm Operators	944.2	1,141.2	1,430.5
Expanding Farm Operators	426.7	515.5	645.8
Total	1,370.4	1,656.7	2,076.3

The major farm transfer credit requirements in 1981 are expected to be for farms transferred to new farm operators which were forecast in the \$944.2 million to \$1,430.5 million range. In comparison, the 1981 requirements for expanding farm operators were forecast in the \$426.7 to \$645.8 million range. The farm transfer estimates for the 1966-71 and 1971-76 periods and the projections for the 1976-81 period indicate a reduction in farm expansions and an increase in new farm entrants. This may be an indication that, (1) the majority of Canadian farms are reaching a viable size given current technology; (2) a limited supply of real estate is available for expansion purposes; and (3) alternative means of entering the farm industry, such as part-time farming, are attracting more individuals into the industry.

The forecast increases in capital and credit requirements have a number of implications for the agricultural industry. Beginning farmers will find it increasingly difficult to meet the equity requirements for the size of loan required to purchase an economically viable farm and the debt load may reach such a scale that it can not be fully amortized over the operator's productive years. For example, the estimates in Tables 4 and 7 indicate that, on average, a new operator financing a farm transfer

would have paid about \$71,000 in 1976. With a high ratio mortgage of 90 percent, the new farmer still required equity of \$7,100 and a \$63,900 loan. The average farm transfer to a new operator could be valued as high as \$128,000 by 1981, according to the present estimates. This would necessitate equity of \$12,800 and a \$115,200 loan given the same mortgage/equity ratio. The current increasing trend in farm values suggests that fewer and fewer young farmers will be able to meet the equity requirements in the future without some form of financial backing from the previous generation or from some public source. In addition, the potential inability of young farmers to finance the transfer of ownership of viable farm units over their farming careers would create a greater dependency on alternative means of financing such as the formation of farm corporations or tenant farming. The impact of these conditions on the structure of the agricultural industry could be substantial.

A second implication of the extensive credit requirements needed for future farm transfers applies to the agricultural industry in aggregate and relates to production costs. As the capital requirements of farming increases, the annual cost of using this capital (i.e., interest on debt, depreciation, etc.) increases accordingly and is reflected in higher costs of production. The annual interest charge on the estimated \$1,384.1 million in credit extended for real estate transfers in 1976 would have been about \$545 million, assuming a 10% rate of interest and a 25 year amortization period. Under the same loan terms, the high forecast of real estate credit extended in 1981 (\$2,076.3 million as indicated in Table 9) represents an annual interest charge of about \$817 million. Such increasing production costs could have an impact of varying magnitudes on farm incomes, the industry's competitive market position (both export and domestic) and consumer welfare (higher food prices) and could lead to requests for additional government support of farmers. To the extent that future transfers contribute to farm expansion, the resultant higher production costs should be at least partially offset by productivity gains achieved through economies of size.^{9/} However, much of this debt, and therefore

^{9/} Two recent empirical studies provide evidence which suggests that the agricultural industry in general is benefiting from farm expansion through gains in production efficiency: F.L. Tunq and W.D. Jones, "Factors Affecting the Farm Adjustment process in Saskatchewan", paper presented to the Annual Conference of the Canadian Agricultural Economics Society, August 14-16, 1977, Guelph; and G.L. Brinkman and J.A. Gellner, "Relative Rates of Resource Returns for Ontario Commercial Farms - A Farm to Non-farm Comparison, 1971-74", Canadian Journal of Agricultural Economics, vol. 25 no. 2: 26-44, July 1977.

much of the increase in costs of production, will be the result of farm transfers to new farm operators. The financing of new operators will add to the productive capacity of the agricultural industry only to the extent that the new operators may possess a higher level of skill than the previous owner-operators.

The final implication discussed here is for the allocation of limited public funds to finance farm transfers. Over the last decade, more than 50 percent of farm real estate debt has been financed by government sources (Appendix B). If governments continue to supply this share, more than one billion dollars in farm real estate credit could be required from government sources by 1981 compared to an estimated \$563 million in 1976.^{10/} The concern over the estimated increase in farm transfer credit required from government revolves around the fact that agriculture will have to compete with other industries for scarce public funds.

Increases in the availability of public funds for farm credit purposes may be restricted in view of the expected scale and priority of other activities competing for public funds such as resource development and public welfare programs. Commercial lending institutions are expected to provide an increasing amount of long-term credit but growth in funds available has been slower than growth in requirements. Moreover, commercial institutions do not have the same commitment to the industry and may redirect some of these funds to non-agricultural uses if better alternatives arise. Thus, farmers with the greatest need for long-term credit, those with low equity or security, may find it difficult to obtain credit from commercial sources. A lack of credit would act as a constraint to rapid agricultural development.

^{10/} It should be noted at this point that much of the funds required to finance new debt comes from the repayment of debt outstanding. The amount of new funds required would depend on the pattern of repayment in the industry.

APPENDIX A: DATA SOURCES AND ESTIMATION PROCEDURES

Farm transfers refer to changes in ownership of farm real estate (land and buildings). Within this definition there are two separate classifications; (1) transfers to new farm operators and; (2) transfers to expanding farm operators.^{1/} The present study identified the number and value of transfers for the 1966-71 and 1971-76 census periods from Census Match Data compiled by the Agriculture Division of Statistics Canada. This information was then employed to project farm transfer activities during the 1976-81 period and to forecast capital and credit requirements for 1981.

Data Sources

The 1966-71 and 1971-76 Agriculture Census Match Data were used to estimate the number and value of farm transfers that occurred in the last decade. The reliability of the estimates is determined by the quality of the data. A manual check of the data indicated the accuracy of the computer match was quite high.^{2/} The matching procedure basically involved a linking of the 1966 census register of farm operators with the 1971 census register of farm operators and likewise for the 1971 and 1976 census registers of farm operators.

