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An Agricultural Law Research Article

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by

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Originally published in ARKANSAS LAW REVIEW
41 ARK. L. REV. 263 (1988)

www.NationalAgLawCenter.org

The New Bankruptcy Chapter 12: A Computer Analysis of If and When a Farmer Can Successfully Reorganize

Janet A. Flaccus* and Bruce L. Dixon**

Farm financial stress has been in the headlines for several years. Several factors have caused the current crisis. In general, farm land prices rose 235% during the 1970's,¹ but in 1981 farm land prices began to fall. Land values in Iowa and Nebraska, for example, had fallen nearly 50% by spring 1985.² Ohio, Indiana, Minnesota and Missouri experienced a 40% drop in farm land values during the same period.³ In 1985 farm land values nationally declined 12% more,⁴ and in 1986 another 8%.⁵ Since farm land accounts for approximately 75% of a farm's asset value,⁶ this sharp decline in land values has led to an unfavorable debt/asset ratio for many farmers, and this unfavorable debt/asset ratio is a major source of farm financial instability.⁷ Many analysts consider a farm with a debt/asset ratio of 40% or more to be a financial

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1. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *For Farm Finances: Promising Signs of a Cooling Crisis*, 8 FARMLINE NO. 4 at 7 (1987).

2. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1985*, AGRIC. INFO. BULL. NO. 495 at 2 (1985).

3. *Id.*

4. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1, 1986*, AGRIC. INFO. BULL. NO. 500 at 3 (1986).

5. ECON. RESEARCH SERV., *supra* note 1, at 6.

6. F. HINES, B. GREEN, & M. PETRULIS, REGIONAL IMPACTS OF FINANCIAL STRESS IN FARMING, OUTLOOK '86 ANNUAL AGRIC. OUTLOOK CONF., Session No. 21, at 460, 463 (1985).

7. *Id.* at 463-65.

risk.⁸ Farms with a debt/asset ratio of over 70% are considered to be in very precarious financial shape, perhaps heading for insolvency.⁹ A ratio of 1 or more is insolvency, since debts exceed assets. The higher a farm's debt/asset ratio, the harder it becomes for that farm to obtain financing. The farm will not have assets to secure a loan and many farms cannot exist without financing.

The one way a farm can survive with a high debt/asset ratio is to have a large income and substantially lower costs. This allows the farm to pay down the debt. Yet, since 1981, farm incomes have been declining, mainly due to shrinking exports and declining commodity prices.¹⁰ When costs exceed income this creates negative cash flow. When a farm has negative cash flow the farm can still survive by selling assets or obtaining a loan. If the farm has a high debt/asset ratio, financing will be very difficult to obtain, particularly with an adverse cash flow. Farms with negative cash flow and a high debt/asset ratio are probably heading for bankruptcy.

Congress responded to the farm crisis by amending the Bankruptcy Code in October 1986 by adding Chapter 12 to allow the reorganization of family farms.¹¹ There is substantial question regarding Chapter 12's effectiveness. If few farms can successfully complete a plan and recover financially, much of the hope generated by Chapter 12 in the farm community will be ill-founded. This article will examine the effectiveness of Chapter 12 by using a computer model to analyze the financial characteristics of a typical cash grain farm in financial trouble. This farm is placed in Chapter 12 and a plan is proposed. The computer model then demonstrates whether the farm is financially viable. The article first examines the extent of the farm crisis by examining the relative frequency of farms with high debt/asset ratios and negative cash flow. The article then focuses on the farm crisis in an area of the country experiencing severe financial stress: cash grain

8. *Id.* at 463.

9. *Id.*

10. *Id.* at 465-66.

11. 11 U.S.C.A. §§ 1201-1231 (West Supp. 1987).

farms in the Mississippi Delta which encompasses Eastern Arkansas, Western Mississippi and Northern Louisiana.

The farm used is a representative cash grain farm in the Arkansas Delta. While it is not structured to be representative of the average or typical farm in the Delta, it is structured to be typical of a large cash grain farm in the Delta. This approach is adopted because large farms are the major source of grain production and also are typical for families whose main source of income is the farm. For smaller farms, failure of the farm enterprise does not have nearly the same family implications as for families on large farms. To be representative, the model farm will grow rice and soybeans, the two most frequently grown crops in this geographical region.¹² The model farm consists of 1,000 acres of tillable land, and the acreage is divided with 215 acres of rice, 670 acres of soybeans and 115 acres set aside pursuant to the government program. The costs of the farming operation were taken from budgets drawn up by the University of Arkansas Cooperative Extension Service.¹³ The prices used were current prices and the government support programs were based on 1987 prices and income supports. The 1985 farm bill mandates the reduction of price and income supports each year for most commodities from 1987 to 1990.¹⁴ However, since farm pressure is substantial and lower government supports would drive more farms out of business, Congress may act to change the law. The computer simulations for this article do not estimate the farm financial picture with the mandated lower supports. If the law is not changed and income and price supports are lowered, the actual financial realities will be worse than those presented in this article.

For the sample farm, only the income for rice will be af-

12. ARK. AGRIC. STATISTICS SERV., ARK. AGRIC. EXPERIMENT STATION, 1986 ARKANSAS AGRICULTURAL STATISTICS, 19-25 (June 1987).

13. J. CLARK, B. HERRINGTON, C. STUART, R. COATS, UNIV. OF ARK. COOPERATIVE EXTENSION SERV., SOYBEAN PRODUCTION COST ESTIMATES, EA87-03 through EA87-11 (1987); C. STUART, J. CLARK, B. HERRINGTON, R. COATS, UNIV. OF ARK. COOPERATIVE EXTENSION SERV., ARKANSAS RICE PRODUCTION COST ESTIMATES, EA87-12 through EA87-14 (1987).

14. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Provisions of the Food Security Act of 1985* AGRIC. INFO. BULL. NO. 498 at 6-23 (1986).

fectured by any cut in government income support. Soybeans are not currently covered by a government program, although a floor price is insured by the Commodity Credit Corporation's (CCC) loan rate.¹⁵ The target price for rice is scheduled to decline from \$11.66 per cwt. in 1987 to \$10.71 per cwt. in 1990.¹⁶

I. DEBT/ASSET RATIOS

Table 1 displays the incidence of financial stress in the agricultural regions of the U.S.¹⁷ All three groups in the table have debt/asset ratio problems since all groups are over 40%.¹⁸ The first group has between a 40% and 70% debt/asset ratio. The second group contains farms with very bad debt/asset problems with ratios over 70% and the last group contains the percent of farms in each geographical region that are insolvent. Appalachia, the Northeast, Southeast, Southern Plains, and Pacific States have the lowest percentage of farms in debt/asset ratio trouble, especially with respect to insolvent farms. Most of these geographical areas show decreases at least by 1986 in each of the three trouble areas.

In contrast are the Lake States, Northern Plains, Corn Belt, Mountain and Delta States. Four of these areas, the Lake States, Northern Plains, Corn Belt and Delta States have the highest percentage of insolvent farms. These percentages represent a large number of farms in financial trouble.

15. *Id.* at 29-30.

16. *Id.* at 22.

17. Table 1 was compiled with data taken from ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1985*, AGRIC. INFO. BULL. NO. 495 at 11 (1985); and ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1, 1986*, AGRIC. INFO. BULL. NO. 500 at 44 (1986).

18. Recall that a debt/asset ratio of 40% or more places a farm in financial trouble. See *supra* note 8 and accompanying text.

Table 1 — Percentage of farms in each region by debt/asset ratio

Region	Highly leveraged (40-70 percent debt/asset ratio)			Very highly leveraged and technically insolvent (71 percent to 100 percent)			Technically insolvent only (debt/asset ratio over 100 percent)	
	1984	1985	1986	1984	1985	1986	1985	1986
Appalachian	7.2	7.2	6.7	4.8	2.3	1.1	1.0	1.5
Northeast	15.9	8.7	9.3	3.9	5.3	3.3	3.0	1.4
Southeast	7.1	7.4	9.8	7.9	5.8	3.4	3.1	2.6
Southern Plains	9.0	5.9	9.0	6.9	5.5	3.2	2.1	3.0
Pacific States	10.3	10.8	10.5	5.5	6.0	4.0	3.2	2.1
Mountain States	10.1	15.5	16.0	9.1	6.6	4.9	2.5	2.9
Delta States	7.9	10.9	7.7	6.5	6.9	3.0	4.1	5.8
Corn Belt	11.9	14.6	15.6	5.9	10.1	5.6	3.9	5.1
Northern Plains	13.9	16.3	17.6	8.4	10.5	8.8	4.0	6.8
Lake States	14.5	15.8	19.1	8.0	9.8	7.3	3.3	6.4
United States	11.1	11.6	12.7	6.6	7.3	4.6	3.0	4.0

Table 2 shows the distributions of debt/asset problems by type of farm production.¹⁹ Cash grain farms and dairy operations are clearly in trouble, both from the percentage of farms and the raw number of farms in debt/asset trouble. Nursery farms have a high percentage of farms which are insolvent, but the number of farms is small. General livestock farms, on the other hand, have a relatively small percentage of farms in debt/asset trouble, but the raw number of farms in trouble is large. The information in Tables 1 and 2 are related since cash grain and dairy farms dominate in the Lake States, Northern Plain, Corn Belt and Delta States.

19. Table 2 was compiled with data taken from ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1985*, AGRIC. INFO. BULL. NO. 495 at 10 (1985) and ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1, 1986*, AGRIC. INFO. BULL. NO. 500 at 43 (1986).

Table 2 — Debt/asset ratios by type of farm

Type of Farm	Highly leveraged (40-70 percent debt/asset ratio)				Very highly leveraged and technically insolvent (over 70 percent debt/asset ratio including technically solvent)				Technically insolvent only (over 100 percent debt/asset ratio)		
	1984	1985	1986	Number of Farms in 1985	1984	1985	1986	Number of Farms in 1985	1985	1986	Number of Farms in 1985
		Percent		Number		Percent		Number	Percent		Number
Cash grain	14.2	13.8	16.0	54,919	7.6	10.2	6.5	40,763	4.5	6.5	17,846
Field crop (tobacco, cotton)**	11.8	8.2	13.2	12,444	8.9	4.1	2.3	6,235	2.1	2.5	3,222
Vegetable and melon	17.8	13.6	7.4*	3,514	6.3	7.6	6.3*	1,964	3.1	3.0*	800
Fruit and nut	7.7	8.4		3,734	4.0	4.9		2,186	2.6		1,175
Nursery	21.7	6.6	5.0	1,823	(d)	9.4	4.8	2,606	6.0	6.7	1,650
Other crop	6.7	8.7	13.4	17,912	4.6	6.0	2.8	12,404	3.0	5.2	6,295
General livestock (beef, hogs, sheep)	10.6	9.2	9.6	54,378	7.1	5.6	2.6	33,130	2.2	3.0	12,903
Dairy	17.8	20.9	19.5	37,551	8.7	10.9	9.6	19,548	2.9	3.7	5,235
Poultry and egg	17.9	18.0	16.8	5,794	17.7	10.1	3.6	3,236	2.4	1.8	776
Other livestock	12.6	13.1	9.1	4,443	9.1	2.8	3.0	935	2.1	.4	696
All farms	11.1	11.6	12.7	196,612	6.6	7.3	4.6	123,007	3.0	4.0	50,599

(d) = Data not available due to disclosure rules.

* The vegetable and melon category is combined with the fruit and nut category in the 1986 report. The figures for 1986 indicate the aggregate of the two categories.

** In the 1986 report, this is listed as tobacco and cotton.

II. NEGATIVE CASH FLOWS—INCOME AND COSTS

A high debt/asset ratio is not synonymous with failure of the farm operation. If farm income were high and costs low, then farmers could pay down some of their debt and improve their debt/asset ratio, but farmers with a negative cash flow can not make current payments let alone pay down their debt. Costs have not recently been a significant problem. Fuel costs and interest rates have both moderated during the 1980's.²⁰ It is low farm product prices that are the major reason for negative cash flow. Low farm product prices make it difficult for farmers in serious financial trouble to pay down debt.

A. On Farm Income

Total farm income is derived from a number of sources. First, income is generated from the sale of farm outputs. Prices of farm products, after reaching high levels in the 1970's have declined since 1981. The price decline was caused initially by a world-wide recession and then by price competition as other countries dramatically increased production.²¹ By 1984, U.S. farm exports had declined by 13%.²² This decline hit the major export crops of wheat, corn, soybeans, cotton and rice the hardest.²³ Exports are expected to rise slightly in 1987, breaking a six year decline.²⁴ Soybeans in Arkansas are grown primarily in the Delta.²⁵ In 1982, 80% of Arkansas' soybean production was destined for foreign markets.²⁶ Rice production is also centered in the Delta.²⁷ In 1983, 75% of Arkansas' rice production was sold overseas.²⁸

20. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *For Farm Finances: Promising Signs of a Cooling Crisis*, 8 FARMLINE NO. 4 at 6-7 (1987).

21. F. HINES, B. GREEN, M. PETRULIS, *supra* note 6, at 460.

22. *Id.*

23. *Id.* at 465. Approximately 75% of the 1982 Arkansas rice crop was sold in international markets. R. GUNDERSON & E. OSPINA, *THE STRUCTURE OF ARKANSAS'S AGRICULTURE: A TAXONOMY* 36-7 (1986).

24. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *For Farm Finances: Promising Signs of a Cooling Crisis*, 8 FARMLINE NO. 4 at 7 (1987).

25. ARK. AGRIC. STATISTICS SERV., *supra* note 12, at 24.

26. R. GUNDERSON & E. OSPINA, *THE STRUCTURE OF ARKANSAS AGRICULTURE: A TAXONOMY* 35 (1986).

27. ARK. AGRIC. STATISTICS SERV., *supra* note 12, at 22.

28. *See supra* note 23. About 65% of the 1984 Arkansas cotton crop was also sold

Despite an improvement in farm exports for 1987, no one is predicting a return to the export levels enjoyed by farmers in the late 1970's. Thus, unless production declines, lower demand will keep prices low.

B. Off Farm Income

A second source of farm income is money generated from employment away from the farm. As farm size gets bigger, off farm income declines because farming activity takes more time. This is true until farms reach \$500,000 or more in sales.²⁹ For example, in 1986 these farms averaged \$20,885 in off farm income.³⁰ Farms with product revenues between \$250,000 and \$499,999 average only \$14,650 in off farm income.³¹ Farms with sales between \$100,000 and \$249,000 had only \$12,674.³² Smaller farms do better. Off farm income rises from \$19,166 for farms with \$40,000 to \$99,999 in sales³³ to \$29,081 for farms with \$9,999 or less in farm sales.³⁴ On smaller farms both the husband and wife generally maintain some sort of employment away from the farm.

Off farm income also tends to be lower for certain types of farms.³⁵ Cash grain,³⁶ tobacco and cotton,³⁷ and dairy farms³⁸ all have lower off farm income when compared with other commodities. For example, in 1986 dairy farms had a mere \$9,117 in average off farm income.³⁹ Tobacco and cotton farms fared a bit better with \$16,733,⁴⁰ while cash grain

overseas. Cotton is also an important crop of the Arkansas Delta. ARK. AGRIC. STATISTICS SERV., ARK. AGRIC. EXPERIMENT STATION, 1986 ARKANSAS AGRICULTURAL STATISTICS 20 (June 1987).

29. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1986*, AGRIC. INFO. BULL. NO. 500 at 61-64 (1986).

30. *Id.* at 51.

31. *Id.* at 52.

32. *Id.*

33. *Id.* at 53.

34. *Id.* at 54.

35. *Id.* at 55-9.

36. *Id.* at 55.

37. *Id.*

38. *Id.* at 58.

39. *Id.*

40. *Id.* at 55.

farms were at \$18,597.⁴¹ All other types of farms except poultry farms fared much better. Off farm income ranged from \$26,906 for beef, hog and sheep farms,⁴² to over \$36,000 for other livestock farms and nurseries and greenhouses.⁴³ With low product prices, farms need other sources of income, especially if the farm has high debt. If off farm income is low, then there is only one other possible source of revenue to supplement the farm income, and that source is government payments. For the current farm economy, government payments are needed to compensate for lower marketing receipts.⁴⁴

C. Government Payments

Government financial support of farmers comes from various programs.⁴⁵ The major source of income supplements from the government are in the form of deficiency payments.⁴⁶ This source is one of the many farm programs contained in the Food Security Act of 1985. Target prices are set for some, but not all, agricultural commodities. The difference between the target price and the higher of the average market price for a set period or the loan rate is paid to the farmer in a deficiency payment.⁴⁷ Part of this payment is received when the farmer signs up for the government program.⁴⁸ The rest is received once the harvest is sold. In order to receive the benefits from many of the government commodity programs, such as the deficiency payment program among others, the farmer must agree to set aside some acres from production.⁴⁹ In addition, the government, under a paid land diversion program, pays the farmer a fee for the set aside acres.⁵⁰

Farmers cannot easily switch from one crop to another in

41. *Id.*

42. *Id.* at 57.

43. *Id.* at 56.

44. *Id.* at iv.

45. For a concise discussion of the various government farm programs, see AGRIC. & FOOD POLICY CENTER, POLICY TOOLS FOR U.S. AGRICULTURE (Aug. 1986).

46. *Id.* at 16.

47. *Id.*

48. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Provisions of the Food Security Act of 1985*, AGRIC. INFO. BULL. NO. 498 at 33 (1986).

49. *Id.* at 9, 12.

50. *Id.* at 13.

order to maximize their government payments because the government programs cover only crops within the farm's base acres.⁵¹ It takes several years to accumulate these base acres, and a switch to a new crop will force that farm to wait several years before qualifying for full benefits for the new crop.⁵² Many farms cannot afford this.

Target prices were authorized for cotton in 1970 and the 1973 farm bill added target prices for wheat, corn, grain sorghum and oats.⁵³ Currently, rice and barley also have a target price.⁵⁴ For example, the target price for wheat for 1987 is \$4.38 per bushel.⁵⁵ This has been the target price for wheat since 1984.⁵⁶ The Food Security Act of 1985 has the target price moving down to \$4.00 for the 1990 crop.⁵⁷ Target prices for all covered crops are set to decline each year until 1990.⁵⁸

Other major sources of income transfers to farmers are marketing loans or Findley payments.⁵⁹ Created by the Food Security Act of 1985,⁶⁰ these are loans which may be repaid at less than the loan rate.⁶¹ The lower rate is sometimes set at the world market rate.⁶² The difference is an income transfer to the farmer. Although the 1985 Act authorized marketing loans for all commodities, they have been used only for a limited group of crops.⁶³ In 1986 and 1987, they were available for rice and cotton.⁶⁴ Farmers were entitled to get marketing certificates for the difference between the loan rate and world market price.⁶⁵ Marketing certificates can be redeemed for cash, rice or other commodities owned by the Commodity

51. *Id.* at 31-2.

52. *Id.*

53. AGRIC. & FOOD POLICY CENTER, *supra* note 45, at 16.

54. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., POLICY RESEARCH NOTES, Issue 22, 62-64 (1986).

55. *Id.* at 62.

56. *Id.*

57. ECON. RESEARCH SERV., *supra* note 48, at 6.

58. *Id.* at 6, 16, 22.

59. AGRIC. & FOOD POLICY CENTER, *supra* note 45, at 15.

60. *Id.*

61. *Id.*

62. *Id.*

63. *Id.*

64. *Id.*

65. ECON. RESEARCH SERV., *supra* note 48, at 23.

Credit Corporation.⁶⁶ In contrast with deficiency and acreage payment programs, the marketing loan program was not initially subject to a payment ceiling.⁶⁷ This allowed some large farms to collect large marketing loan checks. In October 1986, however, the 1985 Act was amended to include a \$250,000 payment limitation for marketing loans.⁶⁸

Nonrecourse loan payments are designed to act as price, not income, supports and constitute the third major support program.⁶⁹ They are generally available for nearly all commodities.⁷⁰ Loan rates are set relatively low. For example, for wheat for 1985 the loan rate was \$3.30 a bushel as compared with the target price of \$4.38.⁷¹ In 1985 wheat averaged a price of \$3.16.⁷² The loan program allows a farmer to sell the wheat and pay back the loan or default on the loan and forfeit the wheat to the government.⁷³ Obviously, the farmer will sell the wheat and pay back the loan only if he or she can sell it for more than \$3.30 a bushel. The loans are nonrecourse. The loan level is only \$2.28 for 1987 wheat.

The above three programs are the major government programs involving payments to farmers. These are not the only programs, however. There are special programs for products such as milk, wool and mohair, and peanuts, and other programs for disaster aid, crop insurance, and conservation payments, to name just a few. The cost of these and other programs under the Food Security Act of 1985 has been exceptionally high. In 1986 the programs cost approximately \$26 billion.⁷⁴ Government support programs throughout the

66. *Id.*

67. *Id.* Deficiency payments under the wheat, corn, feed grain, upland and ELS cotton and rice programs is limited to \$50,000 per person. *Id.* at 33.

68. Continuing Appropriations, Fiscal Year 1987, Pub. L. No. 99-591, § 108(a)(1), 100 Stat. 3341, 346-48 (1986) (codified at 7 U.S.C. § 1308).

69. AGRIC. & FOOD POLICY CENTER, *supra* note 45, at 12.

70. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., POLICY RESEARCH NOTES, Issue 22, 62-64 (1986).

71. *Id.* at 62.

72. U.S. DEP'T OF AGRIC., AGRICULTURAL STATISTICS 1986 at 8 (1986).

73. AGRIC. & FOOD POLICY CENTER, *supra* note 45 at 12.

74. Wall St. J., Sept. 21, 1987, at 18, col. 1.

entire decade of the 1970's totaled only \$30.5 billion.⁷⁵

1. Limitations on Government Supports

Government programs are not without payment limits. Deficiency payments and any land diversion payments received for wheat, feed grains, upland and extra long staple (ELS) cotton, and rice were limited to \$50,000 by the 1985 Act.⁷⁶ In 1986, the Food Security Act was amended to add that the total amount received from "other" programs for wheat, feed grains, upland and ELS cotton, rice and honey plus deficiency payments cannot exceed \$250,000.⁷⁷ Thus, these farms can receive up to \$250,000 in government payments.⁷⁸ The "other" payments include: (1) any disaster payment made under one of the annual programs; (2) any gain realized by a producer under a marketing loan; (3) any deficiency payment received for wheat or feed grains made as a result of reduction of the loan level; (4) any loan deficiency payment received for wheat, feed grains, upland cotton or rice; (5) any inventory reduction payments received for crops of wheat, feed grains, upland cotton or rice; and (6) compensation for resource adjustment or public access for recreation.⁷⁹ Large farms can easily reach these payment limitations. These limits apply to the payments received by one "person".⁸⁰ Thus, farmers began to restructure farm holdings to make them held by more than one "person" to increase the amount of government payments. In response, regulations have been promulgated to define "person" restrictively.⁸¹ These regulations were amended twice in 1986 and proposed amendments came out in March 1987.⁸²

75. Spitze, *Evaluating Costs of Governmental Food and Agricultural Policies*, UNIV. OF ILL. DEP'T OF AGRIC. ECON., 86 E-353 at 10 (1986).

76. ECON. RESEARCH SERV., *supra* note 48, at 33.

77. Continuing Appropriations, Fiscal Year 1987, Pub. L. No. 99-591 § 108(a), 100 Stat. 3341-346 (1986) (codified at 7 U.S.C. § 1308 (Supp. IV 1986)).

78. 7 U.S.C.A. § 1308(2)(A) (West Supp. 1987).

79. 7 U.S.C.A. § 1308(2)(B) (West Supp. 1987).

80. 7 U.S.C.A. § 1308 (West Supp. 1987).

81. 7 C.F.R. pt. 795 (1987).

82. 52 Fed. Reg. 9,302 (to be codified at 7 C.F.R. pt. 795) (proposed March 24, 1987).

a. *Who is a "person"?*

Section 795.3 of Title 7 of the Code of Federal Regulations contains the basic definition of "person" and includes individuals, joint stock companies, corporations, associations, trusts, estates or other legal entities.⁸³ In addition, in order to be considered a separate person for purposes of payment limitations, the legal entity must: "(a) [h]ave a separate and distinct interest in the land or the crop involved, (b) [e]xercise separate responsibility for such interest, and (c) [b]e responsible for the cost of farming related to such interest from a fund or account separate from that of any other individual or entity".⁸⁴ For family members, husbands and wives are considered one person.⁸⁵ Minor children and parents are also treated usually as one person.⁸⁶

The 1987 regulatory amendment makes it clear that an individual shall not be denied separate person status merely because a family member cosigns for or makes a loan to such individual, or leases, loans, or gives such individual equipment, land or labor, as long as such family members were organized as separate units prior to December 31, 1985.⁸⁷ The term family member is defined to include great grandparent, grandparent, child, grandchild, and great grandchild of such individual as well as spouses of these people.⁸⁸ The term separate unit is defined as an individual "who, prior to December 31, 1985, has been engaged in a separate farming operation and, in accordance with the provisions of this Part, had been

83. 7 C.F.R. § 795.3 (1987).

84. *Id.*

85. 7 C.F.R. § 795.11 (1987).

86. 7 C.F.R. § 795.12 (1987). But family membership does not absolutely bar consideration as a separate person. Adult children who are separate producers are separate "persons." Even minors can be considered as a separate person. The minor must be a producer on a farm in which his or her parents or legal guardian have no interest and either be represented by a court appointed guardian with the interest in the land vested in the minor, live separately from his or her parents or guardian and carry out the actual farming for which there is a separate accounting, or be a beneficiary of an irrevocable trust in which ownership of the land is vested in the trust or the minor. As can be seen, very few minors will qualify as a separate "person." Children are minors only up to age 18.

87. 52 Fed. Reg. 9,303 (1987) (to be codified at 7 C.F.R. §§ 795.3, 795.4).

88. *Id.* (to be codified at 7 C.F.R. § 795.3).

determined to be a separate person.”⁸⁹ As will be seen, this protection does not exist for nonfamily members and family membership is restrictively defined. Normally, when the person financing a farmer also has an interest in the farm, he or she is precluded from being a separate “person.”⁹⁰

There are more general rules for partners, joint venturers and corporations. For partners or joint venturers to be considered separate persons for separate payment limitations, they must share in the proceeds commensurate with their contribution to the farm operation.⁹¹ The contribution can be merely one of capital, but it cannot be merely a loan to the partnership or joint venture by the partner, nor can it be a contribution resulting from either money lent from the partnership to the partner or from the proceeds of a loan guaranteed by the partnership or joint venture.⁹²

The Agricultural Stabilization and Conservation Service (ASCS), which administers the farm programs, suggests that capital contributions by partners in a partnership must be at least 30-35% of the operating capital.⁹³ The ASCS provides an example of a partnership in which the partners have made no capital contribution. In this example, a new general partnership is created and an operating loan is obtained. The loan is secured by the crops and deficiency payments. A 50% planting option is selected which entitles the farm to get a 92% deficiency payment, with 40% of it in advance. With this option, very little additional financing is needed. The ASCS says no capital contribution has been made and the partners would not be considered separate “persons”.⁹⁴ Thus, to be considered “persons” the partners must make a sizeable capital contribution which must be commensurate with their benefit from the farm operation. Moreover, unlike a general partnership, a limited partnership is considered only one per-

89. *Id.*

90. *See infra* notes 101-118 and accompanying text.

91. 7 C.F.R. § 795.7 (1987).

92. *Id.*

93. AGRIC. STABILIZATION & CONSERVATION SERV., U.S. DEP'T OF AGRIC., Notice CM-75 (Ark. Notice 5-CM-11) 2, exhibit 1 (Dec. 2, 1986).

94. *Id.*

son.⁹⁵ The ASCS states that an agreement that partners are liable for only a proportionate share of the loan turns the partnership into a limited partnership and limits the number of "persons" for the payment limitations to one.⁹⁶

A corporation will be considered a person separate from its shareholders only if the individual shareholder does not own more than 50% of the outstanding shares.⁹⁷ The shares owned by the individual shareholder's spouse, minor children and trusts for the benefit of the minor children are added together for this 50% rule.⁹⁸ Similarly, where two or more individuals or legal entities own more than 50% of the stock of two or more corporations, all the corporations are considered one person.⁹⁹ But, even if the shareholder does not own more than 50% of the stock, the shareholder must be engaged in the production of a crop as a producer separate from the corporation. The shareholder must also meet the three part test in section 795.3 before the shareholder is considered a separate "person."¹⁰⁰

The parties also need to be careful about their financing. If an individual or entity finances another individual or entity for work on a farm in which they both have an interest, they are considered one person for payment limitation purposes.¹⁰¹ An interest in land is held by landlords, corporate stockholders, mortgagees that have anything more than an equitable interest, and vendors in a contract for deed.¹⁰² Financing arises from merely cosigning, endorsing or guaranteeing a loan.¹⁰³ The ASCS notice states that a shareholder's signing of a corporate debt will not be considered financing as long as all shareholders are required to sign, but they cannot give any of

95. *Id.* at 1.

96. *Id.*

97. 7 C.F.R. § 795.8(a) (1987).

98. *Id.*

99. *Id.* § 795.8(b) (1987).

100. *Id.* § 795.8(a) (1987).

101. *Id.* § 795.3(c) (1987); AGRIC. STABILIZATION & CONSERVATION SERV., U.S. DEP'T OF AGRIC., Notice CM-75 (Ark. Notice 5-CM-11) 3, exhibit 1 (Dec. 2, 1986).

102. AGRIC. STABILIZATION & CONSERVATION SERV., U.S. DEP'T OF AGRIC., Notice CM-75 (Ark. Notice 5-CM-11) 3, exhibit 1 (Dec. 2, 1986).

103. *Id.* at 4.

their assets as collateral for the loan.¹⁰⁴ Thus, the corporation or partnership must secure financing without using the assets of shareholders or partners. In contrast, a partner's contribution of capital based on a loan to the partner must be secured by the individual partner's assets, not the assets of the partnership.¹⁰⁵

These financing limitations are illustrated by the following examples provided by ASCS. In example number 1, Bill operates farm A and has a 75% interest in the crop. John owns the land on farm A and has a 25% interest in the crop. John also owns and operates farm B. On farm C, Richard, as operator, has a 75% interest in the crop, and John, as owner, has a 25% interest in the crop. John cosigns the loan to Bill. Richard obtains his own financing.¹⁰⁶ There are only two "persons" here for purposes of the payment limitation. John, by cosigning Bill's loan, has merged into Bill, and he and Bill must share the \$50,000 and \$250,000 payment limitations.¹⁰⁷ John and Bill are merged because John financed a farm in which John as owner has an interest. Richard is entitled to a separate "person" status.¹⁰⁸ If John had not cosigned Bill's note, then all three men would be "persons" and be entitled to their own payment limitations.

