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Working Paper

Alternatives to 50-50 Partnership Arrangements

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Staff Paper

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ALTERNATIVES TO 50-50 PARTNERSHIP ARRANGEMENTS

Eddy L. LaDue

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ALTERNATIVES TO 50-50 PARTNERSHIP ARRANGEMENTS

Eddy L. LaDue¹

At some point in time, most farm families deal with the issue of how to bring the younger generation into the business. Historically, the most frequently suggested method for accomplishing this is a 50-50 partnership (or a 1/3-1/3-1/3 partnership if there are two younger generation members entering the business). This method involves the younger generation buying 50 percent (or 1/3) of those assets to be put in the partnership, usually the cattle and equipment, with a loan from the senior generation. Thus, a 50-50 partnership is established by each partner contributing his/her half of the assets. The real estate assets are rented from the senior generation by the partnership.

As the size, and thus, investment, in farms has increased and the returns to farm businesses has decreased, the junior partner has experienced increasing difficulty in making the debt payments on the loan from the senior partner. Using a typical situation George Casler² has shown that even a fairly profitable farm will not generate enough cash for the younger generation to meet family living expenses and the make payments on a loan covering half of the cattle and equipment.

The objective of this paper is to investigate some alternatives to the standard 50-50 partnership arrangement. Case situations are used to illustrate the affect of various methods on the cash and farm ownership positions of the junior and senior parties. Although the annual tax burden and the tax basis of the assets at the end of the partnership will certainly differ between alternatives, the analysis presented here is a before tax analysis.

Partnership Agreement Influences Tax Treatment

One important issue in considering alternatives is the tax treatment that they will be accorded by the Internal Revenue Service (IRS). Unless the partnership agreement clearly specifies an alternate method and the alternate method meets some fairly stringent standards, IRS says that income will be distributed for tax purposes according to their standard plan. That standard plan is that net income minus guaranteed payments to partners will be distributed according to ownership in the partnership. Clearly, if the younger generation starts out owning nothing or a very small percent of the business, (s)he will not gain ownership very rapidly unless the business is extremely profitable. This is, of course, one of the reasons that advisors have historically pushed families toward achieving a 50-50 partnership, or something close to it, as soon as possible.

However, if the partnership agreement does clearly specify how income is to be shared, and that specification meets three tests, a wide variety of alternatives will be acceptable to the IRS. The three tests are:

- The partnership must clearly state how income is to be divided. That is, it must clearly specify what is to be divided and who gets how much.

¹ Professor of Agricultural Finance, Department of Agricultural, Resource, and Managerial Economics, Cornell University. The author would like to thank Stuart Smith and George Casler for contributions to, and helpful criticism of, the analysis reported. This paper was presented at the Northeast Agribusiness Seminar, Cornell University, Ithaca, New York, June 13, 1995.

² Casler, G.L., "Are You Willing to Give Away Your Farm? or Can You Son or Daughter Afford to Buy Your Farm?" *Securing Your Future Fact Sheet*, Cornell Cooperative Extension, SYF 2.1, 11/92.

- Income must actually be divided as the agreement specifies. You cannot just say that is how income is to be divided as a tax gimmick. IRS refers to this as having substantial (nontax) economic effect.
- Ownership shares must be maintained and they must actually represent how the business would be shared upon dissolution. Records of ownership shares must be established and written down every year. Upon dissolution, the junior party must receive their listed share and if the ownership shares of any party are negative, they must make up the deficit. Presumably, this would allow a withdrawal penalty for a party leaving the partnership.

Most families should not have a conceptual problem with these three tests. The intent is to get the younger generation into the business, not just to save taxes. However, I have never seen a partnership agreement that met these tests. How income is to be shared is either not indicated, or only vaguely discussed. Net income is practically never defined. The distribution of property upon dissolution is usually not covered. But, agreements could be easily written to meet these tests. The alternatives to 50-50 agreements that are discussed in the remainder of this paper assume that either (1) a new partnership agreement is written, or an existing partnership agreement is rewritten, to conform with these three tests, or (2) the family is willing to pay the taxes and do the gifting or whatever else is required to allow the method to be used.