^{1/} An expanding farm operator is defined as an operator who, between two census years, increases the amount of farm land owned.

^{2/} The quality of the 1966-71 match for Saskatchewan was evaluated. The match data was cross-tabulated by age group. If the match was perfect, no farm operators would appear in the off-diagonal age groups. However, about 10.45 percent of all farm operators fall into off-diagonal cells. Consequently, it was decided to perform a manual match for all farm operators in the off-diagonal matrix. It was found that about 1,000 farm operators which had been matched were theoretically supposed to be unmatched. These mis-matches were mainly due to father-son farm transfers incorrectly being considered as a continuing farm operator. All incorrectly matched farm operators were re-grouped for the Statistics Canada match. As a result, errors in the match for Saskatchewan were reduced from 10 percent to about 6 percent. For more details see: Bollman, R.D., "1966-71 Census of Agriculture Match: Methodology and Analysis of the Quality of the Match", unpublished mimeograph, Agriculture Division, Statistics Canada, 1977.

Identification of Number of Farm Transfers

For the 1966-71 match, it is assumed that all matched farm operators continued their operation throughout the period; the unmatched 1966 farm operators exited from farming; and the unmatched 1971 farm operators were new farm operators entering farm business either through inheritance or purchase of the farm. Similar assumptions were made for the 1971-76 match. The number of expanding farm operators is assumed equal to the number of continuing farm operators (matched farm operators) who, over the matching period, increased their acres of owned farm land. Each new and expanding farm operator, therefore, are considered to represent a farm transfer. All farms were grouped into 13 size classes according to the size of owned farm land for both periods (Table A.1).

The results for both matches are presented in Tables A.1 and A.2. The data presented in these tables highlight the farm transfer activity associated with the adjustment process of the farm industry that has taken place during the 1966-76 period. Data on the first row of Table A.1, for example, indicate the number of farm operators with less than 10 acres of owned farm land in 1966 that remained with the same amount of owned farm land, acquired more owned farm land, or left the industry by 1971. The new operators row indicates the number of farm operators that entered the farm industry by the amount of farm land owned in 1971 as identified by the column headings at the top of the table.

Identification of Real Estate Value Associated with Farm Transfers

Given the number of farm transfers, the total amount and value of real estate associated with these farm transfers were obtained from the Census Match Data, following some adjustment procedures.

The total value of real estate capital transferred should include only the owned portion of farm land and buildings but this information was not directly available from the data. The ratio of owned farm land acreage to total farm land acreage was employed to calculate the value of owned real estate capital under the assumption that there is no

TABLE A.1: Movement of Farm Operators Between 1966 and 1971 Census Years by Acres of Owned Farm Land, Canada^{a/}

Farm size (Acres Owned)	Less than 10	10- 69	70- 129	130- 179	180- 239	240- 399	400- 559	560- 759	760- 1,119	1,120- 1,599	1,600- 2,239	2,240- 2,879	2,880 & over	Total	Exiting (not farm- ing in 1971	No. of farm operators in 1966
Less than 10	9,240	1,320	1,040	1,605	350	1,675	770	550	340	135	45	5	15	17,090	18,870	35,960
10- 69	1,520	17,485	2,160	735	290	290	90	35	20	10	5	-	-	22,640	22,655	45,295
70- 129	1,105	3,205	33,220	3,650	2,570	1,360	250	80	30	15	-	5	5	45,495	30,890	76,385
130- 179	1,040	1,115	3,540	26,285	2,500	4,640	1,525	610	405	105	20	-	5	21,815	11,410	33,225
180- 239	350	470	1,830	2,020	13,190	3,295	590	115	45	10	5	-	5	51,855	22,475	74,530
240- 399	920	565	1,190	3,045	2,540	33,730	5,930	2,585	1,165	265	70	15	5	28,645	9,325	37,970
400- 559	435	180	225	960	350	5,000	17,180	3,775	2,055	385	70	15	15	20,585	5,715	26,100
560- 759	300	85	80	340	105	1,215	1,810	11,905	3,620	775	120	15	15	16,640	3,955	20,575
760-1,119	245	60	50	215	35	550	840	1,525	10,275	2,375	375	75	20	7,095	1,470	8,565
1,120-1,599	95	20	15	70	10	145	190	335	1,090	4,050	910	130	35	2,390	540	2,970
1,600-2,239	30	10	5	20	-	30	40	45	175	370	1,280	295	90	730	185	915
2,240-2,879	10	-	-	5	-	10	10	5	25	70	140	350	125	765	235	1,000
2,880 & over	15	-	-	10	-	15	15	5	15	25	40	75	550	765	235	1,000
Total	15,315	24,515	43,355	38,960	21,740	49,865	29,240	21,570	19,260	8,590	3,080	960	885	277,355	152,355	429,690
Expanding Farms	-	1,320	3,200	5,990	5,710	11,170	9,155	7,750	7,680	4,075	1,620	555	335	58,560		
New Operators (not farming in 1966)	17,805	14,510	13,740	12,565	4,950	11,360	5,255	3,475	2,490	1,020	405	150	250	87,955		
No. of farm operators in 1971	33,120	39,025	57,095	51,525	26,670	61,225	34,495	25,045	21,750	9,610	3,485	1,116	1,135	365,290		

a/ Farms classified as "Institutional" are excluded. Total farm operators may not be identical to Census publication due to adjustments for confidentiality.

- denotes zero or less than three farm operators.

SOURCE: Unpublished 1966-71 Agriculture Canada Match Data, Statistics Canada.

