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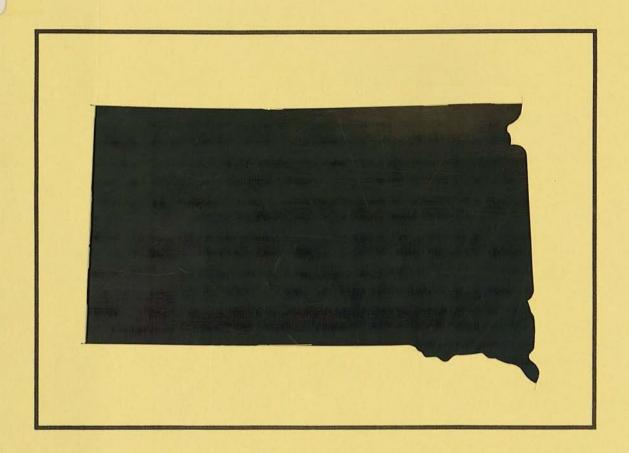
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CHARACTERISTICS OF CHAPTER 12 FARM REORGANIZATION BANKRUPICY

FILINGS AND APPROVED REORGANIZATION PLANS

by

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CHARACTERISTICS OF CHAPTER 12 FARM REORGANIZATION BANKRUPTCY FILINGS AND APPROVED REORGANIZATION PLANS

Abstract: Chapter 12 farm reorganization bankruptcy has been available to financially stressed family farms since November, 1986. This report is one of the first empirical studies that examines the major financial characteristics of Chapter 12 farm debtors and their creditors. Debt reduction characteristics of 101 reorganization plans in South Dakota are presented.

Introduction

The 1980's have been a decade of severe financial stress for many agricultural producers. Debt servicing requirements strained available cash flows, forcing many operators to reorganize their farm businesses. Financial losses were distributed between producers and their lenders through voluntary negotiation, mediation, foreclosure, and bankruptcy. Farm bankruptcy filings increased dramatically in South Dakota during the 1980's, from 37 filings in 1980-1981 to a high of 622 filings in 1987. Improvements in the farm economy reduced the number of farm bankruptcy filings to 159 in 1988 [2].

Increases in the frequency of farm bankruptcy filings prompted considerable discussion of the impact of bankruptcies on

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debtors filing Chapter 12 bankruptcy, 2) examine the characteristics of the debtor's secured and undersecured creditors, and 3) examine the repayment provisions of approved reorganization plans.

Overview of Chapter 12 Farm Reorganization Bankruptcy

Federal Bankruptcy statutes contain four different options for farmers. Chapter 7 requires liquidation of farm assets and distribution of proceeds to satisfy creditors. Chapters 11, 12, and 13 allow farm operators to reorganize, establish a plan to repay creditors, and continue farming.

Single proprietorships with less than \$350,000 secured and \$100,000 unsecured debt are eligible for Chapter 13. Chapter 11 is open to almost any individual or corporate debtor, regardless of the amount of total debt.

Chapter 12 was enacted in November, 1986 as an attempt to address the reorganization needs of "family farms" in the farm finance crisis. Since its enactment, most farm debtors filing reorganization bankruptcy have filed under Chapter 12.

Debtors filing Chapter 12 can have no more than \$1.5 million in total indebtedness, 80% of which must be related to agriculture. Additional requirements must be met by farm corporations. Creditors have no voting or veto power on proposed plans nor are they allowed to submit an alternative. Creditors are provided some protection by the required administration of the plan by a court appointed trustee. Chapter 12 is a temporary statute scheduled to "sunset" (expire) at the end of 1993.

The debtor initiates the bankruptcy process by filing a petition, which contains required personal and financial information. Under Chapter 12, the debtor has 90 days from the filing date to submit a reorganization plan. The judge has 45 days from submission to confirm or reject the plan. There are

three potential outcomes of the bankruptcy process: 1) confirmation of the reorganization plan, 2) conversion to another bankruptcy chapter, or 3) dismissal (rejection).

Confirmation of the Chapter 12 reorganization plan generally will occur if creditors will receive at least as much as they could recover through liquidation (Chapter 7 bankruptcy), and the court believes the debtor will be able to make the payments specified in the plan. In practice, this means that loans usually are written down to the secured value of the collateral, and the remainder is classified as undersecured. Undersecured debts are combined with unsecured debts and have the lowest repayment priority.