Example Situation - S and J Farms

A case farm situation is used to illustrate the kind of results that could be achieved with the various alternatives. This case is similar to the one used by Casler and is a reasonably, but not exceptionally, profitable farm. It is assumed that the partnership will continue for the next 15 years, at which time the senior partner may consider retirement.

The farm is a dairy farm located in New York State with approximately 130 cows. It was expanded a few years ago and still has some debt. The father is currently the owner and manager. He is relatively young (45), and does not plan to retire for at least 15 years. The mother is primarily a housewife who helps with the books and provides emergency help for the farm. The son is a college graduate, is married, and has children. He has been working on the farm for about a year since finishing college. The daughter-in-law is primarily a housewife who helps with the books and provides emergency help for the farm. The younger generation has cattle valued at \$10,175 that are included in the assets of the farm business. These cattle were raised during high school and college and not sold for college expenses. The father and son would like to start a farming-together relationship.

The farm starts with 130 cows and 98 heifers. They will raise heifers equal to 35 percent of the herd size each year. The average age to freshening is 26 months. This will provide sufficient replacements for herd maintenance and slight increases in cow numbers. Cows are initially valued at \$1,100 and are expected to inflate by two percent per year. Calves, open heifers, and bred heifers are valued at 30, 60, and 90 percent of the value of cows.

An expansion occurs on July 1 of year three. The expansion involves the following:

Real Estate

100 stall freestall barn	\$100,000
Bunk silo	25,000
Parlor modifications	20,000

Nonreal Estate

100 cows	110,000
20 open heifers	14,000
Trade for larger chopper	30,000
Silage truck	10,000

Annual Operation Expenses

Rent of 250 acres at \$40/acre	10,000
Add three employees @ \$25,000 each (added expenses in year three of \$47,500 including \$10,000 rent, \$37,500 labor)	75,000

The initial machinery investment is \$150,000. New machinery purchased as part of the expansion is expected to add 70 percent of the purchase price to the market value inventory. Machinery values are expected to inflate by two percent per year. Replacement machinery investment will maintain machinery inventory and is expected to average 16 percent of the market value of machinery. Depreciation of the initial investment starts at \$25,000 and changes with the value of the machinery inventory. Expansion machinery investment has a seven year life for depreciation and replacement purposes. Expansion machinery is replaced at the inflated price at the end of the seven year period and depreciated over the next seven years.

Crop and supply inventories are expected to be constant per cow except for an expected two percent inflation in value. That is, the crops harvested and stored per cow will remain constant as herd size changes.

The base real estate is valued at \$325,000. This is expected to inflate at two percent per year. The addition in year three will cost \$145,000 and will experience 40 percent lost capital. The market value of the addition is expected to remain constant over the rest of the planning period (i.e., it will not inflate). Real estate taxes start at \$6,800 and inflate with the value of real estate. The added real estate is tax exempt for the first 10 years and then incurs taxes at the same rate as the base real estate. Depreciation of the base real estate is \$10,000 for the first eight years and drops to \$3,000 after that (depreciation of capital improvements to maintain the base real estate). The expansion buildings are depreciated over 10 years using straight line depreciation.

Cash receipts start at \$337,000 and change in proportion to cow numbers except for inflation of two percent per year. In the year of the expansion, receipts will decline 10 percent and will recover over two years (half each year). Cash expenses start at \$211,200 (excluding real estate taxes and junior's wage) and change in proportion to cow numbers except for inflation of two percent per year. As a result of the expansion, expenses increase by \$47,500 in year three and an additional \$37,500 in year four (total \$85,000) to cover added labor and rented land expense. Assuming that the value of labor and management for the two partners totals \$50,000, this income level represents a return on assets (ROA) of about five percent.