Cosigning and leasing land (which is financing a tenant) in which the person financing has an interest is now protected by the proposed regulation that came out in March of 1987, but only if the financing and leasing is done by a family member.¹⁰⁹ This regulation is applicable for crop years from 1987 through 1990. However, the definition of family member is rather narrow.¹¹⁰ Brothers, sisters, uncles and aunts are not included.¹¹¹ If brother Bob, who farms farm A, guarantees the loan to brother Tom, who farms farm B which is being

104. *Id.*

105. 7 C.F.R. § 795.7 (1987).

106. AGRIC. STABILIZATION & CONSERVATION SERV., U.S. DEP'T OF AGRIC., Notice CM-75 (Ark. Notice 5-CM-11) at 5, exhibit 1 (Dec. 2, 1986).

107. *Id.*

108. *Id.*

109. 52 Fed. Reg. 9303 (1987) (to be codified at 7 C.F.R. §§ 795.3, 795.4).

110. *Id.* (to be codified at 7 C.F.R. § 795.3(c)).

111. *Id.*

leased to Tom by Bob, then Bob and Tom will be treated as one "person" for the \$50,000 and \$250,000 limits.

The other example provided by the ASCS emphasizes the interest in the land aspect of the test. In this example, the tenant operates the farm, provides 50% of the capital and gets 50% of the crop. The landlord is a corporation that provides 50% of the capital and gets 50% of the crop. The corporation is owned by Dad who owns 10% of the shares and an adult child who owns 90% of the shares. Dad cosigns the bank loan for the unrelated tenant.¹¹² This cosigning merges Dad with the tenant.¹¹³ Dad and the tenant are merged because Dad provided financing for the tenant's crop by cosigning the bank loan, and Dad has an interest in the real estate because Dad is a shareholder in a corporation that owns the land.¹¹⁴

To understand the effect of this merger, assume Dad separately farms a different farm called farm number 2, and the adult child also farms a separate farm called farm number 3. The one "person" status of the tenant and Dad means that they must share one \$50,000 and one \$250,000 payment limitation. Dad's share of these limitations covers not only his share in the crop on farm number 1 but also the production on farm number 2. In this example, there are two "persons." The first "person" includes all the production of the tenant and Dad. The other "person" is the corporation with which the adult child is merged.

If Dad had not cosigned the bank loan for the tenant, Dad would have been a separate "person" and would have been entitled to separate payment limits.¹¹⁵ Dad's 10% interest in the corporation would not merge Dad's limits with the corporation's, since he owns less than 50% of the corporate shares and has a separate farming operation.¹¹⁶ The adult child, on the other hand, is merged with the corporation and would have to share the \$50,000 and \$250,000 payment limits

112. AGRIC. STABILIZATION & CONSERVATION SERV., U.S. DEP'T OF AGRIC., Notice CM-93 (Ark. Notice 5-CM-20) at 2, exhibit 1 (March 13, 1987).

113. *Id.*

114. *Id.*

115. 7 C.F.R. § 795.3 (1987).

116. 7 C.F.R. § 795.8(a) (1987).

even for the production on farm number 3.¹¹⁷ The corporation is a separate person from the tenant since it shares in the risk of producing the crop.¹¹⁸ This would make three “persons”: the tenant, Dad and the corporation/adult child if Dad had not cosigned.

There are special rules for leases as well. Generally, in order to participate in farm programs, the individual or entity must be a producer. Under certain leases the landlord can qualify as a producer.¹¹⁹ Producer is defined as “a person who, as owner, landlord, tenant, or sharecropper, shares in the risk of producing the crop, or would have shared had the crops been produced.”¹²⁰ The payment limitation regulations make a distinction between a cash lease and a share lease.¹²¹ A lease is a cash lease if the lease provides for a guaranteed minimal rent.¹²² A share lease bases the rent on the amount of a crop produced or the proceeds derived from a crop.¹²³ Either rental must be customary and reasonable for the area.¹²⁴ Under a cash lease, the landlord is not a producer and therefore does not qualify to participate in the farm programs, since the landlord does not share in the risk of producing a crop.¹²⁵ However, in a share lease arrangement, the landlord shares the risk, thus she can qualify as a producer.¹²⁶ As long as the landlord does not finance the production of the tenant’s crop, the landlord can qualify as a “person” for the payment limitations.

Custom farming is also covered by the regulations.¹²⁷ Custom farming is defined in the regulations as “performing

117. *Id.*

118. 7 C.F.R. § 795.15 (1987) distinguishes between share leases and cash leases. In order to participate in the government programs the farmer must enter into a contract with the ASCS. To do this a farmer must be a “producer.” 7 C.F.R. § 713.49 (1987). The term “producer” is defined in 7 C.F.R. § 713.3(u) (1987).

119. 7 C.F.R. § 713.49 (1987).

120. 7 C.F.R. § 713.3(u) (1987).

121. 7 C.F.R. § 795.15 (1987).

122. *Id.*

123. *Id.*

124. *Id.*

125. 7 C.F.R. § 713.3(u) (1987).

126. *Id.*

127. 7 C.F.R. § 795.16 (1987).

of services on a farm such as land preparation, seeding, cultivating, applying pesticides, and harvesting for hire" unless the harvesting or chemical applying is done by "firms regularly engaged in such business."¹²⁸ Some farm equipment is currently so expensive that custom farming is becoming more common. The regulations provide that a custom farmer will be considered as separate from the farmer whose farm is using the custom work only if specific requirements are met.¹²⁹ These requirements are:

(1) compensation for the custom farming [performed is reasonable for the area] and is no way depending on the amount of crop produced, and (2) the person performing the custom work (and any other entity in which such person has more than a 20% interest) has no interest directly or indirectly (i) in the crop on the farm by taking any risk in the production of the crop, sharing in the proceeds of the crop, granting or guaranteeing the financing of the crop, (ii) in the allotment on the farm, or (iii) in the farm as landowner, landlord, mortgage holder, trustee, lienholder, guarantor, agent, manager, tenant, sharecropper, or any other similar capacity.¹³⁰

There are similar restrictions on any person who owns more than 20% of any legal entity performing custom work.¹³¹ As can be seen, there are two basic requirements if the custom farmer does not want to be merged with the farmer having the custom work done. The compensation for the custom work must be independent of the production of the farm, and the person doing the custom work can not have any interest in the farm for which the custom work is being done.

The ASCS states that occasional exchange of labor and/or equipment with no money involved is not considered to be custom farming.¹³² The ASCS notice also provides the following example of the effect of the custom farming regulations. Producer A provides financing (remember mere cosigning is

128. *Id.* at § 795.16(a) (1987).

129. *Id.*

130. *Id.* at § 795.16(a)(1).

131. *Id.* at § 795.16(b).

132. AGRIC. STABILIZATION & CONSERVATION SERV., U.S. DEP'T OF AGRIC., Notice CM-75 at 7, exhibit 1 (Dec. 2, 1986).

providing financing) to producer B. Both producers have totally separate farming operations. There are two "persons" here.¹³³ Producer A and B are not merged by the financing because A does not have an interest in B's farm. However, if A also does some custom work for B, the notice says the custom farming rules would merge the producers into one "person."¹³⁴ This merger takes place even if A is being paid a reasonable rate that is not in any way based on production. The regulations provide that a custom worker is not a separate person if he has an interest in the crop by granting or guaranteeing the financing of the crop.¹³⁵

In addition to all of the above limitations, any change in farm structure that increases the number of "persons" for payment limitations purposes must be bona fide and substantive.¹³⁶ The regulations provide two examples of structural changes not deemed to be bona fide and substantive.¹³⁷ In the first example, four shareholders own equal shares of a corporation that was engaged in farming. Three shareholders create a partnership which they own equally and rent land from the corporation that the partnership farms. The regulations state that this constitutes only one person for the payment limitations, not three or four.¹³⁸ If, on the other hand, the four shareholders had dissolved the corporation and had each taken one-fourth of the assets to farm separately, they would be four "persons" and would have separate payment limitations. A change such as a dissolution of a corporation is considered a substantive change.¹³⁹

In the second example, three individuals farm separate tracts. They would be entitled to three separate payment limitations.¹⁴⁰ They decide to form a corporation and divide the stock equally. The three shareholders then lease a portion of the land from the corporation. They individually farm the

133. *Id.*

134. *Id.*

135. 7 C.F.R. § 795.16(a)(6)(2)(i) (1987).

136. *Id.* at § 795.14(a).

137. *Id.* at § 795.14.

138. *Id.* at example 1.

139. *Id.* at § 795.14(b).

140. *Id.* at § 795.14, example 2.

leased land in an attempt to increase to four the number of persons for payment limitations. This is not a bona fide substantive change according to the regulations.¹⁴¹ Not only must a change be bona fide and substantive, but the resulting structure must meet all the regulatory limitations. In the above example, if the change were considered bona fide and substantive, the resulting structure of four "persons," assuming the corporation and three shareholders each farm separately, would not be merged as long as the shareholders were not family members.¹⁴² This is because none of the shareholders own more than 50% of the outstanding shares.¹⁴³ This change, however, is not a bona fide and substantive change, so there are only three "persons."¹⁴⁴ As can be seen, the rules are somewhat complex. Perhaps even more detailed regulations will be needed to deal with the ingenious methods people may employ to obtain more money from the government. In general, to create additional "persons" the farmer is going to have to irrevocably transfer assets to an adult child or someone else.¹⁴⁵ This was not done for the farms analyzed here.

D. Negative Cash Flow

Farm sales, off farm income, and government payments provide the yearly income flowing into the typical farm family. A farm's annual costs consists of a number of items. First are the cash expenses; these include variable and fixed cash expenses. Variable expenses consist of, for example, expendi-

141. *Id.*

142. *Id.* at § 795.8.

143. *Id.*

144. *Id.* at § 795.14, example 2.

145. This can be seen in the regulations on trusts as separate persons. Revocable trusts are not separate "persons" but an irrevocable trust can be. Irrevocable trusts and estates can be considered a separate person unless two or more trusts or estates have common beneficiaries or heirs (including spouses and children) with more than a 50% interest in the trusts or estates. In this case the multiple trusts or estates are considered one person. An individual beneficiary of a trust or an heir of an estate can be considered a person separate from the trust or estate only if the individual is engaged in the production of crops as a separate producer and meets the three part test of § 795.3. But here too, if the irrevocable trust or estate has only one beneficiary or heir, the sole beneficiary or heir cannot be considered a separate "person" for the payment limitations. 7 C.F.R. § 795.9 (1987).

tures for seed, fertilizer, fuel, herbicide, pesticide, and labor. The fixed cash expenses include such things as taxes, insurance, and general farm overhead. Many farms, especially those in financial trouble will also owe sizeable yearly interest and principal payments on outstanding loans. Last is capital replacement. This is not a cash expense until the farmer actually buys the machinery, but a viable farm needs to plan for the purchase of new equipment. The costs used in the computer model include all of the above costs except the capital replacement costs. These costs are listed in Table 8. Replacement costs are excluded on the basis that a farm in financial stress will delay replacement. Nonetheless, in a long run analysis, such costs must be covered.

Note that all of the above expenses are farm expenses and do not include the cost of supporting a family. The USDA in calculating farm cash flows allocates \$15,400 for family expenses.¹⁴⁶ Obviously, some farm families are going to need more than \$15,400 to meet family living expenses. The family living expense in the computer model is \$27,000.¹⁴⁷ This must cover all non-farm expenses.

Examining average farm costs and comparing these with average farm income, the USDA has calculated the percentage of farms which ended the year with a negative cash balance. If a farm ends the year with a negative cash balance, some cost item has remained unpaid. Since nonpayment to creditors leads to collection actions, farmers will need to borrow. If a farm has a low debt/asset ratio, the farmer can get a loan to meet expenses and hope that the next year's financial picture will sufficiently improve to allow repayment. Many in the farm community thought that the price and export declines of the early 1980's were going to be temporary.¹⁴⁸ Obviously they were wrong. When debts reach a high point as compared with assets, additional credit will probably not be available.

The USDA has analyzed the cash flow status of farms

146. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1986*, AGRIC. INFO. BULL. No. 500 at 51 (1986).

147. See *infra* Table 8 for the listing of costs.

148. R. GUNDERSON & E. OSPINA, *supra* note 26, at 14-15.

with different debt/asset ratios. Tables 3, 4, and 5, taken from 1986 USDA data,¹⁴⁹ show the percentage of farms in debt/asset groups with negative cash flow. These percentages are broken down in Table 3 based on size of farm, in Table 4 based on type of farm and in Table 5 based on area of the country. The numbers in parentheses indicates the total number of farms in the debt/asset classification. For example, Table 3 shows that there are 7,000 large farms with sales over \$500,000 that have a debt/asset ratio between 41% and 70%. Of these farms, 27.64% have negative cash flows. Thus, in determining how severe the financial crisis is, three aspects need to be considered: debt/asset ratio, percentage of farms with negative cash flow, and total number of farms in the debt/asset class. The higher the debt/asset ratio, the more serious is the negative cash flow, and the greater the number of farms, the greater the social problem becomes.

Table 3 demonstrates the negative cash flow, debt/asset picture of differently sized farms. The largest class, sales of

Table 3 — Percent of Farms with Negative Household Balance by Size of Farm

Size of Farm (sales class)	Debt/Asset Ratio		
	.41-.70	.71-1.0	Over 1.0
\$500,000 or over	27.64% (7)*	41.01% (3)	48.40% (3)
\$250,000 - \$499,999	30.44% (20)	36.64% (8)	54.65% (5)
\$100,000 - \$249,999	39.03% (46)	51.73% (21)	64.82% (18)
\$40,000 - \$99,999	59.33% (47)	66.70% (16)	71.53% (17)
\$20,000 - \$39,999	57.94% (21)	55.02% (8)	90.88% (6)
\$10,000 - \$19,999	64.45% (16)	54.32% (5)	70.29% (8)
\$9,999 or less	48.35% (41)	41.92% (12)	33.75% (5)

* () numbers represent the number of farms in thousands in the debt/asset class.

\$500,000 or over, has nearly one half of insolvent farms (debt/asset ratio over 1.0) with negative cash flow. Approximately 40% of these farms with debt/asset ratios between .71 and 1 have a negative cash flow. But the number of farms involved

149. ECON. RESEARCH SERV., *supra* note 146, at 51-64.

is small. There are only 3,000 insolvent farms and 3,000 farms in the .71 - 1 debt/asset class. More significant in terms of numbers of farms in financial stress are the farms with sales from \$40,000 to \$249,999. All of these are commercial farms. Commercial farms are defined as any farm having more than \$40,000 in yearly gross sales.