Data Sources and Limitations

The data sources were Chapter 12 farm bankruptcy cases filed at Federal Bankruptcy Courts in Sioux Falls and Pierre, South Dakota from November, 1986 through February 1988. Most of the case information came from the (1) debtor's initial petition, which provides data on personal and business characteristics including income, asset values and amounts owed to each creditor, (2) creditor's proof of claim on amount and terms of debt owed and security claimed, and (3) reorganization plan, which includes a complete description of when and how much each creditor will be repaid. One fourth of the Chapter 12 cases, with confirmed reorganization plans, were randomly selected for this study. All approved reorganization plans are in the early implementation stages and none have been fully completed. Thus it is not known how many of these approved plans will be "successful plans".

Analysis of Chapter 12 Farm Debtor Characteristics

The characteristics of Chapter 12 filers reflect the population of

farmers the law was intended to serve. Average total debt at time of filing was \$439,700 and 92% of the filers had less than \$750,000 in total debt (Table 1).

Farm operators of all ages and experience levels filed for Chapter 12 bankruptcy. On average, the filers had operated a farm for 25 years and this average was the same at all levels of total debt. However, the average number of years in farming decreased from 29.2 years to 22.2 years as the extent of insolvency increased. This may reflect differences in timing of major asset purchases or differences in management.

Most Chapter 12 filers operate small to medium size farms with average total property of \$211,300 and average gross farm income of \$89,900. Over half, 56%, reported some nonfarm income, which averaged \$7900 per recipient. Gross farm income was positively related to total debt, increasing from an average of \$55,700 for debtors reporting less than \$250,000 of total debt to about \$140,000 - 150,000 for debtors reporting total debt above \$500,000.

Most filers (88%) were sole proprietors. The percentage of sole proprietors decreases from 85% - 100% of debtors reporting less than \$750,000 of total debt to only 50% of debtors reporting higher amounts of debt.

Average total property reported by Chapter 12 filers was \$211,300, about half of which, \$112,500, was real estate. As one might expect, total property values, real estate values, and machinery values increased with the amount of total debt. Filers owing less than \$250,000 listed property with an average value of \$124,300, while debtors with the most debt listed three times that amount, \$376,800.

Most farm operators (98%) filing for bankruptcy protection were insolvent. Average total debt of \$439,700 was more than twice the amount of average total property values of \$211,700. This amount of debt was owed to an

Table 1. Major Financial Characteristics of Debtor Filing Chapter 12 Farm Bankruptcy, November 1986 - February 1988, by Overall, Size of Total Debt, and Debt-to-Asset Ratio.

		_			housands of				t Ratio
Cha	<u>racteristics</u>	<u>Overall</u>	< 250	250 to 499	500 to 749	<u>>750</u>	<1.5	1.5 to 2.0	>2.0
Α.	Sample Size								
	1. Number	101	21	49	23	8	26	22	53
	2. Percent of total	100.0%	20.8%	48.5%	22.8%	7.9%	25.7%	21.8%	52.5
В.	Average number of								
	years in farming	25.0	25.6	24.9	24.1	25.0	29.2	26.0	22.2
c.	Sole Proprietorship								
	(percent of incidence)	88.0%	100.0%	89.6%	85.7%	50.0%	88.5%	95.5%	84.9
D.	Gross farm income ^a (\$1000)	\$89.9	\$55.9	\$78.2	\$139.4	\$147.9	\$99.3	\$87.1	\$86.1
Ε.	Nonfarm income ^b								
	1. percent of incidence	56.0%	52.4%	60.4%	52.4%	62.5%	65.4%	63.6%	51.0
	2. average (\$1000)	7.9	6.1	6.9	6.6	21.4	7.5	6.4	9.0
F.	Total Debt (\$1000) ^C	44413.2	3909.0	17813.5	14363.5	8327.2	9168.8	8308.6	26935.7
	percent of total debt	100.0%	8.8%	40.1%	32.3%	18.8%	20.6%	18.7%	60.77
G.	Average per debtor in thousands of dollars								
	1. Grain inventory	7.7	2.5	8.1	7.9	17.9	10.6	7.2	6.5
	2. Livestock	34.7	32.2	32.6	43.0	30.7	63.4	30.4	22.4
	3. Machinery	31.2	12.5	29.1	44.3	54.9	29.2	36.8	29.7
	4. Real estate	112.5	66.2	101.5	160.0	165.0	137.5	120.1	97.1
	5. Total property ^d	211.3	124.3	188.9	280.8	376.8	273.7	213.9	179.6
	6. Total debt ^C	439.7	186.1	363.5	624.5	1040.9	352.6	377.7	508.2
	7. Secured debt	410.0	172.1	339.8	568.9	1007.6	330.0	361.7	469.2
	8. Unsecured debt	23.8	9.8	16.6	51.2	26.3	18.4	11.0	31.9
н.	Average number of creditors								
	1. Secured	4.5	3.7	4.3	5.3	6.9	4.4	4.6	4.6
	Unsecured	7.1	6.3	7.0	8.0	7.8	7.2	4.5	8.2