TABLE A.2: Movement of Farm Operators Between 1971 and 1976 Census Years by Acres of Owned Farm Land, Canada^{a/}

Farm size (Acres Owned)	Less than 10	10-69	70-129	130-179	180-239	240-399	400-559	560-759	760-1,119	1,120-1,599	1,600-2,239	2,240-2,879	2,880 & over	Total	Exiting (not farming in 1976)	No. of farm operators in 1971
Less than 10	8,155	1,380	995	1,390	330	1,460	795	645	525	175	60	15	15	15,940	17,180	33,120
10-69	1,445	15,465	1,940	685	310	275	100	45	40	10	-	5	-	20,320	18,705	39,025
70-129	950	2,815	24,900	2,900	1,910	1,095	200	70	30	10	5	-	-	34,885	22,205	57,090
130-179	785	1,110	2,555	19,710	2,160	3,505	1,215	580	400	120	45	5	-	18,090	8,570	26,660
180-239	295	495	1,550	1,690	10,530	2,825	520	130	45	5	5	-	-	41,435	19,790	61,225
240-399	655	615	1,060	2,705	2,015	25,535	4,775	2,335	1,245	370	80	25	20	24,815	9,680	34,495
400-559	405	195	250	1,025	320	2,895	13,655	3,390	2,090	475	85	15	15	18,690	6,375	25,065
560-759	295	100	85	455	95	1,280	1,670	9,965	3,490	1,015	190	30	20	16,895	4,855	21,750
760-1,119	210	75	65	340	50	645	900	1,540	9,600	2,745	600	90	45	7,605	2,000	9,605
1,120-1,599	105	25	15	120	15	180	200	350	1,090	4,055	1,135	220	95	2,760	725	3,485
1,600-2,239	25	5	5	35	5	50	45	85	205	475	1,395	305	125	2,760	725	3,485
2,240-2,879	10	5	5	15	-	15	10	20	25	60	155	370	180	870	235	1,105
2,880 & over	25	5	-	5	-	10	10	15	15	35	40	75	640	875	265	1,140
Total	13,360	22,290	33,415	31,075	17,740	39,770	24,095	19,170	18,800	9,550	3,795	1,155	1,155	235,370	129,920	365,290
Expanding Farms	-	1,380	2,935	4,975	4,710	9,160	7,605	7,195	7,865	4,925	2,205	710	515	54,180		
New Operators (not farming in 1971)	20,290	18,990	14,655	14,475	4,995	12,615	5,960	4,310	3,395	1,540	610	200	335	102,370		
No. of farms operators in 1976	33,650	41,280	48,070	45,550	22,735	52,385	30,055	23,480	22,195	11,090	4,405	1,355	1,490	337,740		

a/ Farms classified as "Institutional" are excluded. Total farm operators may not be identical to census publication due to adjustments for confidentiality.

- denotes zero or less than three farm operators.

SOURCE: Unpublished 1971-76 Agriculture Census Match Data, Statistics Canada.

difference in the value of owned and rented real estate.^{3/} The value of real estate capital transferred for 1971 was assumed to be equal to one fifth of the value of those transfers between 1966 and 1971. The same procedure was used to estimate the value of real estate transfers for 1971 and 1976.

^{3/} It is recognized that this assumption might have resulted in underestimating the value of owned real estate capital transferred since a high proportion of rented land is poor land for which the price is generally lower. However, the data required for a more accurate procedure is not available.

APPENDIX B: THE SOURCES AND NATURE OF FARM CREDIT IN CANADA^{1/}

In this Appendix the recent trends in credit supply by source and the nature of the sources of supply are discussed. All sources of farm credit are aggregated into three groups, namely private individuals, commercial lenders, and governments. Private sources of funds to farm operators generally imply father to son credit arrangements. Commercial lenders include all lenders except governments and private individuals such as chartered banks, financial institutions (insurance, trust and loan companies), credit unions and supply companies. Government lenders include all levels of governments as well as the Treasury Branches of Alberta which operate in a similar nature to the commercial banks.

For the sake of completeness, farm credit of all terms is covered although farm transfer credit is primarily long-term credit. Loans offered by all lenders are grouped into short (up to 18 months), intermediate (18 months to 10 years) and long-term (10 years and over). Credit supplied is presented by the amount extended during any one year and by the total amount of debt outstanding at the end of each year. Farm credit extended is the flow of credit granted to farmers in any given year and indicates annual credit supplied. Farm credit outstanding is the sum of all farm loans disbursed but not repaid at the end of a given year. Credit outstanding indicates total farm indebtedness.

Comprehensive data on farm credit extended and outstanding for 1966, 1971 and 1974 through 1976 by length of term and source are presented in Tables B.1 and B.2, respectively.

1. SOURCES OF FARM CREDIT

1.1 Short-term Credit

A stable proportion of over 90 percent of total short-term credit extended comes from commercial sources. Financial institutions, banks, credit unions, and finance companies are increasingly dominant in this

^{1/} This discussion relies heavily on material and data presented in "Farm Finance" articles by R.S. Rust, published annually in Canadian Farm Economics and, more recently, Market Commentary, Economics Branch, Agriculture Canada. All credit data represent rough estimates derived from annual surveys.