There are twenty-one thousand farms in the \$100,000 - \$249,999 sales class with .71 to 1.0 debt/asset ratios, and 18,000 farms in this sales class with debts exceeding assets. Little more than one half of the highly leveraged farms (ratios between .71 and 1) have negative flow while nearly two-thirds of the insolvent farms had negative cash flow. The \$40,000 - \$99,999 size farms are also in trouble. Sixteen thousand farms are highly leveraged and approximately two-thirds of these farms have negative cash flow. Over 70% of the insolvent farms have negative cash flow. Thus, a high proportion of these relatively large farms are in financial trouble. Yet, the largest farms exhibit the counter-intuitive characteristic of being insolvent although more than half of such farms have a positive cash flow.

Table 4 associates the percentage of farms exhibiting neg-

Table 4 — Percent of Farms with Negative Household Balance/Type of Farm

Type of Farm	Debt/Asset Ratio		
	.41-.70	.71-1.0	Over 1.0
Cash Grain	39.50% (64)*	43.13% (26)	63.67% (26)
Tobacco, Cotton	56.45% (12)	44.08% (2)	82.03% (2)
Vegetables, Fruits and Nuts	56.42% (5)	62.39% (4)	55.91% (2)
Nursery or Greenhouse	23.00% (1)	14.05% (1)	4.30% (2)
Other Crops	47.45% (10)	46.35% (2)	54.55% (4)
Beef, Hogs, Sheep	51.38% (58)	54.17% (16)	71.93% (18)
Dairy	57.52% (34)	63.00% (17)	81.54% (7)
Poultry	32.28% (6)	52.43% (1)	38.55% (1)
Other Livestock	62.41% (7)	61.29% (2)	60.93% (0)

* () numbers represent the number of farms in thousands in the debt/asset class.

ative cash flow with debt/asset ratio and type of farm. Here cash grain farms stand out as problematic. There are 26,000

cash grain farms in both the highly leveraged debt/asset class and the insolvent class. Approximately 43% of the highly leveraged farms have negative cash flow, and almost 64% of the insolvent cash grain farms have negative cash flow. While the percentage of farms in each class with negative cash flow may be higher for other types of farms—tobacco and cotton or dairy farms, for example—neither group has as many farms in trouble. Only beef, hog and sheep farms have large numbers of farms in both the highly leveraged and insolvent classes as well as a high percentage of negative cash flow farms.

Table 5 associates the percentage of negative cash flow farms with debt/asset ratio and area of the country. This

Table 5 — Percent of Farms with Negative Household Cash Balance/Region of Country

Region of Country	Debt/Asset Ratio			
	.41-.70	.71-1.0	Over 1.0	All Farms
Corn Belt	39.17% (51)*	45.11% (18)	61.62% (17)	(329)
Lake States	57.13% (38)	54.86% (14)	76.19% (13)	(198)
Northern Plains	51.47% (26)	52.00% (13)	50.38% (10)	(147)
Appalachia	53.85% (15)	94.51% (2)	91.31% (3)	(222)
Southeast	48.43% (9)	50.77% (3)	49.10% (2)	(87)
Delta	63.58% (5)	71.41% (2)	79.64% (4)	(69)
Southern Plains	45.20% (16)	43.45% (6)	80.31% (5)	(173)
Mountain	51.48% (14)	57.77% (4)	48.41% (3)	(90)
Pacific	41.67% (12)	54.56% (5)	62.79% (2)	(115)

* () numbers represent the number of farms in thousands in the debt/asset class.

Table demonstrates that it is the Corn Belt, Lake States and, to a lesser extent, the Northern Plains that have the most farms in trouble. The Corn Belt and Lake States have many farms with both high debt/asset ratios and negative cash flow.

Another interesting picture emerges when one compares the percentage of total farms in a given region that are highly leveraged or insolvent with the percentage of these farms that have a negative cash flow. In the Corn Belt, 10% of the farms are highly leveraged or insolvent, but only 45% and 62%, respectively, have negative cash flows. Nearly 14% of the farms

in the Lake States are in debt/asset trouble, but only half of the highly leveraged farms have negative cash flow. More of the insolvent farms have negative cash flow. Nearly 16% of the farms in the Northern Plains have highly leveraged and insolvent debt/asset ratios, but only half of these farms have negative cash flows. In the Delta region, where nearly 9% of the farms are in highly leveraged and insolvent positions, a very high percentage of these farms have negative cash flows. Over 70% of highly leveraged farms have negative cash flows while nearly 80% of the insolvent farms have negative cash flow. Thus, while the total number of farms in the Delta in financial trouble is not large when compared with the Corn Belt, the percentage of Delta farms in trouble is comparable, and these highly leveraged farms are in greater difficulty in the Delta since more have negative cash flows.

This is one of the reasons the representative farm in this study was placed in the Delta region. In particular, the farm is located in the eastern Arkansas portion of the Delta. Although the Delta region encompasses part of Mississippi and Louisiana as well as eastern Arkansas, Arkansas is the only one of these states that participated in a state farm finance survey conducted in March 1986.¹⁵⁰ The Delta region in Arkansas is divided into three crop reporting districts.¹⁵¹ Since all agricultural statistical data are aggregated to the crop reporting district level, it is important to understand the divisions.¹⁵² Crop reporting district number 3 is located in the northeast corner of the state, number 6 is in the east central region, and number 9 is located in the southeast corner.¹⁵³ Although only approximately half of district 9 is Delta country, all of districts 3 and 6 are Delta country.¹⁵⁴ Large cash

150. ARK. CROP & LIVESTOCK REPORTING SERV., *Farm Finance Survey*, ARKANSAS FARM REPORT 1 (April 4, 1986).

151. See R. GUNDERSON & E. OSPINA, *supra* note 26, at 21, which shows the Mississippi Alluvial Plain which forms the Delta region in Arkansas; ARK. AGRIC. STATISTICS SERV., ARK. AGRIC. EXPERIMENT STATION, 1986 ARKANSAS AGRICULTURAL STATISTICS (1987), which shows the crop reporting districts. There are nine total districts in Arkansas.

152. See ARK. AGRIC. STATISTICS SERV., ARK. AGRIC. EXPERIMENT STATION, 1986 ARKANSAS AGRICULTURAL STATISTICS (June 1987).

153. *Id.* at back cover.

154. Compare R. GUNDERSON & E. OSPINA *supra* note 26, at 21 (map) with the

grain farms dominate these three districts and make the Delta unlike any other part of the state.¹⁵⁵

There are two other geographical regions in the state. The West Gulf Coastal Plain covers the south central and southwestern part of the state.¹⁵⁶ This part of the state is devoted primarily to forestry.¹⁵⁷ The other major region of the state, occupying approximately one half of the state, is the Ozark-Ouachita mountain region.¹⁵⁸ The farming that occurs here is characterized by small and medium sized farms devoted primarily to livestock and poultry production.¹⁵⁹

A financial survey conducted in March 1986 illustrates the degree and variation of financial difficulties occurring throughout the geographical regions of Arkansas.¹⁶⁰ This survey gathered the debt/asset ratios and the percentages of farms delinquent on principal and interest payments on farm loans.¹⁶¹ The data tabulated do not present negative cash flows, but one can assume that highly leveraged farms experiencing negative cash flows will soon be delinquent on their loan payments, if they are not delinquent already. Table 6 displays the debt/asset ratios of Arkansas farms classified by district.¹⁶² The debt/asset classes are grouped differently from the classes in the USDA study. The second class, debt/asset ratios over 69%, was divided into two classes in the USDA study.¹⁶³

Table 6 demonstrates that the farms in the Delta (crop

demarcations of the crop reporting districts on the back cover of the ARK. AGRIC. STATISTICS SERV., *supra* note 152.

155. R. GUNDERSON & E. OSPINA, *supra* note 26, at 21-23.

156. *Id.* at 21.

157. *Id.*

158. *Id.*

159. *Id.*

160. The survey was conducted on March 1, 1986. The results have been reported twice. A more detailed discussion of the survey results can be found in ARK. CROP & LIVESTOCK REPORTING SERV., *Farm Finance Survey*, ARK. FARM REP. (April 4, 1986). An analysis of the survey results has been published by Shulstad and Collins, *Arkansas Farm Bureau Farm Finance Survey*, ARK. FARM RESEARCH (May-June 1986).

161. ARK. CROP & LIVESTOCK REPORTING SERV., *Farm Finance Survey*, ARK. FARM REP. (April 4, 1986).

162. *Id.* at 3.

163. The USDA study utilized debt/asset ratio groupings of .7 to 1.0 and over 1.0,

Table 6 — Debt/Asset Ratios of Arkansas Farms by Crop Reporting District

Crop Reporting District	Debt/Asset Ratio* .40 - .69	Debt/Asset Ratio* over .69
1 (northwest)	13.1	2.3
2 (north central)	7.3	.7
3 (northeast)	17.3	9.2
4 (west central)	7.0	3.5
5 (central)	6.9	.0
6 (east central)	23.1	14.4
7 (southwest)	11.3	3.2
8 (south central)	8.3	1.4
9 (southeast)	14.6	12.2

* Figures represent the percent of farms in the given debt/asset class for the indicated region.

reporting districts 3, 6 and 9) have the most significant debt/asset problems.¹⁶⁴ First, there are a large percentage of farms in initial debt/asset trouble. These are the farms with debt/asset ratios between 40% and 70%. The northeast (crop reporting district 3) has 17.3% of its farms in initial debt leverage problems. The east central (crop reporting district 6) has 23.1% of its farms facing trouble. The southeast (crop reporting district 9) has 14.6% of its farms in this category. These percentages are much higher than for the remaining Arkansas crop reporting districts. A debt/asset ratio between 40% and 70% is serious but not yet lethal.

More telling, however, are the percentages of farms that are very highly leveraged and insolvent (debt/asset ratios over 69%). In this category, the Delta districts really stand out. No other crop reporting district in Arkansas has a percentage over 3.5%. District 3 has 9.2% of its farms in serious debt/asset trouble; district 6 has had 14.4% of its farms in trouble; and district 9 has 12.2% of its farms very highly leveraged.

Table 7 reinforces the fact that the farms in eastern Ar-

respectively. See ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1, 1986*, AGRIC. INFO. BULL. No. 500 (1986).

164. Table 6 was taken from data in ARK. CROP & LIVESTOCK REPORTING SERV., *supra* note 161, at 3.

Table 7 — Arkansas Farm Loans — Percentage Delinquent by Crop Reporting District

CROP REPORTING DISTRICT									
ITEM	NW 1	NC 2	NE 3	WC 4	C 5	EC 6	SW 7	SC 8	SE 9
Number									
Number of farms (1985)	9,800	6,000	9,200	8,000	4,600	5,400	4,300	3,100	2,600
Percent									
<u>Real Estate Loans</u>									
Farms with loans	43.4	46.4	51.0	36.0	35.6	50.0	38.7	29.2	48.8
Farms current on loans*	92.2	92.2	87.0	97.6	100.0	88.5	95.8	90.5	70.0
Farms delinquent on principal and interest*	7.9	6.3	13.0	2.4	0	7.7	4.2	4.8	30.0
<u>Non-Real Estate Loans</u>									
Farms with loans	31.4	31.9	51.5	36.0	26.4	63.5	35.5	40.3	63.4
Farms current on loans*	90.9	100.0	91.1	90.2	100.0	86.4	95.5	86.2	80.8
Farms delinquent on principal and interest*	7.3	0	7.9	4.9	0	7.6	4.5	6.9	15.4

* These percentages do not add up to 100% because some farmers who responded indicated that they had loans but did not indicate the loan status.

kansas are in the most serious financial trouble.¹⁶⁵ This table illustrates the percentage of real estate and non-real estate farm loans that are delinquent in both principal and interest payments. It should be noted that not all farms have outstanding loans. Except for crop reporting district number 3, all districts have 50% or more of their farms with no outstanding real estate loans. Except for the Delta region (districts 3, 6 and 9), at least 60% of the farms in each of the other districts do not have non-real estate loans. These farms are not the focus of this study. It is the percentage of farms delinquent on both principal and interest on farm loans that is the focus here. These farms are facing liquidation unless they make satisfactory arrangements with their creditors or file for reorganization.

As noted previously, Table 7 presents the percentage of farms in each district that is delinquent on loans. For real estate loans, districts 3, 6 and 9 stand out. Only the northwest (crop reporting district number 1) has a similarly high figure. Crop reporting districts 3 and 6 have 13% and 7.7% of their farms with delinquent loans, respectively. The figure for district 9, 30% is extraordinarily high. For non-real estate loans, once again districts 3, 6 and 9 stand out with districts 1 and 8 also showing high delinquency percentages. Crop reporting district 9, again, is in the worst trouble with 15.4% of its farms delinquent on non-real estate loans. These figures correlated with the Arkansas debt/asset data demonstrate that the Arkansas Delta farms may be facing liquidation in large numbers. Furthermore, the Arkansas figures are consistent with the National USDA data. Both sources indicate that commercial cash grain farms are in the worst financial trouble in both Arkansas and the country as a whole.¹⁶⁶

The March 1986 survey also provides information on off farm income in Arkansas. Recall the USDA data showed that large cash grain and dairy farms had low off farm income.¹⁶⁷ The Arkansas Delta is characterized by large cash grain

165. The Table 7 delinquency data were taken from data in ARK. CROP & LIVESTOCK REPORTING SERV., *supra* note 161, at 2, 5.

166. See *supra* text accompanying notes 17-44.

167. See *supra* text accompanying notes 35-44.

farms. Districts 3, 6 and 9 have \$10,000, \$8,000 and \$10,000, respectively, in off farm income.¹⁶⁸ All other districts, except district 7 in the southwest, averaged \$14,000 in off farm income.¹⁶⁹ In addition to the lower averages of off farm income, farms in the Delta region have been burdened by higher than average interest costs and by the decline in foreign exports. Farms in districts 3, 6 and 9 on average paid \$10,000, \$12,000 and \$11,000, respectively, in interest for the year.¹⁷⁰ All other districts, except district 7, paid an average of \$4,000 or less.¹⁷¹ The cash grain farms of Arkansas have also been hit hard by the decline in exports over the past six years. In 1982, 65% of the cotton,¹⁷² 80% of the soybeans,¹⁷³ and 75% of the rice¹⁷⁴ produced in Arkansas were exported to foreign markets.

III. WILL CHAPTER 12 BE EFFECTIVE IN SAVING FARM ENTERPRISES?

A. The Structure of the Representative Farm

As noted above, the farm used in this study grows rice and soybeans. Flood irrigated soybeans are grown on 670 acres and rice is grown on 215 acres. This leaves 115 acres of the 1,000 tillable acres as set aside acres. This set aside acreage is mandated by the government rice program. Rice is grown on only 215 acres since the deficiency payments reach the maximum level of \$50,000 at this point. Thus, the farm's income from the government deficiency program is \$50,000.¹⁷⁵ The price for rice used in the study was \$3.08 per bushel. Growing rice outside of the government program is un-

168. ARK. CROP & LIVESTOCK REPORTING SERV., *supra* note 161, at 3.

169. *Id.*

170. *Id.*

171. *Id.*

172. R. GUNDERSON & E. OSPINA, *supra* note 26, at 34.

173. *Id.* at 35.

174. *Id.* at 37.

175. This \$50,000 deficiency payment is not the only government payment this farm receives. Marketing loans are loans made at the loan rate but only paid back at the world price. The loan rate per bushel for 1987 rice is \$3.08. The world market price for 1987 rice averaged about \$3.60 per cwt. *See infra* note 176. This calculates to \$1.64 per bushel of rice. The difference between the loan rate of \$3.08 and the world price of \$1.64 multiplied by the number of acres devoted to rice is the marketing loan.

economical since the world market price is so low.¹⁷⁶ This is why the farm only grows 215 acres of rice.