Source. Compiled from initial filing data reported 101 by debtors filing Chapter 12 farm bankruptcy, November 1986 - February 1988, Federal Bankruptcy Court, Sioux Falls and Pierre, South Dakota.

^a Gross farm income is the average gross farm receipts reported for the previous tax year. Only 79 of 101 debtorfilers reported this information in their initial filing schedules.

b Nonfarm income is the average nonfarm income of those reporting any nonfarm income.

Total debt is the sum of debt owed to secured creditors and to unsecured creditors and past due taxes owed to Federal, state and local governments. Debtor's estimate of amount of debt owed is reported in this table.

d Total property includes grain inventories, livestock, farm machinery, real estate and all other tangible property owned by the debtor that is not listed as exempt property. The average amount of debtors valuation is reported.

average of 4.5 secured creditors and 7.1 unsecured creditors. More than half, 53%, of filers reported debt to asset ratios above 2.0 and only 26% reported debt to asset ratios under 1.5.

Major Characteristics of Secured and Unsecured Creditors

Secured creditors held over 93% of the total debt, but only 20% (\$8.32 million) of the \$41.4 million of debt was held by creditors with sufficient collateral value to fully secure their loans (Table 2). The remainder of this debt was owed to undersecured creditors. In most Chapter 12 reorganization plans, fully secured creditors can recover all debts owed to them while undersecured creditors can recover the amount of each loan that is secured by the current value of collateral taken. Additional (undersecured) debt held by these creditors is treated the same as unsecured debt and the amount of debt recovery is small.

Farmers Home Administration (FmHA) was listed as a secured creditor more often than any other type of creditor. Over 86% of the debtors owed FmHA a total of \$21.88 million, 53% of the total secured debt volume of \$41.4 million. Only 3% (\$588,900) of the debt owed to FmHA was fully secured and 97% (\$21,291,000) was undersecured. This accounted for almost two thirds of the total undersecured debt. The average amount owed FmHA by individual debtors was \$251,500 (Table 2).

Commercial banks had the second largest stake in Chapter 12 proceedings. They were listed as a secured creditor by 71.3% of debtors with outstanding debt to commercial banks of about \$7.5 million, 18% of the total secured debt reported. Most of the debt, \$5.3 million, was undersecured.

Farm Credit System agencies, Federal Land Bank (FLB) and Production Credit Association (PCA) held 15% (\$6.2 million) of the secured debt. A large

Table 2. Distribution of Secured Creditors, Fully Secured and Undersecured, by Total Credit Volume, Average Amount Owed to each Creditor and Percent of Debtors Listing One or More Secured Creditors.

Type of		Secured Credit Volume			Average Amount Owed to Each Creditor Fully Total Secured ^C Undersecured ^C			Percent of Debtors Listing One or More Secured Creditors ^d
Secured Credito	Secured		Fully Total Secured ^c Undersecured ^c					
Clearco	01			Dollars			of Dollars	Creditors
A. Com	nmercial Banks	7498.7	2200.9	5297.8	74.2	48.9	94.6	71.3
B. Far	rmers Home Administration	21879.9	588.9	21291.0	251.5	58.9	273.0	86.1
	er Government Creditors CC, SBA, ASCS)	2574.2	1563.2	1011.0	36.8	31.9	48.1	62.4
D. Fed	deral Land Bank	4384.6	1325.0	3059.6	93.3	47.3	161.0	46.5
E. Ind	dividual/Estates	1513.0	1136.9	376.1	43.2	43.7	41.8	28.7
F. Far	rm Implement Dealers	197.4	124.4	70.3	13.2	10.4	24.3	12.9
	m Machinery Finance opanies	307.4	100.7	206.7	16.2	8.4	29.5	15.8
H. Pro	oduction Credit Association	1820.8	603.7	1217.1	151.7	120.7	173.9	11.9
I. Oth	ner Farm Supply Companies	225.7	186.0	39.7	17.4	23.2	7.9	11.9
J. Oth	ner Secured Creditors	1005.5	490.8	514.7	21.9	17.3	23.2	35.6
	Total ^a	41407.2	8320.5	33086.7	92.8	37.1	149.0	

Source: Compiled from initial filing data for Chapter 12 farm bankruptcies filed from November 1986 - February 1988, Federal Bankruptcy Court, Sicux Falls and Pierre, South Dakota.

a Total debt for 446 secured creditors as reported by the 101 debtor-filers in the sample.

b Average dollar amount is the amount reported per debtor owing money to one or more secured creditor by type.