TABLE B.1 Estimated Credit Extended (Million of Dollars) By Source and Term of Credit, Canada, 1966 to 1976

Source and Term of Credit	1966			1971			1974			1975			1976		
	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit
Long-Term (10 years and over)															
<u>Government - Total</u>	320.2	93.6	16.4	179.2	87.2	6.8	606.3	95.4	14.2	607.0	92.8	11.1	563.0	80.6	9.4
Farm Credit Corporation	234.4	68.5	12.0	109.7	53.3	4.1	430.9	67.8	10.1	472.0	72.1	8.6	443.1	63.4	7.4
Veterans' Land Act	35.6	9.8	1.7	20.6	10.0	0.8	11.7	1.8	0.3	6.7	1.0	0.1	7.7	1.1	0.1
Total Federal	268.0	78.3	13.7	130.3	63.3	4.9	442.6	69.6	10.4	478.7	73.2	8.7	450.8	64.5	7.5
Total Provincial	52.2	15.3	2.6	48.9	23.7	1.9	163.7	25.8	3.8	128.3	19.6	2.4	112.2	16.1	1.9
<u>Commercial - Total</u>	10.0	2.9	0.5	4.8	2.3	0.2	7.5	1.2	0.2	7.4	1.1	0.1	91.5	13.1	1.5
<u>Private - Total</u>	12.0	3.5	0.6	22.0	10.7	0.8	22.0	3.4	0.5	40.0	6.1	0.7	44.0	6.3	0.7
<u>Total Long-Term Credit</u>	342.2	100.0	17.4	206.0	100.0	7.8	635.8	100.0	14.9	654.4	100.0	11.9	698.5	100.0	11.6
Intermediate-Term (18 months to 10 years)															
<u>Government - Total</u>	9.6	2.0	0.5	23.6	4.5	0.9	75.1	7.6	1.8	60.2	5.0	1.1	56.5	3.5	0.9
Farm Credit Corporation	-	-	-	1.9	0.4	0.1	5.3	0.5	0.1	4.5	0.4	0.1	1.8	0.1	-
Federal Business Development Bank	6.9	1.5	0.4	11.4	2.2	0.4	38.8	3.9	0.9	28.4	2.4	0.5	26.2	1.6	0.4
Total Federal	6.9	1.5	0.4	13.3	2.6	0.5	44.1	4.4	1.0	32.9	2.8	0.6	28.0	1.7	0.4
Total Provincial	0.5	0.1	-	4.4	0.8	0.2	18.5	1.9	0.5	11.1	0.9	0.2	12.4	0.8	0.2
Total Municipal	2.2	0.5	0.1	5.9	1.1	0.2	12.5	1.3	0.3	16.2	1.3	0.3	16.1	1.0	0.3
<u>Commercial - Total</u>	343.8	72.6	17.6	358.8	67.9	13.6	650.6	66.5	15.4	834.9	69.6	15.2	1189.4	74.1	19.8
Banks (FILA)	212.8	45.0	10.9	147.4	27.9	5.6	162.9	16.4	3.8	188.9	15.7	3.4	147.8	9.7	2.5
Banks & Other Financial Institutions (NON-FILA)	93.0	19.6	4.8	160.4	30.4	6.1	332.7	33.6	7.8	385.0	32.1	7.0	675.5	42.1	11.2
Supply companies	38.0	8.0	1.9	51.0	9.6	1.9	164.0	16.5	3.8	261.0	21.8	4.8	366.1	22.8	6.1
<u>Private - Total</u>	120.0	25.4	6.1	146.0	27.6	5.5	257.0	25.9	6.0	304.0	25.4	5.6	360.0	22.4	6.0
<u>Total Intermediate-Term Credit</u>	473.4	100.0	24.2	528.4	100.0	20.0	991.7	100.0	23.2	1199.1	100.0	21.9	1605.9	100.0	26.7
Short-Term (up to 18 months)															
<u>Government - Total Provincial</u>	12.7	1.1	0.7	25.9	1.4	1.0	67.2	2.5	1.6	76.3	2.1	1.4	80.8	2.2	1.3
<u>Commercial - Total</u>	1032.5	90.6	52.8	1775.4	93.1	67.2	2443.5	92.3	57.1	3380.8	93.3	61.7	3436.8	92.6	57.1
Financial Institutions	702.0	61.6	35.9	1460.4	70.6	55.3	2064.5	78.6	48.3	2972.8	82.0	54.3	2954.6	79.6	49.1
Supply Companies, Dealers, & Co-ops	330.5	29.0	16.9	315.0	16.5	11.9	379.0	14.3	9.8	408.0	11.3	7.4	482.2	13.0	8.0
<u>Private - Total</u>	95.0	8.3	4.9	105.0	5.5	4.0	138.0	5.2	3.2	167.0	4.6	3.1	195.0	5.2	3.3
<u>Total Short-Term Credit</u>	1140.2	100.0	58.4	1906.3	100.0	72.2	2648.7	100.0	61.9	3624.1	100.0	66.2	3712.6	100.0	61.7
<u>TOTAL ALL CREDIT</u>	1955.8		100.0	2640.7		100.0	4276.2		100.0	5477.6		100.0	6017.0		100.0

SOURCE: Compiled from: R.S. Rust, "Farm Finance" published annually in Canadian Farm Economics and Market Commentary published by Agriculture Canada.

TABLE R.2 Estimated Credit Outstanding (Million of Dollars) by Source and Term of Credit, Canada, 1966 to 1976