Soybeans cover those acres which are not growing rice or are not included in the set aside program. The price used for the soybeans was \$5.00 per bushel. Both the rice and soybean prices are functions of the loan rate program. The loan rate for soybeans is \$4.77 per bushel for 1987.¹⁷⁷ The price of \$5.00 is used because current market prices are near this level.¹⁷⁸ Our subjective belief is that the price will be around this figure for the next few years. Certainly they will not be less than \$4.77 for 1987, since this is the 1987 loan rate. Rice is priced exactly at the loan rate, \$3.08 per bushel. Because market prices are sufficiently lower than this floor price, a farmer will get this price either by using the CCC loan program or selling on the international market. With this latter option, the difference between the loan rate, and the price received will be made up by the marketing loan program.

There are substantial variations in cultural practices among farms in a given region. The computer analysis uses two different situations on the farm. For the average farm, the yield figures were taken from the average irrigated soybean yield in the Delta for 1986.¹⁷⁹ The costs for the average farm¹⁸⁰ were taken from the budgets compiled by the Arkansas Cooperative Agricultural Extension Service.¹⁸¹ These

176. The world market price of rice averaged about \$5.91 per cwt. for 1985-86 and \$3.60 per cwt. for 1985-86. FOREIGN AGRIC. SERV., ECON. RESEARCH SERV., U.S. DEPT' OF AGRIC., *World Agricultural Supply and Demand Estimates*, 208 (Aug. 11, 1987).

177. AGRIC. STABILIZATION & CONSERVATION SERV., U.S. DEPT' OF AGRIC., Notice LP-1183 (Ark. Notice 2-LP-Grain 121), exhibit 14 (September 18, 1986). The actual loan rate varies from county to county. This notice sets the loan rate for Arkansas counties. The loan rate ranges from \$4.70 per bushel in Sevier and Little River counties to \$4.83 per bushel in twelve other counties.

178. This was the price at the central Illinois market on September 14, 1987, at 4 p.m. eastern time. Wall St. J., Sept. 15, 1987, at 52, col. 6.

179. The 32 bushels per acre yield for the average farm is based on expert opinion which adjusted the average yields for irrigated soybeans for the whole state to reflect Delta yields. In 1984 the state average yield for irrigated beans was 31.1. In 1985 the average yield was 32.6 bushels per acre. In 1986 this figure was 29.6. ARK. AGRIC. STATISTICS SERV., *supra* note 152, at 26.

180. The cost figures used for the average farm can be found *infra* in Table 8.

181. J. CLARK, B. HERRINGTON, C. STUART, R. COATS, UNIV. OF ARK. COOPER-

budgets represent cultural practices that are commonly used by farmers in the various regions.¹⁸² To a certain degree expert opinion is also used by members of the extension service in drawing up the budgets. Expert opinion is necessary since strict adherence to average figures might generate a set of incompatible or noneconomic practices.¹⁸³

The verification farm's yield figures are an average taken from verification trials performed by farmers in cooperation with agronomists in the Extension Service. Actual yields on a farm are used in the verification trials and the farmer does the work. However, the farmer agrees to follow all of the advice of the extension agronomists. Verification trials were conducted during 1986 and the yield figures are an average of the yields on the verification trial fields.¹⁸⁴ The yields on the verification fields are higher than the average yields reported for the state.

The costs for the verification farm are also an average taken from the verification trials.¹⁸⁵ The verification trials on average had both higher yields and lower costs. Thus, the verification farm performs better in bankruptcy. It must be remembered, however, that the average farm's figures are based on actual farmer experience over a much larger number of farmers.

Yields for the average farm are 117.78 bushels per acre of rice¹⁸⁶ and 32 bushels per acre of soybeans.¹⁸⁷ The verification

ATIVE EXTENSION SERV., SOYBEAN PRODUCTION COST ESTIMATES, EA87-03 through EA87-11 (1987); C. STUART, J. CLARK, B. HERRINGTON, R. COATS, UNIV. OF ARK. COOPERATIVE EXTENSION SERV., ARKANSAS RICE PRODUCTION COST ESTIMATES, EA787-12 through EA87-14 (1987).

182. *Id.*

183. For example, certain types of farm implements require a tractor of a minimum size for efficient use. It could be that the average size of a particular implement, say a seeder, requires a tractor larger than the average size of tractors for efficient operation. Hence, the judgment must be used so that the farm design is consistent with real world practices.

184. COOPERATIVE EXTENSION SERV., UNIV. OF ARK., ARKANSAS CROP RESEARCH VERIFICATION TRIALS 1986-1987 (1987).

185. The cost figures used for the verification farm can be found *infra* in Table 8.

186. The state average yield for 1986 rice was 5,300 pounds per acre. ARK. AGRIC. STATISTICS SERV., *supra* note 152, at 22. One bushel of rough rice equals 45 pounds. ECON. STATISTICS & COOPERATIVES SERV., U.S. DEP'T OF AGRIC. CONVERSION FAC-

farm has yields of 138.39 bushels of rice per acre¹⁸⁸ and 38.4 bushels per acre of soybeans.¹⁸⁹ Multiplying these yields times the respective prices and adding the \$50,000 government deficiency program payment, the hypothetical average farm has a total income of \$235,142 compared with \$270,553 for the hypothetical verification farm. Neither representative farm has any off farm income.

Table 8 lists the costs for each of the farms. Note that costs for the verification farm are \$9,950 less than costs for the average farm. Both farms employ two workers. One worker is employed year round and the other is employed seasonally. This is an \$18,000 expense that a farm in bankruptcy or financial stress might be able to decrease. The family living expense for both farms is \$27,000. This is another area where the costs of a distressed farm might be decreased.

The income tax calculation for each farm utilized \$37,115 in depreciation. An actual farm, however, may have more or less depreciation, and the income tax calculation would correspondingly change.

The costs of a bankruptcy filing have been included only partially. The two biggest costs are attorney's fees and the trustee's fees. Only the trustee's fee has been included in the costs of the hypothetical farms. All Chapter 12 proceedings have a trustee appointed.¹⁹⁰ This differentiates it from Chapter 11 filings.¹⁹¹ The trustee in a Chapter 12 does not actually

TORS AND WEIGHTS AND MEASURES FOR AGRICULTURAL COMMODITIES AND THEIR PRODUCTS 49 (March 1979). Thus 5,300 pounds is 117.78 bushels of rice.

187. See *supra* note 179.

188. COOPERATIVE EXTENSION SERV., *supra* note 184, has both rice and soybean verification farm results. Detailed rice results can be found in C. STUART, J. CLARK, B. HERRINGTON, R. COATS, UNIV. OF ARK. COOPERATIVE EXTENSION SERV., *Economic Analysis of Individual Extension Rice Research Verification Trial Fields*, EA SVT86-01 through EA SVT86-10 (unpublished but available on requests made to the authors of the study).

189. COOPERATIVE EXTENSION SERV., *supra* note 184, has both rice and soybean results. Detailed soybean results can be found in J. CLARK, B. HERRINGTON, C. STUART, R. COATS, UNIV. OF ARK. COOPERATIVE EXTENSION SERV., *Economic Analysis of Individual Extension Soybean Research Verification Trial Fields*, EA RVT86-01 through EA RVT86-11 (unpublished but available on request made to the authors of the study).

190. 11 U.S.C.A. § 1202(a) (West Supp. 1987).

191. Section 1104 sets out the grounds for appointment of a trustee in a Chapter 11

Table 8 — Costs of Various Farms

Farm Costs (8)	Fully Owned (A)*	Fully Owned (V)*	Half Rented (A)*	Half Rented (V)*	Fully Rented (A)*	Fully Rented (V)*
Seed	8,371	7,669	8,371	7,669	8,371	7,669
Fertilizer	13,068	11,163	13,068	11,163	13,068	11,163
Crop Chemicals	18,885	17,262	18,885	17,262	18,885	17,262
Crop Insurance	4,561	4,686	3,991	4,101	3,421	3,515
Drying Fuel	11,460	13,502	10,027	11,814	8,595	10,127
Irrigation Energy	10,505	10,487	10,505	10,487	10,505	10,487
Machine Hire	16,706	16,392	16,706	16,392	16,706	16,392
Fuel & Oil	13,220	9,500	13,220	9,500	13,220	9,500
Repairs	14,089	11,160	14,089	11,160	14,089	11,160
Hired Labor	18,000	18,000	18,000	18,000	18,000	18,000
Farm Taxes	7,150	7,150	4,950	4,950	2,750	2,750
Farm Insurance	2,540	2,540	2,540	2,540	2,540	2,540
Utilities	1,200	1,200	1,200	1,200	1,200	1,200
Interest†	83,511	83,067	50,773	50,328	18,035	17,590
Miscellaneous	5,000	5,000	5,000	5,000	5,000	5,000

* (A) means average farm, (V) means verification farm.

† The interest rates set for all the farms in the table were 11% long term and 8% short term.

run the farm,¹⁹² he or she has only administrative duties.¹⁹³

The calculation of the trustee's fee is set out in section 586 of Chapter 12.¹⁹⁴ This fee is taken out of plan payments.¹⁹⁵ The maximum percentage that can be taken is 10% of the first \$450,000 in plan payments.¹⁹⁶ The percentage is reduced to 3% for plan payments after \$450,000 has been paid.¹⁹⁷ The court in *In re Meyer*¹⁹⁸ set the fee at 10% for Chapter 12, and held that a farm debtor had to plan for such costs.¹⁹⁹ The trustee fee for the hypothetical farm was set at 5% since that is the fee currently set by the Arkansas Chapter 12 trustee. Arkansas has not yet been set up under the U.S. Trustee System; however, this should happen sometime in 1988. The fee may then be raised, perhaps to the maximum 10%, thus aggravating the financial picture of these farms.

Outside of bankruptcy, with this income and cost picture, the average farm has negative cash flow at the 40% debt level.²⁰⁰ The farms' assets were valued at \$1,055,000, so the debt at the 40% level totals \$422,000. The total annual debt payment is \$58,527, thus the representative average farm is \$3,383 short of making this payment. This farm accordingly can save no money toward future equipment purchases. The representative verification farm, with its higher yields and lower costs, has \$28,245 remaining after principal and interest payments. When the debt/asset ratio reaches the 80% debt level, the verification farm will have a negative cash flow. At this level, it is \$12,275 short of making its payments. The av-

proceeding. 11 U.S.C. § 1104 (1982). The grounds include fraud, dishonesty, incompetence or gross mismanagement of the affairs of the debtor by the current management.

192. 11 U.S.C.A. § 1202(b) (West Supp. 1987) sets out the trustee's administrative duties.

193. *Id.*

194. 28 U.S.C.A. § 586(e)(1)(B) (West Supp. 1987).

195. 28 U.S.C.A. § 586(e)(1)(B)(ii) (West Supp. 1987).

196. 28 U.S.C.A. § 586(e)(1)(B)(ii)(I) (West Supp. 1987).

197. 28 U.S.C.A. § 586(e)(1)(B)(ii)(II) (West Supp. 1987).

198. *In re Meyer*, 73 Bankr. 457 (Bankr. E.D. Mo. 1987).

199. *Id.* at 459.

200. The authors have the computer print outs showing both farms outside of bankruptcy at no debt and at the 20%, 40% and 80% debt levels. This farm is fully owned. Due to depressed land values, this farm land was given a value of \$715,000. Both farms have \$99,000 worth of equipment and \$36,000 worth of stored soybeans. The debtor's house is worth \$90,000, his family car is worth \$6,000 and he has \$9,000 in cash.

average farm at the 80% debt level is \$56,298 short of making its debt payments. Both farms, especially the average farm, are in serious financial trouble at the 80% debt level. At this point, if not earlier, the farmer should be thinking about bankruptcy or restructuring his debt.

B. Bankruptcy—The New Chapter 12

Business persons who want to continue in their enterprise despite bankruptcy must consider three potential bankruptcy chapters. Chapter 13 is not available for most businesses because under Chapter 13 the debtor can have no more than \$350,000 in secured debt and \$100,000 in unsecured debt.²⁰¹ The average and verification farms could not file under Chapter 13. Chapter 12 is limited to family farmers with aggregate debts under \$1,500,000.²⁰² Nonfarmers cannot file in Chapter 12.²⁰³ Businesses in general can file in Chapter 11.²⁰⁴ There are no debt limitations in Chapter 11.²⁰⁵ The two farms could file either a Chapter 11 or Chapter 12 petition. Most farmers, however, if they meet the Chapter 12 debt limitation, should file in Chapter 12 rather than in Chapter 11.²⁰⁶ For this reason, these farms were placed in Chapter 12. This is not to say that a workout outside of bankruptcy is not preferable. If the farmer can get creditors to discharge some of the indebtedness, then many of the bankruptcy advantages can be reached without the expense, disruption and stress of bankruptcy. However, any nonbankruptcy discharge of indebtedness can have serious tax consequences.²⁰⁷ Careful consideration must be made of section 108 of the Internal Revenue Code.²⁰⁸ Certain farmers are protected by a section added by the 1986 tax changes as long as they are solvent at the time of the dis-

201. 11 U.S.C. § 109(e) (1982).

202. 11 U.S.C.A. § 109(f) (West Supp. 1987) provides that only family farmers can file in Chapter 12. 11 U.S.C.A. § 101(17) (West Supp. 1987) defines family farmer.

203. 11 U.S.C.A. § 109(f) (West Supp. 1987).

204. 11 U.S.C. § 109(b), (d) (Supp. III 1985).

205. *Id.*

206. Wilson, *Chapter 12 Family Farm Reorganization*, J. AGRIC. TAX'N & L. 299 (1987).

207. Flaccus, *Taxes, Farmers, and Bankruptcy and the 1986 Tax Changes: Much Has Changed, But Much Remains the Same*, 66 NEB. L. REV. 459, 475-82 (1987).

208. 26 U.S.C.A. § 108 (West 1984 & Supp. 1987).

charge.²⁰⁹ A farmer insolvent at the time of the discharge, but made solvent by the discharge, has more to worry about.²¹⁰ Under the worst scenario, all of the discharged indebtedness is ordinary income to the farmer for tax purposes.²¹¹ Discharge of indebtedness outside of bankruptcy necessitates care to avoid this result.

Chapter 12 is limited to family farmers, and section 101(17) defines family farmer.²¹² A family farmer's aggregate debts cannot exceed \$1,500,000.²¹³ Both computer farms easily qualify. They have a total of \$986,000 in liabilities. Bank 1 with a mortgage on the land is owed \$750,000. Various equipment lenders are owed \$161,000 and have security interests in the equipment. Bank 2, which lent an operating loan for the 1986 crop, is still owed \$25,000 but this is secured by stored soybeans from last year's crop worth \$25,000. The farmer owes \$8,000 to GMAC which has a security interest in the debtor's car and \$42,000 to Bank 3 which has a mortgage on the debtor's house. Both farms qualify as family farms for purposes of Chapter 12.