^C Fully secured and undersecured debt volume is estimated for each type of creditor based on the Bankruptcy Judge's classification of the secured creditor.

d Percent of 101 debtors, with complete information on secured creditors, where many debtors listed more than one bank or individual or other specified creditor. percentage of their debt, 70% and 67% respectively, was in undersecured loans. Almost half, 46.5%, of debtors listed FIB as a secured creditor and average amount owed per debtor was \$93,300. Only 12% of debtors listed PCA as a secured creditor and the average amount owed per debtor was \$151,700.

All other secured creditors held 14% of the total secured debt and average amount owed per debtor was much smaller. Five-eighths of debtors owed other government agencies (CCC, SBA ASCS) an average of \$46,800 and 29% of debtors owed individuals an average of \$43,200 per debtor. About 40% and 20%, respectively, of total debt owed these creditors was undersecured.

Farm machinery finance companies, implement dealers, and other farm supply companies were listed as secured creditors by 12% to 16% of the filers, and 36% of filers owed money to other secured creditors. Average amounts owed per debtor to each creditor ranged from \$13,200 to \$21,900.

Unsecured creditors involved in these Chapter 12 bankruptcy cases were 61% of the total number of creditors, but they held only 6% of the total debt (Table 1). Most of the unsecured creditors were local hospitals, clinics and mainstreet businesses. Most amounts owed per debtor to each creditor were small - less than \$5000.

Chapter 12 Farm Reorganization Plans

Chapter 12 reorganization plans provide a detailed description of how the debtor's operation is to be restructured, including the amount and schedule of repayment for each creditor. The remaining discussion is focused on repayment plans confirmed by the Federal Bankruptcy Judge and uses debt values established by the Judge after reviewing the debtor's petitions, creditor's proof of claim and related evidence.

Overall, confirmed Chapter 12 reorganization plans reduced filers'

Table 3. Debt Reduction Characteristics of Approved Chapter 12 Farm Reorganization Plans.

			Size of T	otal Debt i	n Thousands c	of Dollars	D€	bt/Asset Rat	io oi:
Ma	jor Characteristics	Overall	< \$250	250 - 499	500 - 749	> 750	<1.5	1.5 - 1.99	> = 20
Α.	Sample Size								
	1. Number	101	21	49	23	8	26	22	53
	Percent of Total	100.0	20.8	48.5	22.8	7.9	25.7	21.8	52.5
			thou	sands of do	llars		thou	isands of dol	llars
В.	Total Debt ^a	45635.7	3976.7	18609.3	14800.2	8249.5	9886.0	8508.3	27241.4
C.	Debt Repayment ^b	25354.2	2654.5	10464.9	7660.5	4574.2	6913.1	5125.4	13315.8
D.	Debt Reduction ^c	20281.5	1322.2	8144.4	7139.7	3675.3	2972.9	3382.9	13925.6
Ε.	Percent Debt Reduction	44.4%	33.2%	43.8%	48.2%	44.6%	30.1%	39.8%	51.25
							av	erage per de	ebtor
		avera	age per deb	tor in thou	sands of doll	ars	in th	ousands of	dollars
F.	Debt at Time of Filing:		•						
	 Fully secured debt 	∠42.0	120.8	203.7	324.1	558.1	258,3	227.2	240.0
	Undersecured and								
	unsecured debt	204.2	65.0	169.0	315.0	446.1	118.4	154.6	266.8
	3. Total debt	451.8	189.4	379.8	643.5	1031.2	380.2	386.7	514.0
G.	Debt Repayment in								
	Reorganization Plan On:								
	4. Fully secured debt	242.0	120.8	203.7	324.1	558.1	258.3	227.2	240.0
	Undersecured and								
	unsecured debt	3.1	1.3	2.7	4.5	6.7	3.3	.8	4.1
	6. Total debt repayment	251.0	126.4	213.6	333.1	571.8	265.9	233.0	244.1
н.	Debt Reduction	\$ 200.8	63.0	166.2	310.4	459.4	114.3	153.7	269.9

Source: Based on initial filing data reported by debtor and data reported in reorganization plan approved by Federal Bankruptcy Judge, Federal Bankruptcy Court, Sioux Falls and Pierre, South Dakota.