Source and Term of Credit	1966			1971			1974			1975			1976		
	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit	\$ Million	% of Term	% all Credit
Long-Term (10 years and over)	1198.7	91.5	35.5	1732.8	92.4	36.8	2335.7	94.8	33.9	2628.2	94.4	32.2	3030.1	90.7	31.8
Government - Total	748.5	57.2	22.2	1182.5	63.0	25.1	1684.6	68.4	24.4	1930.2	69.4	23.6	2276.2	68.1	23.9
Farm Credit Corporation	147.3	11.2	4.3	151.5	8.1	3.2	133.8	5.4	2.0	134.4	4.8	1.7	132.1	4.0	1.3
Veterans' Land Act	895.8	68.4	26.5	1334.0	71.1	28.3	1818.4	73.8	26.4	2064.6	74.2	25.3	2408.3	72.1	25.3
Total Federal	302.9	23.1	9.0	398.9	21.3	8.5	517.3	21.0	7.5	563.6	20.2	6.9	621.8	18.6	6.5
Total Provincial	50.0	3.8	1.5	63.1	3.3	1.3	43.6	1.8	0.6	40.7	1.5	0.5	212.1	6.4	2.3
Commercial - Total	61.0	4.7	1.8	80.0	4.3	1.7	84.0	3.4	1.2	114.0	4.1	1.4	97.0	2.9	1.0
Private - Total	1309.7	100.0	38.8	1875.9	100.0	39.8	2465.3	100.0	35.7	2782.9	100.0	34.1	3339.2	100.0	35.1
Total Long-Term Credit															
Intermediate-Term (18 months to 10 years)	31.0	2.7	0.9	68.5	5.5	1.5	165.1	7.0	2.4	194.5	7.1	2.4	226.9	7.3	2.4
Government - Total				6.8	0.6	0.2	11.1	0.5	0.2	12.3	0.4	0.2	11.9	0.4	0.1
Farm Credit Corporation										84.9	3.1	1.0	88.0	2.8	1.0
Federal Business Development Bank	20.0	1.7	0.6	34.0	2.7	0.7	70.0	2.9	1.0	96.3	3.5	1.2	99.9	3.2	1.1
Total Federal	20.0	1.7	0.6	40.8	3.3	0.9	81.1	3.4	1.2	49.3	1.8	0.6	68.4	2.2	0.7
Total Provincial	2.0	0.2	-	4.9	0.4	0.1	46.4	2.0	0.7	48.9	1.8	0.6	58.6	1.9	0.6
Total Municipal	9.0	0.8	0.3	22.8	1.8	0.5	37.6	1.6	0.5	48.9	1.8	0.6	43.0	1.4	0.6
Commercial - Total	654.1	56.0	19.4	641.0	51.3	13.6	1500.4	63.7	21.8	1688.1	61.8	20.7	2012.5	64.9	21.1
Banks (FILA)	399.1	34.2	11.8	321.0	25.7	6.8	447.0	19.0	6.5	469.2	17.2	5.7	434.0	14.0	4.6
Banks & Other Financial Institutions (NON-FILA)	139.0	11.9	4.2	190.0	15.2	4.0	833.4	35.4	12.1	856.9	31.4	10.6	1157.5	37.3	12.1
Supply Companies	116.0	9.9	3.4	130.0	10.4	2.8	220.0	9.3	3.2	362.0	13.2	4.4	421.0	15.6	4.4
Private - Total	483.0	41.3	14.3	540.0	43.2	11.5	690.0	29.3	10.0	850.0	31.1	10.4	860.0	27.8	9.0
Total Intermediate-Term Credit	1168.1	100.0	34.6	1249.5	100.0	26.6	2355.5	100.0	34.2	2732.6	100.0	33.5	3099.4	100.0	32.5
Short-Term (up to 18 months)	9.6	1.1	0.3	30.0	1.9	0.6	72.6	3.5	1.0	80.5	3.1	1.0	96.9	3.2	1.0
Government - Total Provincial	810.2	90.4	24.0	1467.9	92.4	31.1	1896.4	91.2	27.5	2433.9	92.0	29.8	2837.1	91.0	29.8
Commercial - Total	561.7	62.7	16.6	1220.9	77.1	25.9	1660.4	80.3	24.2	2189.9	82.8	26.8	2592.4	84.0	27.2
Financial Institutions				242.0	15.3	5.2	227.0	10.9	3.3	244.0	9.2	3.0	244.7	7.9	2.6
Supply Companies, Dealers & Co-ops	248.5	27.7	7.4	90.0	5.7	1.9	199.0	5.3	1.6	130.0	4.9	1.6	152.0	4.9	1.6
Private - Total	76.0	8.5	2.3	1582.9	100.0	33.6	2078.0	100.0	30.1	2644.4	100.0	32.4	3097.8	100.0	32.4
Total Short-term Credit	895.8	100.0	26.6	1582.9	100.0	33.6	2078.0	100.0	30.1	2644.4	100.0	32.4	3097.8	100.0	32.4
TOTAL ALL CREDIT	3373.6		100.0	4708.3		100.0	6696.8		100.0	8159.9		100.0	9524.6		100.0

SOURCE: Compiled from: R.S. Rust, "Farm Finance" published annually in Canadian Farm Economics and Market Commentary published by Agriculture Canada

market with the amount extended increasing from about three-fifths of all short-term credit extended in 1966 to about three-quarters from 1971 to 1976. Other commercial sources, such as supply companies and dealers, have supplied a decreasing proportion of short-term credit extended, dropping from 29.0 percent in 1966 to 13.0 percent in 1976. Governments extend a very small proportion, 1 or 2 percent, of short-term credit and it comes completely from provincial governments. Similarly, private individuals are a negligible source at 5 percent or less of all short-term credit extended since 1971.

Commercial sources account for about nine-tenths of short-term credit outstanding. Financial institutions dominated with the amount of credit outstanding increasing from two-thirds of all short-term credit outstanding in 1966 to more than four-fifths in 1976. Other commercial sources steadily decreased their share of short-term farm credit outstanding, from 27.7 percent of all short-term credit outstanding in 1966 to 7.9 percent in 1976. Provincial governments accounted for a very small proportion of short-term credit outstanding, although the proportion has increased from 1 percent in 1971 to 3 percent in 1974.

1.2 Intermediate-Term Credit

Commercial sources are again the leading intermediate-term creditors, accounting for two-thirds to three-quarters of intermediate-term credit extended and on-half to two-thirds of credit outstanding. Farm Improvement Loans (FILA) secured from banks have decreased as a proportion of credit extended over the period. Conversely, the proportion of non-FILA loans from banks and other financial institutions has doubled. The same trend holds for credit outstanding, with FILA loans decreasing from 34.2 percent of all intermediate-term credit in 1966 to 14.0 percent in 1976. Supply companies have supplied a steadily increasing proportion of intermediate-term credit extending from 8.0 percent of total intermediate-term credit in 1966 to 22.8 percent in 1976. The proportion of credit outstanding from supply companies, however, has been fairly constant at about one-tenth of total intermediate-term credit outstanding over the period.