Chapter 12 has a number of advantages for the financially beleaguered farmer. The most immediate benefit is the automatic stay which halts all stages of creditor's collection efforts and gives the farmer a breathing spell.²¹⁴ A more significant benefit is the ability of the farmer to modify the claims of his or her creditors even if the creditors object.²¹⁵ Modification can involve a number of things. The payment period on a loan can be lengthened to reduce periodic payments.²¹⁶ The interest rate can be lowered if the contract interest rate is higher than the prevailing market rate.²¹⁷ Most importantly,

209. 26 U.S.C.A. § 108(g) (West Supp. 1987).

210. See Flaccus, *supra* note 207, at 475-482.

211. *Id.*; see 26 U.S.C.A. §§ 108, 1017 (West 1984 & Supp. 1987).

212. 11 U.S.C.A. § 101(17) (West Supp. 1987).

213. *Id.*

214. 11 U.S.C.A. § 362 (West 1979 & Supp. 1987).

215. 11 U.S.C.A. § 1222(b)(2), (3) (West Supp. 1987).

216. See *In re O'Farrell*, 74 Bankr. 421, 423-24 (Bankr. N.D. Fla. 1987).

217. See *In re Edwardson*, 74 Bankr. 831, 835-36 (Bankr. D. N.D. 1987); 5 COLLIER ON BANKRUPTCY ¶ 1129.03 (discusses the identical requirement in § 1129 of the Bankruptcy Code). See also *In re Monnier Bros.*, 755 F.2d 1336, 1339 (8th Cir. 1985) (cites COLLIER'S discussion with approval).

secured creditors have to be paid only the current value of the collateral.²¹⁸ If secured creditors are owed more than their collateral is worth, the creditor's secured claim can be reduced to the value of the collateral.²¹⁹ Any remaining debt is treated as unsecured.²²⁰ The plan then must pay on the secured claim the value of the collateral plus interest over the set period of time specified in the plan.²²¹

It is fairly likely that Chapter 12 debtors will owe more to their real estate lenders than the farmland is worth.²²² Many of the farmers in financial trouble expanded in the late 1970's when land values were at their peak. An Ohio study of farmers who quit farming during 1984-85 for financial reasons shows that nearly four out of every five expanded in some manner after 1976.²²³ If grain farmers bought land toward the end of the 1970's, their land is now worth 50-60% of its late 70's value. Farmland in Arkansas sold for an average price of \$1,096 at its peak in 1982.²²⁴ All across Arkansas, farmland

218. 11 U.S.C. § 1225(a)(5) (Supp. IV 1986) provides that a plan will be confirmed if a secured claim is provided for in the plan in specified ways. First is the acceptance of the treatment by the secured creditor. *Id.* at § 1225(a)(5)(A). Second, the collateral is turned over to the secured creditor. *Id.* at § 1225(a)(5)(C). Thirdly, the plan must provide that the creditor keep its lien on the property. *Id.* at § 1225(a)(5)(B)(i). The creditor must be paid as of the effective date of the plan the allowed amount of the claim. Section 506(a) defines the allowed amount of a creditor's interest in property. It states that it is secured to the extent of the value of the property and unsecured to the extent that the value of the property is less than the creditor's allowed claim. Section 506(d) allows the debtor to avoid that part of a secured parties' lien to the extent it exceeds the value of the property. 11 U.S.C. §§ 506(a), (d) (1982 & Supp. III 1985).

219. 11 U.S.C. § 506(a), (d) (1982 & Supp. III 1985).

220. *Id.*

221. This is because § 1225(a)(5)(B)(ii) says the value is fixed on the effective date of the plan. Since the value is to be paid over time, a greater dollar total must be paid to place the creditor in the position that it would have been in had it been paid off on the effective date of the plan. 11 U.S.C. § 1225(a)(5)(B)(ii) (Supp. IV 1986). *See In re Miller*, 13 Bankr. 110 (Bankr. S.D. Ind. 1981) (discussing nearly identical language as that found in § 1325(a)(5) of the Bankruptcy Code).

222. *See supra* text accompanying note 3 for a discussion of the rise and decline of farm land values.

223. Henderson and Frank, *Farm Transition Under Financial Stress: An Ohio Case Study*. This paper has not yet been published but is available from the authors on request sent to the Department of Agricultural Economics and Rural Sociology, The Ohio State University.

224. R. GUNDERSON & E. OSPINA, *supra* note 26, at 15.

decreased over 11% in 1983,²²⁵ 4% in 1984, and 9% in 1985.²²⁶ Nationwide, land prices declined an additional 8% in 1986.²²⁷ The cash grain farmland of the Delta fell more precipitously as did the land in Illinois, Iowa and Missouri which fell between 58% and 70% during this time period.²²⁸

The difference between what a secured creditor is owed and the value of the collateral becomes an unsecured claim of the creditor.²²⁹ Unsecured creditors need only be paid what they would have been paid had the farm been liquidated in a Chapter 7 proceeding plus interest.²³⁰ If the nonexempt farm assets are completely encumbered, the unsecured creditors would get nothing in the Chapter 7 liquidation.

Thus, the value given to the secured party's collateral is crucial. The debtor will wish to give it a low value and the secured party will wish to give it a high value. There are two basic ways of valuing an asset in bankruptcy. It has a value as part of an ongoing concern and a liquidated value which is usually lower than the going concern value.²³¹ The value of a secured party's claim is fixed under section 506 of the Code.²³² The Code does not specify whether a going concern or liquidation value is to be used. Several cases discussing valuation under section 506 have stated that the court must determine

225. *Id.*

226. *Id.*

227. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *For Farm Finances: Promising Signs of Cooling Crisis*, 8 FARMLINE NO. 4 at 6 (1987).

228. In its 1985 report, the Economic Research Service states that land values in Iowa and Nebraska had fallen 50%, and in Ohio, Illinois, Indiana, Minnesota, and Missouri land value had fallen 40%. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1985*, AGRIC. INFO. BULL. NO. 495 at 2 (1985). Nationwide land value fell 12% more in 1985. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *Financial Characteristics of U.S. Farms, January 1, 1986*, AGRIC. INFO. BULL. NO. 500 at 3 (1986). In 1986, farm land values fell nationally another 8%. ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *For Farm Finances: Promising Signs of Cooling Crisis*, 8 FARMLINE NO. 4 at 6 (1987).

229. 11 U.S.C. § 506(a) (1982).

230. 11 U.S.C.A. § 1225(a)(4) (West Supp. 1987). This value too is as of the effective date of the plan. Interest must be paid on unsecured claims under the plan as well as on secured claims.

231. For a good discussion of valuation in the various stages of a bankruptcy proceeding, see Fortyang and Mayet, *Valuation in Bankruptcy*, 32 U.C.L.A. L. REV. 1061 (1985).

232. 11 U.S.C. § 506 (1982 & Supp. III 1985).

what the property would receive in a customary and reasonable disposition.²³³ Since this is not a liquidation action, there will not be any attempts to sell the farm to gauge the market.

In a recent Chapter 12 case, *In re Beyer*, the debtor's appraiser appraised two land tracts by using a modified income approach.²³⁴ This approach used gross rental values adjusted for crop rotations to determine the value of the land.²³⁵ Under this approach a 295 acre tract was worth \$12,780, and a 160 acre tract was worth \$8,700.²³⁶ The debtor's plan called for slightly greater payments to the mortgage holders. The creditor's appraiser used a combination of an income approach and a comparable sales approach.²³⁷ Under the comparable sales approach, he valued the 295 acre tract at \$83,000 and the 160 acre parcel at \$41,000.²³⁸ Under the income approach, he calculated the values at \$87,500 and \$43,500, respectively.²³⁹ The court rejected the rental value approach used by the debtor's appraiser.²⁴⁰ Although the debtor had relied on the provision in section 1205 allowing rental value to act as adequate protection,²⁴¹ the court held that the rental value in section 1205 has nothing to do with valuing a secured creditor's claim under section 1225.²⁴²

Once a value is found for the property, reasonable costs of sale must be subtracted from the value because the secured party would not be able to realize that value out of the asset without paying the costs of sale. In *In re Parr*, the court held that 10% would be taken from the value of the property for selling costs in assessing the value of the secured party's claim under section 506.²⁴³ Since 1,000 acres would be difficult to sell in a cash sale in a relatively short period of time, this Arti-

233. See *In re Beyer*, 72 Bankr. 525 (Bankr. D. Colo. 1987); *In re Parr*, 30 Bankr. 276 (Bankr. N.D. Ala. 1983).

234. *In re Beyer*, 72 Bankr. 525, 526 (Bankr. D. Colo. 1987).

235. *Id.*

236. *Id.*

237. *Id.* at 527.

238. *Id.*

239. *Id.*

240. *Id.* at 528.

241. *Id.* at 526-28.

242. *Id.* at 528.

243. *In re Parr*, 30 Bankr. 276, 278 (Bankr. N.D. Ala. 1983).

cle uses three values for Bank 1's claim: \$450,000, \$600,000 and \$750,000. In the farmer's confirmation plan, Bank 1 must be paid either \$450,000, \$600,000 or \$750,000 plus interest depending on the value fixed by the court. The Bank was owed \$750,000, so either \$300,000, \$150,000 or none of its debt will be unsecured, depending on the value of the land fixed by the court.

The model assumes that the equipment has declined much less in value. It is worth \$150,000 in bankruptcy, leaving \$11,000 unsecured. Bank 2 is fully secured by the stored soybeans, and the farmer can turn over the beans to the bank to pay off Bank 2's claim.²⁴⁴ This leaves the house, the car and \$7,000 in cash as assets. The house is worth \$80,000, so the house lender, owed \$42,000, is fully secured. But the unsecured creditors will not benefit by the \$38,000 in equity in the house, because rural debtors in Arkansas can claim 80 acres of land with any improvements thereon, without regard to value, as exempt.²⁴⁵ The debtor must be married or head of a family in order to claim a homestead exemption. Since the representative farmers have a wife and family they can claim their homestead worth \$80,000 as exempt.²⁴⁶ They will still have to pay off the \$42,000 owed to the house lender, Bank 3, but unsecured creditors cannot reach the \$38,000 of the debtor's equity.²⁴⁷

The debtor owes \$8,000 to GMAC on a car worth \$6,500. GMAC will have to be paid \$6,500 plus interest as a secured creditor, leaving it a \$1,500 unsecured claim. This leaves the \$7,000 cash which could be claimed and shared pro

244. A secured party's claim can be satisfied by turning over the collateral to the creditor. 11 U.S.C.A. § 1225(a)(5)(C) (West Supp. 1987).

245. When in bankruptcy, the debtor's exemptions are governed by ARK. CODE ANN. § 16-66-218 (1988) which refers to the homestead exemptions found in the Arkansas Constitution Article 9, § 4. This provides a rural exemption of 160 acres but its value cannot exceed \$2,500. The debtor may keep 80 acres without regard to value. An urban homestead is one acre as long as it is not worth more than \$2,500 otherwise, the debtor can keep 1/4 acre without regard to value. ARK. CONST. art. 9, § 5. Both the rural and urban homestead dwellers can exempt any improvements on this acreage.

246. ARK. CONST. art. 9, § 3.

247. Specific liens can reach exempt property along with mechanics lien claimants and the IRS and a few others, but judicial lien creditors cannot reach exempt property. ARK. CONST. art. 9, § 3.

rata by the unsecured creditors after administrative expenses have been paid. The farmer may wish to protect this \$7,000 by using it to pay down the mortgage on the home, thereby increasing the farmer's equity in the homestead. The farmer may also be able to protect the \$7,000 by using it on other exempt assets. In Arkansas, life insurance policies are exempt,²⁴⁸ and one Arkansas bankruptcy judge and district court judge have ruled that any cash surrender value is exempt as well.²⁴⁹

The debtor should be able to transfer nonexempt assets into exempt assets on the eve of bankruptcy as long as such transfer is not done with an intent to hinder, delay or defraud creditors.²⁵⁰ In a Chapter 7 bankruptcy proceeding, a fraudu-

248. ARK. CODE ANN. § 16-66-209 (1987).

249. *In re Duckett*, 65 Bankr. 545 (D. W.D. Ark. 1986); *In re Johnson*, 66 Bankr. 339 (Bankr. W.D. Ark. 1986), *aff'd*, No. 86-5172 (W.D. Ark. Jan. 8, 1987).

250. The courts that allow a debtor to change nonexempt assets into exempt assets have relied on legislative history. The House and Senate Reports state: "[U]nder current law, the debtor will be permitted to convert nonexempt property into exempt property before filing a bankruptcy petition. . . . The practice is not fraudulent as to creditors, and permits the debtor to make full use of the exemptions to which he is entitled under the law." H.R. REP. NO. 595, 95th Cong., 1st Sess. 360-61; S. REP. NO. 989, 95th Cong., 2d Sess. 75 (1978), *reprinted in* 1978 U.S. CODE CONG. & AD. NEWS, 5787, 5963, 6317. The test is whether such a transfer was done with an intent to hinder, delay or defraud creditors. Not only would such intent constitute a fraudulent transfer, 11 U.S.C. § 548(a)(1) (Supp. III 1985), it also bars the debtor from discharge in Chapter 7. 11 U.S.C. § 727(a)(2) (1982). Thus, the test is whether the debtor had such an intent. In *Mickelson v. Anderson*, 31 Bankr. 635 (Bankr. D. Minn. 1982) the debtor, after consulting with an attorney about bankruptcy, sold various nonexempt assets, partly to his father. This brought \$13,600 which the debtor used to satisfy the mortgage on his exempt homestead. The court, stressing the unlimited value of Minnesota's homestead rules, held that this transfer was with such intent, and disallowed the exemption to the extent of the transfer. In *In re Collins*, 19 Bankr. 874 (Bankr. M.D. Fla. 1982), the court held that the transfer of \$55,000 in nonexempt assets to pay off \$55,000 of the homestead's mortgage barred discharge under § 727(a)(2). In *Ford v. Poston*, 773 F.2d 52 (4th Cir. 1985), the debtor transferred \$2,000 worth of real property to himself and his wife as tenants by the entirety one day after a judgment was rendered against him. Bankruptcy was filed within the year. The lower court's holding that this fraudulent transfer barred discharge under § 727(a)(2) was affirmed by the court. In *In re Lindberg*, 735 F.2d 1087, 1090 (8th Cir. 1984), the Eighth Circuit suggests that a debtor can take full use of his or her exemptions. The court recently barred the discharge of a debtor who told his bank he had no assets to pay off his loan at a time when he had \$60,000 that he was about to put into a homestead. *McCormick v. Security State Bank*, 822 F.2d 806 (8th Cir. 1987). The court held that such behavior constituted an intent to hinder, delay and defraud the creditors. *Id.*

lent transfer can actually bar discharge.²⁵¹ The Eighth Circuit has recently held that telling a creditor that no assets are available when some assets are indeed available and about to be put into exempt property constitutes a fraudulent transfer.²⁵² In that Chapter 7 case, the court barred the debtor's discharge.²⁵³ The Eighth Circuit noted, however, that it is not fraudulent *per se* to convert nonexempt assets into exempt assets on the eve of bankruptcy.²⁵⁴ This follows an earlier ruling by the Eighth Circuit.²⁵⁵

The two representative farms can realize the maximum benefit by filing under Chapter 12. All secured creditors except the house lender are undersecured. This creates either \$12,500, \$162,500 or \$312,500 in unsecured debt, depending on the value of the real estate. Because there are no unencumbered, nonexempt assets, unsecured creditors would receive nothing in a Chapter 7 liquidation. The Chapter 12 plan, therefore, does not need to provide payments on the unsecured debt.²⁵⁶

However, there is one danger when the plan provides for no payments on unsecured debts. Section 1225(a)(3) requires the plan to be proposed in good faith.²⁵⁷ There is a similar provision in Chapter 13.²⁵⁸ Some courts have held that a Chapter 13 plan in which nothing is to be paid to unsecured creditors is not proposed in good faith.²⁵⁹ Among the circuit courts, the Eighth Circuit was the first to so rule.²⁶⁰ In *In re Terry*, the court held that a plan paying nothing to unsecured

251. 11 U.S.C. § 727(a)(2) (1982).