^a Total debt owed is the amount of debt owed to all secured creditors and the amount of past due taxes as reported by the Federal Bankruptcy Judge plus the amount of debt owed to unsecured creditors based on creditors proof of claim form. This amount \$45,635,700 is \$1,222,500 higher than the amount of debt reported by debtors (\$44,413.200) at time of initial filing.

b Debt repayment shown in this table is the total repayment of principal to secured creditors and unsecured creditors plus past due taxes as specified in the approved reorganization plans. In most cases examined, debt repayment to secured creditors is based on current security (collateral) values. Only minimal amounts are usually available for payment to the undersecured portion of a loan from secured creditors and to unsecured creditors. Past due taxes have priority over other secured creditor claims and are usually specified to be fully paid.

^C Debt reduction is the amount of reduction in principal payments to all creditors and is the difference between 'total debt' owed and 'debt repayment'.

total debt from \$45.63 million to \$25.34 million, a loss of \$20.28 million (44.4% of total debt) for the creditors involved (Table 3). At time of filing, the average amount of debt owed per debtor was \$451,800. Of this amount, \$5600 were priority claims for past due taxes, another \$242,000 were classified as fully secured debts, and the remaining \$204,200 were undersecured and unsecured debts. The reorganization plan included projected repayment of principal of all priority claims and fully secured debt, but only 1.7% of undersecured and unsecured debt (\$3400 of \$204,200).

The average amount of debt reduction per debtor was \$200,800. In general, the amount and percent of debt reduction increased as total debt increased. Not surprisingly, the percentage of debt reduction granted was positively related to the debtor's initial debt to asset ratios. Debtors with initial debt to asset ratios of less than 1.5 were granted an average debt reduction of 30.1%. The percentage debt reduction increased to 39.8% for debtors with ratios of 1.5 to 1.99, and to 51.2% for those with initial debt to asset ratios above 2.0.

In most cases, the post reorganization plan debt - to - asset ratio was about 1.0. This result occurred because almost all debtors (98%) were insolvent at time of filing and few debtors owned any remaining farm assets that were not already pledged as collateral to a lender.

Amount and Percentage of Debt Repayment by Type of Secured Creditor

The amount and percent of debt repaid varied systematically by amount of debt owed to each secured creditor and by type of secured creditor. These findings are based on a multiple regression analysis [7] of the relationship of percent debt repayment (payratio) to the amount of debt and type of secured creditor (Table 4). Overall, secured creditors were expected to

Table 4. Multiple Regression Analysis of Debt Repayment Ratio by Total Debt and Type of Secured Creditor.

Dependent Variable: Payratioa

Source	DF	Sum of Squares	Mean Square	F-Value	
Model	10	14,235	1.424	19.99***	R ² =0.315
Error	435	304979	0.071		
Corrected Total	445	45,215			
D =	- 0 700	DWGE - 0 06	7 6 77	0 0 / 0	

Payratio Mean = 0.780 RMSE = 0.267 C.V. = 0.342

Param	eter	N	Coefficient	Std. Error	Payratio <u>Mean</u>	Total Debt Mean (\$1000)
	ercept Ts ^b		0.952 -0.062	0.039*** 0.011***		
Cre	ditor:					
Α.	Bank	101	-0.126	0.047***	0.776	\$ 79.5
В.	P CA	12	-0.099	0.087	0.757	\$152.5
C.	FLB	47	-0.023	0.056	0.909	\$104.9
D.	FmHA	88	-0.321	0.054***	0.473	\$252.8
E.	Gov't.	70	-0.084	0.050*	0.843	\$ 40.9
F.	Indiv.	35	-0.020	0.060	0.935	\$ 44.4
G.	Farm Imp.	5	-0.024	0.079	0.919	\$ 13.7
H.	Mach. Fin.	19	-0.108	0.073	0.834	\$ 17.1
I.	Farm Supply	13	-0.058	0.084	0.884	\$ 16.3
J.	Other Secured	46			0.938	\$ 22.6
	Creditor					

^aPayratio is the unweighted mean of total principal repayment/total debt owed.

bJTOTs = Total debt owed/\$100,000.

recover an average of 78% of principal outstanding at time of filing. The coefficient for amount of debt owed per creditor was negative and significant (p<.01). Commercial banks, FmHA and other government creditors were the only types of creditors that had significantly lower payratio coefficients than nonfarm secured creditors, after accounting for differences in amount of debt owed. Approximately 31.5% of the variation in payratio was explained in this simple model. More complicated models, which included interaction terms and other explanatory variables (type of collateral), did not contribute significant additional explanation.