Governments (federal, provincial and municipal) are more important sources of intermediate-term than short-term credit but still only account

for a small proportion of the total intermediate-term credit supplied. The proportion supplied by all governments increased from 2.0 percent in 1966 to 7.6 percent in 1966 to 7.6 percent in 1974 and has since decreased to 3.5 percent in 1976. Within the government sector, the Federal Business Development Bank dominates as an intermediate-term creditor. The Farm Credit Corporation, beginning in 1965, has supplied small amounts of intermediate-term loans to farm syndicates. Provincial governments also supply a small but increasing amount of intermediate-term credit and municipal governments in Ontario provide a small proportion of intermediate-term credit under the Tile Drainage Act. However, the provincial and municipal proportion of intermediate-term credit, both extended and outstanding, remains quite small at 2 percent or less. Private individuals on the other hand, provide a relatively large proportion of the total intermediate-term credit, accounting for one-quarter of all intermediate-term credit extended over the period.

1.3 Long-Term Credit

Long-term credit (loans of 10 years or more) is related largely to real estate loans. This credit extended is a relatively small and variable proportion of all credit extended, ranging from a high of 17.4 percent in 1966 to a low of 7.8 percent in 1971. The proportion of long-term debt to total debt has been relatively constant during the decade studied and has represented over one-third of total farm indebtedness. In absolute terms, however, both long-term credit extended and long-term outstanding debt have doubled over the decade from \$342.2 million extended in 1966 to \$698.5 million in 1976 and from \$1,309.7 million outstanding in 1966 to \$3,339.2 million in 1976.

The leading suppliers of long-term credit are governments (both federal and provincial). They supply about nine-tenths of the long-term credit extended for the period. The federal government, through the Farm Credit Corporation, supplied about two-thirds to three-quarters of all long-term credit. Provincial governments provided approximately one-sixth to one-quarter of total long-term credit.

Commercial and private individuals also supplied a small and variable proportion of total long-term credit to farmers. Over the

period investigated these sources generally represented less than 10 percent of all long-term credit extended.

2. THE NATURE OF FARM CREDIT SUPPLY

The nature of farm credit on the supply side is characterized by the dominance of particular lending institutions associated with the length of the term of loans. The commercial sector dominates the supply of most short-term and intermediate-term credit. On the other hand, governments, especially the federal government, concentrate on provision of long-term credit. Private individuals are the least significant lenders supplying less than 10 percent of all credit extended, but are distributed among long-term, intermediate-term and short-term credit. This pattern may be attributable to the fact that the lending criteria and the objectives under which the loans are advanced differ among the three broadly classified lending institutions.

The terms of credit (length of the loans, amount of the loans and interest rate charges) offered by the governments differ from the other two institutions because the government supply of credit is mainly for the purpose of assisting the special needs of farmers. Commercial farm credit suppliers include financial institution, chartered banks, credit unions, insurance, loan and trust companies, and supply companies, dealers and stores. These lenders normally supply credit to farmers under terms which would have a substantial profit after covering costs of operation, risk and default. Credit supplied under private arrangements especially on family farm transfers is quite common in agriculture. The lending criteria used by private individuals vary according to individual arrangements.

2.1 Credit Programmes of the Federal Government

a) The Farm Credit Corporation

The Farm Credit Corporation (FCC) is a Crown Agency established in 1959 which administers the Farm Credit Act and the Farm Syndicate Credit Act. The main purpose of the FCC is to provide long-term mortgage credit under suitable terms and conditions to farmers to organize viable family farms. Loans are mainly made to purchase farm land, to construct

or improve farm buildings, and to purchase livestock and farm equipment. The FCC held 68.2 percent of all long-term credit outstanding in 1976. Funds loaned by the FCC are borrowed from the Ministry of Finance.

Over the last decade, several changes have been made to the Farm Credit Act. On May 15, 1978, the FCA was changed to reflect the needs of a specific group of farmers including beginning farmers and low equity farmers. Under the revised Act on May 15, 1978, individual loans limits were increased to \$200,000 and partnership and corporation limits were set at \$400,000. Loans can now be secured up to 100 percent of the land value and by chattels up to 50 percent of the total security required. However, interest rates and the length of term were not affected by these changes. FCC interest rates are adjusted biannually and are set at 1 percent above the average yield of five to ten year government bonds. The interest rate for the FCA was 10.0 percent as of March, 1979.

The Farm Syndicates Credit Act was established in 1965 to provide loans to syndicates of three or more farmers to purchase machinery, buildings, or installed equipment for co-operative use. The main objective is to assist farmers to more economically meet some of the costs of ownership of required machinery, equipment and facilities. Syndicates may borrow up to 80 percent of the cost of a maximum of \$15,000 per member for a total maximum of \$100,000. The length of the loan is variable depending on the type of investment. Loans for buildings and installed equipment are granted with up to a 15 year term and machinery for a term of up to 7 years. The Act also has biannual interest rate which is similar to the Farm Credit Act. The present interest rate for the Farm Syndicate loans was 9.75 percent as of March 1979.

b) Federal Business Development Bank

Since 1961, the Federal Business Development Bank (FBDB), formerly the Industrial Development Bank, has operated as a farm credit source of last resort, providing loans for new and existing agricultural enterprises whose owners are unable to secure funds elsewhere on reasonable terms and conditions. Interest rates are similar to general commercial bank rates

which are about 11 percent at the present time. The loan repayment term is variable depending on the type of assets secured. Over \$26 million of credit was extended by the FBDB in 1976.

c) Farm Improvement Loans Act

The Farm Improvement Loans Act (FILA) was enacted in 1944 to encourage commercial banks to grant intermediate and short-term credit to farmers with a guarantee by the federal government of up to generally 10 percent of any losses incurred by the lending agencies under the Act. Loans are granted for acquiring additional land and for a variety of farm improvement and development uses, including construction of buildings, irrigation systems, and purchase of farm machinery, equipment and livestock. FILA loans are made by most banks and to a small extent by credit unions and other approved lenders such as Alberta Treasury Bank. These loans are generally secured by chattel or real estate mortgages.