252. *McCormick v. Security State Bank*, 822 F.2d 806 (8th Cir. 1987).

253. *Id.*

254. *Id.*

255. In *In re Lindberg*, 735 F.2d 1087 (8th Cir. 1984), the issue was whether new exemptions that arose between a Chapter 13 filing and the date the case was converted to Chapter 7 could be claimed by the debtor. The court held that the date of the conversion controlled. Part of its rationale was that the debtor was free to convert nonexempt assets into exempt assets close to bankruptcy. *Id.* at 1090 (the legislative history is cited with approval).

256. 11 U.S.C.A. § 1225(a)(4) (West Supp. 1987).

257. 11 U.S.C.A. § 1225(a)(3) (West Supp. 1987).

258. 11 U.S.C. § 1325(a)(4) (1982).

259. See *In re Terry*, 630 F.2d 634 (8th Cir. 1980). *In re Brown*, 7 Bankr. 529 (Bankr. S.D. N.Y. 1980); *In re Hurd*, 6 Bankr. 329 (Bankr. N.D. Ind. 1980).

260. *In re Terry*, 630 F.2d 634 (8th Cir. 1980).

creditors could not be confirmed because it was a bad faith plan.²⁶¹ The court reached this conclusion despite the fact that the debtors had no more money with which to pay unsecured creditors.²⁶² The court reasoned that someone with so little money should have to liquidate under Chapter 7.²⁶³ Shortly thereafter, five other circuit courts addressed the issue and held that a *per se* rule was inappropriate and that each case would have to be examined under a flexible standard.²⁶⁴

In *In re Estus*,²⁶⁵ the Eighth Circuit had a chance to re-examine the rule, and the court retreated from a *per se* approach.²⁶⁶ It does not overrule *Terry* but states that *Terry* was a nonpayment case and *Estus* involved a minimal payment.²⁶⁷ *Estus* adopts a flexible test to determine "whether the plan constitutes an abuse of the provisions, purpose, or spirit" of the applicable chapter.²⁶⁸ The court then provides a nonexclusive list of relevant factors.²⁶⁹ Thus, under the *Estus* rule, some plans should be approved in Chapter 13 despite low payments to unsecured creditors. The failure to overturn *Terry*, however, and the court's explanation of *Terry* as a case dealing with nonpayment instead of low payment²⁷⁰ means that good faith issues will be raised when nonpayment is proposed.

A good argument can be made, however, that where all creditors are getting paid substantial sums, a failure to pay the unsecured portion of those claims does not amount to bad

261. *Id.* at 635-36.

262. *Id.* at 635.

263. *Id.* at 635-36 & n.5.

264. *In re Metz*, 820 F.2d 1495 (9th Cir. 1987); *Public Finance Corp. v. Freeman*, 712 F.2d 219, 221 (5th Cir. 1983); *Barnes v. Whelan*, 689 F.2d 193, 197-200 (D.C. Cir. 1982); *Deans v. O'Donnell*, 692 F.2d 968 (4th Cir. 1982); *In re Rimgale*, 669 F.2d 426, 431-33 (7th Cir. 1982); and *In re Goeb*, 675 F.2d 1386 (9th Cir. 1982).

265. *In re Estus*, 695 F.2d 311 (8th Cir. 1982).

266. *Id.*

267. *Id.* at 315 n.9.

268. *Id.* at 316.

269. *Id.* at 317. These factors include: (1) the amount of plan payments; (2) the debtor's employment history; (3) the duration of the plan; (4) the accuracy of plan statements; (5) the extent of preferential treatment between classes of creditors; (6) the extent to which secured debt is modified; (7) the type of debt being modified, is it a nondischargeable debt in Chapter 7; and (8) the existence of special circumstances such as inordinate medical expenses. *Id.*

270. *Id.* at 315 n.9.

faith. Moreover, the *Terry* court was concerned about a debtor obtaining the special benefits of Chapter 13 without paying more than would have been paid to creditors in Chapter 7.²⁷¹ Chapter 12 is different in two respects. First, one of the benefits of Chapter 13 is a broader discharge.²⁷² It discharges most of the debts that are nondischargeable in Chapter 7.²⁷³ This is not true of Chapter 12.²⁷⁴ Nondischargeable Chapter 7 debts are also nondischargeable in Chapter 12.²⁷⁵ Secondly, and perhaps more importantly, Chapter 12 was passed to enable family farmers to stay in business and keep their farms.

If after substantial payments on secured debt, the farmer has no more disposable income with which to pay unsecured debt, the purpose of Chapter 12 would not be met where the farmer is forced to liquidate. Moreover, since the *Terry* case was decided, Congress amended Chapter 13 to require the debtor to pay all projected disposable income during the plan.²⁷⁶ The plan must pay out all disposable income.²⁷⁷ Even if the plan called for nominal or no payment to unsecured creditors, the disposable income test would result in payment to the unsecured creditors if the farm had any disposable income left after plan payments.²⁷⁸ This disposable income test has been placed in Chapter 12.²⁷⁹ Disposable income is defined as money not reasonably necessary for the support of the debtor and his other dependents nor reasonably necessary for

271. *In re Terry*, 630 F.2d 634 (8th Cir. 1980).

272. 11 U.S.C. § 1328(a) (1982 & Supp. III 1985). This broader discharge is only available once plan payments are made. Once plan payments are made, it is a broader discharge. The only § 523 nondischargeable debts that are nondischargeable under § 1328(a) are child support and alimony claims in § 523(a)(5).

273. *Id.*

274. 11 U.S.C.A. § 523(a) (West Supp. 1987) applies to §§ 1228(a) and 1228(b). These two sections set out the discharge in Chapter 12. In addition, §§ 1228(a) and 1228(c) provide that § 523(a) debts are not discharged in a § 1228 discharge. 11 U.S.C. § 523(a) (West Supp. 1987); 11 U.S.C.A. § 1228 (West Supp. 1987).

275. *Id.*

276. 11 U.S.C. § 1325(b) (Supp. III 1985). The debtor must pay out all disposable income only if the trustee or a holder of an allowed unsecured claim objects.

277. *Id.*

278. The Chapter 13 trustee in Arkansas, Mr. A.L. Penney, Esq., says he requires all plans to provide that all disposable income will be paid out under the plan.

279. 11 U.S.C.A. § 1225(b) (West Supp. 1987).

the preservation or operation of the debtor's business.²⁸⁰ This money must be paid out under the plan. This test will insure that unsecured creditors get paid something if the farm does better than expected. Thus, while a Chapter 7 would preclude any possibility of unsecured debt being paid, a Chapter 12 holds out some chance of unsecured debts being paid when secured debts exceed available assets.

C. Will Representative Farms Cash Flow Under Chapter 12?

When a farm goes into Chapter 12, there are a number of economic and financial factors that will influence the farm's ability to complete the plan successfully and become financially healthy. The production history of a farm will set the production projections in the plan. Two production scenarios have been used here with the average and verification farms.²⁸¹ The farm's income consists of crop sales (commodity prices times production) plus government payments. The court in confirming a plan will look at current prices and historical trends. Only a change in soybean prices will make a difference in the farm's income. Because the rice loan rate is so high compared with world market rice prices, and the target price is so high, a change in rice prices is not likely to change the farm's income.²⁸² For this reason, only soybean prices were varied in successive scenarios. The soybean prices used in the model were the current price of \$5.00 per bushel and the hoped for prices of \$7.00 and \$9.00. As will be shown, an increase in prices of soybeans has the most dramatic effect on the farm successfully completing the plan.²⁸³

Since farms in bankruptcy are heavily burdened with debt, the interest rate fixed by the court to be paid to creditors will affect a farm's ability to pay that debt. The rate fixed by

280. *Id.* at § 1225(b)(2).

281. *See supra* text accompanying notes 179-200.

282. The 1987 rice loan rate per hundred weight is \$6.84. The 1987 target price is \$11.66 per hundred weight. The average world price from August 1986 to July 1987 was \$3.85 per hundred weight. FOREIGN AGRIC. SERV., ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., *World Agricultural Supply and Demand Estimates*, 208 (Aug. 11, 1987).

283. *See infra* Table 9.

the court does not need to be the contract rate. Courts hold that the market rate as of the effective date of the plan will suffice.²⁸⁴ In fixing the market rate, courts take into consideration the length of the loan and the risks of nonpayment or default.²⁸⁵ Two recent Chapter 12 cases are instructive;²⁸⁶ they are the only Chapter 12 cases to date which have discussed the appropriate interest rate to be paid on deferred payment claims. In *In re O'Farrell*,²⁸⁷ the secured creditor was a federal land bank. The debtor proposed to pay the value of the land over 30 years at a 9% interest rate.²⁸⁸ The only evidence as to the market rate was provided by the bank.²⁸⁹ Its officers testified that current fixed rates on their loans ranged from 10.33% to 13.33%, depending on the risk of the loan.²⁹⁰ The court set the interest rate at 11%.²⁹¹ In *In re Edwardson*,²⁹² the debtor proposed to pay 8% interest on a secured bank debt over 30 years. The court fixed the interest rate at 12% because the bank's current farm loans were being fixed at 12% interest rates.²⁹³

Lower rates may be applicable for shorter loan periods.²⁹⁴ The car and equipment loans of the farms in question are to be paid back in seven years. Analogous to these lower rates for shorter loan periods are the cases determining the interest rate to be paid on unsecured and secured tax liability. Unsecured

284. See *In re Camino Real Landscape Maintenance Contractors*, 818 F.2d 1503 (9th Cir. 1987); *United States v. Neal Pharmacal Co.*, 789 F.2d 1283 (8th Cir. 1986); *In re Edwardson*, 74 Bankr. 831 (Bankr. D. N.D. 1987); *In re O'Farrell*, 74 Bankr. 421 (Bankr. N.D. Fla. 1987).

285. *United States v. Neal Pharmacal Co.*, 789 F.2d at 1285-86; *In re Edwards*, 74 Bankr. at 835-36; *In re O'Farrell*, 74 Bankr. at 424.

286. *In re Edwardson*, 74 Bankr. 831 (Bankr. D. N.D. 1987); *In re O'Farrell*, 74 Bankr. 421 (Bankr. N.D. Fla. 1987).

287. 74 Bankr. at 422.

288. *Id.* at 424.

289. *Id.*

290. *Id.*

291. *Id.*

292. 74 Bankr. at 836.

293. *Id.*

294. One of the factors to be considered is the length of borrowing. See *United States v. Neal Pharmacal Co.*, 789 F.2d 1283, 1285-86 (8th Cir. 1986). In *In re Edwardson*, 74 Bankr. 831 (Bankr. D. N.D. 1987), the court held that the factors relied on in *Neal Pharmacal Co.* and other Chapter 11 Eighth Circuit cases are equally applicable in Chapter 12 cases. *Id.* at 836.

tax liability is a priority claim under section 507(a)(7).²⁹⁵ In Chapter 11, section 507(a)(7) tax claims must be paid within six years after the fixing of the value of the claim.²⁹⁶ The interest rate on deferred tax payments is to be fixed at market rates just as on other debts.²⁹⁷ In the recent case of *In re Camino Real Landscape Maintenance Contractors*,²⁹⁸ the Ninth Circuit affirmed an 8% interest rate fixed by the bankruptcy court. That court took into consideration a current treasury bill rate of 7.02%, added 2% for the added risk of the IRS, and then subtracted 1% because the IRS's debt was fully secured.²⁹⁹

Because short and long term interest rates are often different, three sets of long and short term rates were used. The long term rates which were used were 10%, 11% and 12%. The short term rates used were 7%, 8% and 9%, with the lowest, medium, and highest long and short term rates being used together. While these plausible changes in the interest rates affected farm performance, even the combination of the lowest rates of 10% long term and 7% short term did not enable the farm to cash flow.³⁰⁰

To keep the number of computer runs within a manageable range, each variable was not run against each other variable for all possible settings. The average and verification farms were run for each of the alternative variable settings. The interest rate changes were run with the land value and bean prices fixed as of today. Since the land valued at \$715,000³⁰¹ outside of bankruptcy is likely to be valued slightly lower in bankruptcy and because a sale fee is subtracted,³⁰² \$600,000 was the bankruptcy value placed on the land today. This same \$600,000 land valuation was used for

295. 11 U.S.C. § 507(a)(7) (Supp. III 1985).

296. 11 U.S.C. § 1129(a)(9)(C) (1982).

297. *In re Camino Real Landscape Maintenance Contractors*, 818 F.2d 1503 (9th Cir. 1987); *United States v. Neal Pharmacal Co.*, 789 F.2d 1283 (8th Cir. 1986).

298. 818 F.2d at 1507-8.

299. *Id.*

300. *See infra* Table 9.

301. This is the value placed on the land by expert opinion from the Arkansas Cooperative Extension Service Faculty.

302. *In re Parr*, 30 Bankr. 276, 278 (Bankr. N.D. Ala. 1983).

the price changes as well.³⁰³

The soybean price used for the interest rate and land value changes was \$5.00 per bushel. This value was chosen because it represents the current price of soybeans.³⁰⁴ The interest rates used for both the changes in land value and prices were 11% for long term debt and 8% for short term indebtedness.³⁰⁵ Thus, for interest rate changes the land value was fixed at \$600,000 and soybean prices were set at \$5.00 a bushel.³⁰⁶ For the land value variable changes, the interest rate was fixed at 11% and 8% and the price of soybeans at \$5.00.³⁰⁷ Finally, for the soybean price variations, the interest rate was fixed at 11% and 8% and the land value was fixed at \$600,000.³⁰⁸

Table 9 illustrates the cash flow of the average and verification farms under the different variable assumptions. A cash flow number with a minus sign in front of it means that the farm fell short of meeting its interest and principal payment obligations by the indicated amount. A farm with negative cash flow, even with debt discharged, should not be confirmed since it is not viable. As can be seen, neither farm under the different interest rate variables has positive cash flow. The verification farm comes close with interest rates of 10% and 7%. It lacks only \$5,661 in making its interest and principal payments. Even at this lower interest rate, the average farm is \$45,817 short of meeting its yearly debt obligations. Thus, unless rates fall dramatically, it is not a change in interest rates that will make the farm cash flow.

303. See *infra* Table 9.

304. The \$5.00 a bushel figure is an estimated price based on the October, 1987 spot prices in the Central Illinois market at 4:00 p.m. eastern time. Spot prices for soybeans on the same dates the year before, October, 1986, and the 1987 loan rate for soybeans of \$4.77 a bushel set the floor price. The spot prices from October 18, 1987 to October 22, 1987 ranged from \$4.95 to \$5.16 per bushel. On these dates in 1986, soybean prices ranged from \$4.57 to \$4.70 per bushel. Wall St. J., Oct. 22, 1987, at 50, col. 6; Wall St. J., Oct. 21, 1987, at 44, col. 6; Wall St. J., Oct. 20, 1987, at 52, col. 6; Wall St. J., Oct. 19, 1987, at 38, col. 6; Wall St. J., Oct. 18, 1987, at 34, col. 6.