Nonfarm secured creditors, individuals (usually holding contracts for deed), farm implement dealers and Federal Land Bank were the only classes of secured creditors expected to be repaid more than 90% of principal debt outstanding. Most of these creditors held first secured interest in a major asset, land or equipment, which kept their repayment ratios higher than other secured creditors.

Farm machinery finance companies, farm suppliers and government agency creditors (CCC, SBA, ASCS) were expected to be repaid 83% to 88% of outstanding loan volume, while commercial banks and PCA were expected to recover an average of 75% - 78% of outstanding loan volume. Many bank and PCA loans were operating loans with livestock, inventories, and/or equipment as collateral. Many of these debtors had split lines of operating credit. Consequently, the secured interest in this collateral was often a second or third lien, and therefore written down to the value remaining after higher priority secured interests were satisfied.

Farmers Home Administration received the lowest average repayment rate of 47.3% on FmHA debts, the only creditor to receive less than half of their outstanding indebtedness. FmHA is frequently a lender of last resort, and

many of their loans are secured by a second or third mortgage on farmland or a lower priority lien on personal property, some as low as a fifth lien.

Conclusions:

Chapter 12 bankruptcy was established to assist "family farms" with less than \$1.5 million of total debts to reorganize their farm business and continue farming. The evidence, presented from 101 South Dakota farm bankruptcy cases filed from November 1986 - February 1988, indicates that Chapter 12 bankruptcy filers operate small to moderate size farms and have been in business an average of 25 years.

Chapter 12 filers (98%) were insolvent at time of filing. Confirmed reorganization plans are providing significant amounts of debt relief, through loan writedowns. Average debt reduction is 44.4% (\$200,800) of their total debt at time of filing.

Individuals, farm machinery and farm supply companies, and the Federal Land Bank obtained the highest percent of debt recovery. Unsecured creditors and secured creditors that made the riskiest loans (FmHA) obtained the lowest percent and amount of debt recovery. Debt repayment ratios is the estimated percent of principal recovered, but does not account for differences in net present value associated with different timing of repayment. Thus reported debt repayment ratios somewhat overstate the actual debt recovery value.

It remains to be seen how many reorganization plans will be successful, and the final impacts that Chapter 12 will have on the behavior of agricultural lending institutions and credit terms extended to farm families.

References

- 1. Farferlick, Chris and Neil E. Harl. "The Chapter 12 Bankruptcy experience in Iowa." <u>Journal of Agricultural Taxation and Iaw</u>, 10 (4), 1988. pp. 302-336.
- 2. Federal Bankruptcy Court, District of South Dakota. Chapter 12 Bankruptcy Case Records, Sioux Falls and Pierre, South Dakota.
- 3. Harl, Neil. "Current Estate Planning Topics." <u>Journal of Agricultural</u> Taxation and Law. 10 (2), 1988. pp. 170-180.
- 4. Janssen, Larry L., Brian H. Schmiesing and Alan Schroeder.

 "Characteristics of Farm Reorganization Bankruptcy Filings."

 Agribusiness: An International Journal, 4 (1), 1988. pp. 79-89.
- 5. Lodoen, James A. "Chapter 11 Farm Reorganizations; Farmer Beware." Journal of Agricultural Taxation and Law, 9 (2), 1987. pp. 99-119.
- 6. Robison, Lindon O., Peter Barry and William Burghardt. "Borrowing Behavior under Financial Stress by the Proprietary Firm: A Theoretical Analysis." Western Journal of Agricultural Economics, 12 (2), 1987. pp. 143-151.
- 7. SAS Institute, Inc. <u>SAS User's Guide: Statistics, Version 5 Edition</u>. Cary, North Carolina: SAS Institute, Inc., 1985.
- 8. Schmiesing, Brian H., Larry Janssen and Burton Pflueger. "Agricultural Bankers' Reactions to Chapter 12 Bankruptcy." <u>Journal of American</u>
 <u>Society of Farm Managers and Rural Appraisers</u>, 52 (1), 1988. pp.43-52.
- 9. Wilson, Robert B. "Chapter 12: Family Farm Reorganization." <u>Journal of Agricultural Taxation and Law</u>, 8, 1987. pp. 299-310.