Since March, 1978, the interest rate went from fixed rates to a floating base of prime rate plus 1 percent. Loan limits were also increased to \$75,000 and term restrictions based on asset type were eliminated. A loan term can now be negotiated up to 15 years for land and up to 10 years for purchases of machinery and equipment. In 1976, nearly \$154 million of credit was extended under the Act with credit outstanding totalling \$460 million.

2.2 Credit Programmes of the Provincial Governments

All ten provinces have programmes to supply credit to farmers. The number, purpose, terms and conditions of provincial programmes are diverse, reflecting specific policy objectives of the different provinces. Some of the notable differences among provincial credit programmes are briefly outlined in tabular format in Table B.3. In 1976, provinces and municipalities (Ontario Tile Drainage Act) extended \$120.6 million in credit, with credit outstanding totalling \$698.2 million.

A common method of provincial credit assistance is providing loans at preferred rates of interest. This assistance is extended to help young farmers entering agriculture or to provide incentives for the production of specific commodities, in which case grants are often also available. Preferred interest rates are also often provided for general farm improvement

purposes and are available even to established farmers. Four provinces, British Columbia, Quebec, New Brunswick and Nova Scotia, also subsidize credit provided by federal agencies, such as FCC, FBDB or VLA, by reimbursing a portion of the interest charges. Often, loan guarantee programmes are available for credit obtained from commercial sources. In some cases, the provinces act as direct creditors of last resort, particularly for intermediate-term loans. In general, the policy objectives of provincial credit programmes are to assist farm entry, to encourage farm improvements, or to foster the production of certain commodities.

2.3 Commercial Credit Sources

a) Chartered Banks

Chartered banks are by far the most important source of short-term credit for farmers, supplying 75.5 percent of all short-term credit extended in 1976, or \$2,804 million. Banks are also a major supplier of intermediate-term credit, accounting for 31.0 percent of intermediate credit extended in 1976. Approximately 30 percent of \$147.8 million of credit extended is granted under the Farm Improvement Loan Act. Chartered banks not supplying long-term credit to the farm industry prior to 1976 even though the current Bank Act permits banks, take real estate mortgages. Starting with 1977, some of the Chartered banks have cautiously moved into this field. Their long-term loans are subject to a periodic adjustment in interest rates.

b) Other Financial Institutions

Credit unions, and insurance, trust and loan companies are a relatively small supplier of credit to the farm industry, providing one-tenth of credit extended (463.4 million) in 1976. However, these institutions are major credit suppliers in Quebec and Saskatchewan. These non-bank financial institutions allocate most of their credit funds to the intermediate-term market with short-term loans being second. Credit unions account for nine-tenths of the credit supplied by these financial institutions. Insurance, trust and loan companies are not actively engaged in farm credit supply as credit unions. This could be because these companies are oriented towards residential, commercial and industrial finance and may feel ill-equipped to evaluate farm loans and adequately service such borrowers.

TABLE B.3: Characteristics of Agricultural Credit Assistance
Provided By The Provincial Governments

Program and Province	Purpose of Assistance	Maximum Loan Limit	Interest Rate	Length of Term
<u>British Columbia</u>				
Agricultural Land Development Act	Land Improvement	\$15,000	4%	15 years
Agricultural Credit Act	Guaranteed loans to farmers who cannot qualify for bank loans		Reimbursement at variable rates	
Interest Reimbursement Program	Reimburses portion of interest on loans made through banks, credit unions, FCC, FBDB and VLA		Reduces rate to maximum of 8 to 8.5%	
Peace River Livestock Production Incentive Program	Encourages producers in Peace River to establish or expand beef cattle and sheep production	\$10,000	Reimburses interest to a minimum to 4 to 4.5%	up to 7 years
<u>Alberta</u>				
Direct Farm Loans	Land purchase, permanent improvement, debt consolidation for producers unable to obtain credit from other sources	\$150,000	Variable	30 years
Beginning Farmer Program	All agricultural purposes; restricted to young farmers with 10% equity	\$175,000		40 years
Father-Son Farming Program	Loans to young farmers whose family will assist in establishing a farm	\$100,000	Direct loan rate plus 2%	20 years
Disaster Assistance Program	Loans to farmers who have suffered a natural disaster to repair and replace buildings and replace livestock	\$150,000	No interest first 3 years	long-term
Financial Restructuring Loan Program	Assists farmers whose short term and long term debt is out of balance	\$150,000	Direct loan rate plus 1%	up to 20 years
Specific Guaranteed Loans	Short or intermediate term loan for any agricultural asset, operating capital and debt consolidation - borrower unable to obtain financing from other source			10 years
Vegetable Production Loan Program	To assist producers to purchase equipment for vegetable production with a guaranteed loan	\$50,000	Interest rebate of 2% on declining principal balance	10 years

TABLE B.3 (Cont'd)