305. Interest rates are currently moving up and even the 11% long term rate and the 8% short term rate may be optimistic.

306. See *infra* Table 9.

307. *Id.*

308. *Id.*

Table 9 — Economic Variations on the Fully Owned Farm

Interest Rate Long Term/ Short Term	Price of Soybeans	Land Valuation	Farm Type*	Ownership†	Net Cash Farm Income	Cash Surplus or Deficit
Interest Rate Variations						
12/9%	\$5.00	\$600,000	A	FO	-\$1,465	-\$61,636
12/9%	\$5.00	\$600,000	V	FO	\$43,482	-\$17,087
11/8%	\$5.00	\$600,000	A	FO	\$6,878	-\$53,659
11/8%	\$5.00	\$600,000	V	FO	\$51,776	-\$10,733
10/7%	\$5.00	\$600,000	A	FO	\$15,221	-\$45,817
10/7%	\$5.00	\$600,000	V	FO	\$60,060	-\$5,661
Land Value Variations						
11/8%	\$5.00	\$750,000	A	FO	-\$9,446	-\$71,776
11/8%	\$5.00	\$750,000	V	FO	\$35,452	-\$26,878
11/8%	\$5.00	\$600,000	A	FO	\$6,878	-\$53,659
11/8%	\$5.00	\$600,000	V	FO	\$51,776	-\$10,733
11/8%	\$5.00	\$450,000	A	FO	\$23,204	-\$35,543
11/8%	\$5.00	\$450,000	V	FO	\$68,101	\$1,973
Soybean Price Variations						
11/8%	\$5.00	\$600,000	A	FO	\$6,878	-\$53,659
11/8%	\$5.00	\$600,000	V	FO	\$51,776	-\$10,733
11/8%	\$7.00	\$600,000	A	FO	\$49,758	-\$12,173
11/8%	\$7.00	\$600,000	V	FO	\$103,232	\$23,531
11/8%	\$9.00	\$600,000	A	FO	\$92,638	\$16,645
11/8%	\$9.00	\$600,000	V	FO	\$154,688	\$55,344

* A represents the average farm and V represents the verification farm.

† FO represents the fully owned farm.

The effect of changing land values is also shown by Table 9. Here, too, the effect is to make only the verification farm cash flow and this is by the negligible amount of \$1,973. Thus, even fixing the land value at \$450,000 and discharging much more of the mortgagee's debt does not make these farms truly cash flow. The average farm even with the low land value is \$35,543 short of making debt payments.

Only a change in soybean prices has a dramatic effect on the ability to cash flow. At a price of \$7.00 per bushel for soybeans, both farms could cash flow. The verification farm shows a cash flow of \$23,531, even with no outside employment. The average farm would need outside employment to make up its \$12,173 deficit. But the average off farm income in the Delta is low. In crop reporting districts 3, 6 and 9, the three Arkansas delta districts, the average off farm income is \$10,000, \$8,000 and \$10,000, respectively.³⁰⁹ Thus to cash flow at \$7.00 beans, the average farm would need to cut costs as well as add outside employment.

With beans at \$9.00 per bushel both farms cash flow even with no outside employment. As can be seen, these farms need an increase in farm prices to complete bankruptcy successfully. However, even with \$9.00 beans, neither farm is deducting money to replace equipment. A farm must be able to replace equipment to be financially viable over time.

All of the above economic variable changes were made on a fully owned farm. Not all farms are fully owned, however. Therefore, the average and verified farms were analyzed using farms that were half owned and half subject to a crop share lease. A fully rented farm was analyzed as well. In the half owned farm, the land debt is reduced to \$300,000. In the fully rented farm, there is no land debt. The lease utilized in the model is a 25% crop share lease. This means the landlord is entitled to 25% of one half of the farm income, including government payments on the half rented farm. On the fully rented farm the landlord is entitled to 25% of farm income. For the half owned farm the landlord also shares $\frac{1}{4}$ of half of

309. ARK. CROP & LIVESTOCK REPORTING SERV., *Farm Finance Survey*, ARK. FARM REP. 3 (April 4, 1986).

the crop insurance cost and the drying fuel cost. For the fully rented farm the landlord shares $\frac{1}{4}$ of the full cost of crop insurance and drying fuel. These costs are listed in Table 8.

Table 10 illustrates the cash flow potential of the partially owned farm and the fully rented farm. Note that neither the average farm nor the verification farm will cash flow with \$5.00 beans. The verification farm could cash flow with outside income since it is only \$4,867 short of making its debt payments.

At \$7.00 beans, only the verification farm cash flows. The average farm is still \$7,035 in the red. Outside income or a reduction in costs are needed to make it cash flow.

The fully rented farm is in a better position but is still not in good shape. At \$5.00 beans only the verification farm cash flows and then only by \$996. At \$7.00 beans the average farm still does not cash flow. But in contrast to the half owned, half rented farm, the average farm is closer to cash flowing. It is only \$1,979 in the red.

Although these partially and fully rented farms were not analyzed with different land values and different interest rates, the positions of the fully owned, partially owned, and fully rented farms are not that different. Using the same interest rates (11% and 8%) and the same land valuation (\$600,000) and the same soybean price (\$5.00), the fully owned average farm is \$53,659 in the red, the half owned farm is \$42,529 in the red and the fully rented farm is \$31,398 in the red. All three farms are far from cash flowing.

Interest rate changes help. A one point drop saves the fully owned average farm \$7,842. Since the partially owned and fully rented farms have less debt, however, interest rate changes will have less of an impact on these farms. The change in land value for the fully owned farm from \$600,000 to \$450,000 has a bigger impact. For the fully owned average farm, this saves the farm \$18,116. Once again, with less land owned by the partially owned farm, this change in land value will have less of an impact. For the wholly rented farm the change in land values has no impact.

Thus, even for the partially owned and fully rented farms, commodity price changes have the biggest impact.

Table 10 — Economic Variations on the Partially and Fully Rented Farms

Interest Rate Long Term/ Short Term	Price of Soybeans	Land Valuation	Farm Type*	Ownership†	Net Cash Farm Income	Cash Surplus or Deficit
Half Owned/Half Rented Farms and Price Variation						
11/8%	\$5.00	\$300,000	A	HO/CS	\$14,427	—\$42,529
11/8%	\$5.00	\$300,000	V	HO/CS	\$55,169	—\$4,867
11/8%	\$7.00	\$300,000	A	HO/CS	\$51,947	—\$7,035
11/8%	\$7.00	\$300,000	V	HO/CS	\$100,193	\$25,137
Fully Rented Farm and Price Variations						
11/8%	\$5.00	\$0	A	CS	\$21,974	—\$31,398
11/8%	\$5.00	\$0	V	CS	\$58,562	\$996
11/8%	\$7.00	\$0	A	CS	\$54,134	—\$1,979
11/8%	\$7.00	\$0	V	CS	\$97,154	\$26,745

* A represents the average farm and V represents the verification farm.

† HO/CS represents the half owned and half crop share lease farm. CS represents the fully crop shared lease farm.

When the price of soybeans is moved from \$5.00 to \$7.00, the partially owned farm is \$35,494 better off. The fully rented farm benefits less due to the larger landlord share, but it does benefit by \$29,419. Overall, however, the fully rented farm is in the best shape for the average farm as well as for the verification farm.

The bottom line is still bleak for these farms. Despite writing down land and equipment debt and writing off all unsecured debt in bankruptcy, these farms fail to cash flow unless commodity prices rise significantly. The experience of actual farms may differ, but the farms analyzed here based on recent Arkansas data indicate that unless commodity prices rise substantially, the chance of a successful Chapter 12 plan is in doubt for many heavily indebted farmers.

D. Financing: Another Stumbling Block to Successful Reorganization

In addition to the problem of showing the court that the plan is viable, many Chapter 12 farms may have difficulty in obtaining post petition financing. Even when these two farms cash flowed, neither farm made sufficient money to cover production expenses for the next year's crop. Since no creditor can be forced to lend money to a debtor in bankruptcy, the debtor has to solicit a loan commitment that is granted voluntarily. Also, Chapter 12 has not added any additional carrots to entice entities to make post petition loans in Chapter 12. Thus, the only inducements available are those which are provided for in section 364, i.e., administrative expenses, liens on unencumbered property, or super liens above existing creditors.³¹⁰ If no assets are available for new liens, and old creditors cannot be adequately protected if a new creditor is given a super priority lien, the lenders would likely be unwilling to lend.³¹¹

310. 11 U.S.C. § 364 (1982).

311. Section 364(c) gives a post petition lender the security of a lien on unencumbered property or a junior lien on partially encumbered property. If no property is available to provide protection then § 364(c) does not help. Section 364(d) provides for a super lien equal to or above existing liens. This cannot be granted, however, unless existing liens are adequately protected. Thus, if encumbered property is fully encumbered, § 364(d) will not be available. Sections 364(a) and (b) provide administrative

Another way of financing a crop is to sell stored farm products and use the proceeds of the sale to finance the production of a new crop. The hypothetical farms would not be helped much by this since they have only \$25,000 in stored crops. The hypothetical assumes these crops are turned over to the lender to pay off last year's operating loan. It also assumes that a new loan is obtained and that the "interest" cost used for both farms (shown on Table 8) includes interest at 8% per year on the operating loan. If the farmer were able to use the proceeds from the stored crop to finance the new crop, then the interest would be paid to the creditor holding a security interest in the stored crops. Under either scenario, the farm will have to pay interest on the money it uses to put in the new crop.

If a farmer is not likely to get post petition credit, the farmer should consider a bankruptcy filing in time to enable the farmer to sell stored farm products to raise sufficient funds to pay for current year's operating expenses under bankruptcy. Given the difficulty in convincing farm lenders to make additional loans to a farm in bankruptcy, stored crops may be the only source of operating capital.

Since most stored crops will be subject to a security interest, the secured party will have to get a substitute lien that will adequately protect its interest.³¹² In the farm case the farmer offers to give the lender a replacement lien on the sale proceeds from the stored crops. The issue is whether the secured party is adequately protected by the replacement lien.³¹³ Section 1206 allows the sale of farm land and farm equipment free of liens if the lien holder is given a replacement lien on the

expense priority. Lenders should not be satisfied with mere administrative expense priority since this can be subordinated to other administrative claims. See 11 U.S.C. §§ 726(b), 507(b), 364(c) (1982). One author has predicted tighter credit as a result of Chapter 12. Smith, *Chapter 12 is Bad for Agriculture*, FEEDSTUFFS 8 (June 22, 1987).

312. Section 363(f) authorizes the sale of estate property free and clear of liens. Subsection (e) provides, however, that on request of the creditor the court must condition the sale so as to adequately protect the creditor's interest. 11 U.S.C. § 363(e), (f) (1982 & Supp. III 1985). If the lien is not cut off by the Bankruptcy Code, it would continue in the crops under state law pursuant to § 9-306(2) of the Uniform Commercial Code.

313. 11 U.S.C. § 363(e) (1982).

proceeds.³¹⁴ Farm products are not covered, and the authorization for their sale would have to come under the rules that cover sales under Chapter 11.³¹⁵ A series of cases have allowed farm Chapter 11 debtors to sell crops subject to a security interest free and clear of liens if the secured party is adequately protected by a replacement lien.³¹⁶ A replacement lien on the proceeds of sale suffices, but then the farmer will want to spend the proceeds. This is more of a problem. In order for a debtor to use cash collateral, the debtor must obtain court approval.³¹⁷ It is the replacement lien on crops of the future that must provide adequate protection of the creditor's interest.³¹⁸ Generally, the courts have required farms to demonstrate a substantial profit and obtain insurance to cover crop loss.³¹⁹

The Eighth Circuit had listed relevant factors in *In re Martin*.³²⁰ The court noted that the value of the secured party's current rights has to be determined.³²¹ Next, several factors have to be examined to insure that the secured party's interest is protected. The court notes that all-weather crop insurance is important but not complete,³²² since the policy excludes loss for failure to follow good husbandry practices.³²³

The court identified several factors which are important;

314. 11 U.S.C.A. § 1206 (West Supp. 1987).

315. The sale must meet the requirements of 11 U.S.C. § 363 (1982 & Supp. III 1985).

316. *In re Sheehan*, 38 Bankr. 859 (Bankr. D. S.D. 1984) and *In re Behrens*, 41 Bankr. 524 (Bankr. D. Minn. 1984) both allowed the sale of crops free of the secured party's lien and the use of the proceeds to plant a new crop. The secured party was given a lien on the crop to be grown. The courts were not bothered by the fact that § 363(f) does not seem to authorize this type of sale.

317. 11 U.S.C. § 363(c)(2) (1982).

318. This is the real adequate protection question that concerns the courts. *See, e.g., In re Martin*, 761 F.2d 472 (8th Cir. 1985); *In re Sheehan*, 38 Bankr. 859 (Bankr. D. S.D. 1984); *In re Behrens*, 41 Bankr. 524 (Bankr. D. Minn. 1984); *In re Frank*, 27 Bankr. 748 (Bankr. S.D. Ohio 1983).

319. Projected profits and crop loss insurance are generally required to provide adequate protection. *In re Martin*, 761 F.2d at 477; *In re Sheehan*, 38 Bankr. at 865-69; *In re Behrens*, 41 Bankr. at 527.

320. 761 F.2d 472 (8th Cir. 1985).

321. *Id.* at 477.

322. *Id.*

323. *Id.*

these include past yields and husbandry practices,³²⁴ health and reliability of the farmer, the condition of the machinery, and the possibility the machinery might be repossessed prior to harvest.³²⁵ Next, the court has to determine whether the secured party's lien would fight with any other lien.³²⁶ Finally, anticipated prices have to be examined.³²⁷ The court notes that this is not an exhaustive list, but it provides a good indication of what must be shown to convince a court to allow the farmer to use the proceeds from the sale of crops as operating money.³²⁸

It is important, therefore, to formulate a plan before bankruptcy is filed. If loans are not available outside of bankruptcy, filing a petition will not usually make lenders more willing to lend. Even if a farm is viable, the profits may not be large enough to pay for the next crop. Thus, outside financing or a sale of stored crops will be needed to provide operating capital. Otherwise, these factors will also keep the Chapter 12 farm from successfully reorganizing.

IV. CONCLUSION

As indicated herein, substantial doubt exists as to whether cash grain farmers will be able to successfully reorganize in Chapter 12 at the current commodity prices. This is true despite substantial discharge of indebtedness allowed under Chapter 12. It is clear that changes in interest rates and land valuation do not have the impact that changes in commodity prices have.

Related to this is the impact of increased production. The verification farm does substantially better in bankruptcy than does the average farm. The verification farm has higher production and lower costs. Thus, a farm with very good yields, lower costs, and outside income may be able to make it. But even the verification farm would need lower costs and/or increased off farm income to cash flow at \$5.00 soybeans.

324. *Id.*

325. *Id.*

326. *Id.*

327. *Id.*

328. *Id.*

Before filing bankruptcy, a farm situation should be carefully analyzed to determine whether Chapter 12 will create a viable farm. This analysis suggests that many may not.