Program and Province	Purpose of Assistance	Maximum Loan Limit	Interest Rate	Length of Term
Alberta Farm Development Loan	Guaranteed loan for short or intermediate term for any purpose but debt consolidation	\$50,000		10 years
Dairy Development Incentive Program	Assists dairy farmers to obtain credit at preferential rates. Funds available for buildings, facilities, equipment and milk quota	\$12,000 for individuals \$24,000 for partnerships or corporations	7%	short and intermediate
<u>Saskatchewan</u>				
Farm start Corp.- Loan and Grant Program	Credit and grants for farmers establishing or expanding livestock production	\$80,000	6.25%	
Guaranteed Livestock Loans	To purchase cattle and sheep	\$12,000 for individuals; \$36,000 for partnerships		7 years
<u>Manitoba</u>				
Manitoba Agricultural Credit Corp. (MACC)-direct loans	Loans, all terms, for almost all purposes	\$40,000	Variable - 2% interest reduction for young farmers	31 years
MACC-Corporate, Co-operative and partnership loans	To establish and develop multiple-owner farm enterprises	\$40,000		
MACC-Guaranteed Agricultural production credit loans	Guaranteed lines of credit made to farmers by lending institutions for operating expenses and other approved purposes.	\$40,000		1 year for operating loans, otherwise 10 years
<u>Ontario</u>				
Ontario Young Farmers Loan Program	Intermediate term credit for farm development to help establish young farmers		Prime rate plus 1%	10 year
Tile Drainage Loans	Loans are available from the government through township councils for tile drainage	up to 75% of cost of drainage	6%	10 years
<u>Quebec</u>				
Farm Credit Act Administered by the Farm Credit Bureau	For purchasing land, and machinery, constructing buildings, improving land, debt consolidation	\$150,000 per individual; \$200,000 per group	2.5% on first \$15,000; balance at 8%	34 years
Farm Loan Act	To subsidize the interest rate charged under the farm credit act and the Veterans' Land Act.		Pays interest in excess of 2.5% in first \$15,000	

TABLE B.3 (Cont'd)

Program and Province	Purpose of Assistance	Maximum Loan Limit	Interest Rate	Length of Term
Quebec Farm Improvement Loan Act	Provides on a need basis for guaranteed loans from banks and credit unions.-For purchase of basic herd livestock, quotas, additional land and machinery, farm buildings and other improvements.	\$50,000	Prime rate plus 1% 1% rebate of 3% on first \$15,000	up to 10 years, 1% years for tile drainage
Act to Promote Credit to Farm Producers	Provides short term guaranteed loans for operating expenses for crop and livestock production	\$50,000	Current	up to 2.5 years
Act to Promote Special Credit to Agricultural Producers during Critical Periods	Government guaranteed loans to cover losses from natural disasters			
<u>New Brunswick</u>				
Loans to Full-Time Farmers (Part I)	Loans for the purchase of farms, additional loans, buildings, livestock and consolidating short-term debts.	\$150,000 including any FCC loan	5%	
Loans to Part-Time Farmers (Part II)	Provides loans to qualified part-time farmers at low interest rates to assist in establishing a viable economic unit	\$30,000	5%	
Loans to Commercial Farmers and Agricultural Linkage Operations	Provides loans to commercial farmers and agricultural linkage operations to maximize returns to the producer	\$250,000	prime rate plus 1%	
Interest Rebate Program	Provides an interest rebate to encourage farmers to borrow from FCC.			payment of up to 3% of interest charges
<u>Nova Scotia</u>				
Agriculture and Rural Credit Act				
- loans to commercial farmers	Provides loans to well established farmers	\$125,000	7%	30 years
- loans to young farmers	Assists young farmers to develop viable farm enterprises	\$125,000	6% first \$50,000; 7% on remainder	30 years
- Loans to part-time farmers	Assists part-time farmers to provide agricultural products	\$20,000	8.5%	
Interest Subsidy Program	Subsidizes interest rates for borrowers from FCC, VLA, or the N.S. Farm Loan Board			Subsidy of 2.5% for interest rate of 5% or more. Subsidy of 1/4 of the interest when interest rate less than 5%. Max. subsidy = \$1250.

TABLE B.3 (Cont'd)

Program and Province	Purpose of Assistance	Maximum Loan Limit	Interest Rate	Length of Term
<u>Prince Edward Island</u>				
Land Development Corporation	May take a mortgage on sales of its own lands to farmers	No statutory loan limits	Rates comparable to FCC	up to 30 years
Lending Authority	Provides operating loans and also long-term loans for equipment, storage facilities, barns, land improvements or other capital improvement		Prime rate for operating loans; 10% for capital loans	1 year for operating loans, 3-5 years for breeding stock, up to 20 years for capital loans
<u>Newfoundland</u>				
Farm Development Loan Board	Assists farmers to establish viable farms through loans for livestock, equipment, land development and buildings	\$30,000 for buildings; \$10,000 for other loans	5%	up to 15 years

c) Supply Companies, Dealers and Co-operatives

Non-financial institutions which provide farm credit include almost all supply companies such as farm machinery, feed mills, fertilizer and fuel companies as well as agents and some retail stores such as hardware stores. These commercial institutions provide credit as a marketing tool whereby they secure the farmer's business by selling their products to farmers on a credit payment basis. The length of term can range from several weeks to 3 or 4 years. Security required is not as great as that of chartered banks and credit is often granted through the faith that farmers will pay their debts. Presumably, because there is normally no security against such loans, interest rates charged by these supply companies are usually quite high (about 14 percent to 16 percent).

It appears that the cost of credit provided by supply companies is higher than that offered by other institutions such as chartered banks and credit unions. However, credit extended by these companies represented 14.2 percent of all credit in 1976 (\$848.3 million).

2.4 Private Individuals

Farm credit provided by private individuals constituted about 9 percent of all credit extended in 1976 and was mainly for intermediate and short-term credit. The interest rates charges on private loans are not necessarily high compared with these charged by other institutions because many of the private loans are made between family members for family farm transfers. In this case, the terms of the loan (down payment, interest rate and length of term) are usually compatible to other financial institutions. On the other hand, the terms of private loans may be high for non-family farm sales. In view of the high rate of farm transfers in Canada (about 5 percent per year), there is a high potential for vendor farm credit. That is, credit provided by the private individual who is selling the farm.