Outstanding loans at the beginning include a \$180,000 real estate loan and a \$81,572 loan on cattle and equipment. The real estate loan has 17 years remaining at eight percent interest with monthly payments. Payments will continue to be made over the next 17 years. The cattle and equipment loan bears interest at 8.5 percent and has a five year term. This loan will be refinanced annually to allow early repayment of debt if cash flows of the business are in excess of cash needs, or to allow borrowing of added funds if cash flows of the business are insufficient to meet cash needs.

The expansion in year three will include a real estate loan of \$145,000 and nonreal estate loans totaling \$184,000. The real estate loan will have a 10 year term and an interest rate of eight percent. The nonreal estate loan will be added to the existing nonreal estate loan balance (five year term refinanced annually).

Asset information for S and J Farms (Table 1) for the 15 year period show the effects of the expansion investment and two percent inflation that was assumed on most assets. The values shown are market values.

Table 1.

S and J Farm Assets

Year	Number of cows (end yr.)	Number of Heifers	Cattle	Machinery	Crops & Supplies	Total Real Estate	Total Assets
0	130	98	\$194,990	\$150,000	\$50,000	\$325,000	\$ 719,990
1	130	98	198,890	153,000	51,000	331,500	734,390
2	130	99	203,133	156,060	51,797	338,130	749,120
3	226	137	339,613	187,741	71,719	431,893	1,030,966
4	230	151	354,872	191,496	90,844	438,791	1,076,003
5	230	172	377,240	195,326	91,641	445,827	1,110,034
6	233	175	391,682	199,233	92,438	453,004	1,136,357
7	237	177	404,257	203,218	93,633	460,324	1,161,432
8	242	180	419,261	207,282	95,625	467,790	1,189,958
9	247	184	435,511	211,428	97,617	475,406	1,219,962
10	251	188	450,945	215,657	99,609	483,174	1,249,385
11	250	189	458,730	219,970	99,211	491,097	1,269,008
12	250	190	466,251	224,369	99,609	499,179	1,289,408
13	251	191	475,781	228,856	100,008	507,423	1,312,068
14	249	190	480,306	233,433	98,813	515,831	1,328,383
15	252	190	491,672	238,102	100,406	524,408	1,354,588

Some income and expense data for the 15 year period are shown in Table 2. Real estate tax expense is listed separately because the real estate are not included in some partnerships. Interest is not shown because the outstanding loan balances, and thus the amount of interest expense, depends on the partnership agreement. Appreciation is the increase in market value of machinery, real estate and livestock that results from increases in the general price level (i.e., the two percent inflation).

Farming-Together Alternatives Considered

Eight different farming-together arrangements were considered, including the standard 50-50 partnership. Most of the arrangements were in use on one or more farms visited for LaDue and Crispell's study of farming-together relationships³. Many of these alternatives involve unequal ownership of assets and unequal sharing of income. Some involve concessions, in various forms, on the part of the senior partner, including implicit gifting and sale or leasing of assets at below market prices. In parentheses following the name of each alternative is the label used to identify that alternative on the figures found in the results. The symbols "= a" should be read "equal after", and "O a" should be read "by ownership after." The participants are referred to as the junior partner and senior partner for all alternatives even though in some cases no partnership is actually formed.

One of the problems with many partnership arrangements observed by LaDue and Crispell was that records of ownership shares were not kept up to date. One of the reasons for that becomes obvious when attempting to define cash flows and ownership shares with the various alternatives. That is, the descriptions of the alternatives do not provide nearly enough information to actually make the calculations. Net income is usually not defined. To make the calculations, one needs to know whether net income means net cash income, accrual net income without appreciation, accrual net income with appreciation, or net cash flow after debt payments. What happens when draws exceed cash available or net income, or when net income is negative, are usually not specified. So, for each alternative method the division of income and calculation of ownership shares is specified. The method used is, of course, only one of those that could be used. Within each alternative, there are several sub-alternatives.

50-50 Partnership - Seven Year Loan (50-50, 7 Year)

S and J partnership will be formed. The partnership will include all the nonreal assets, valued at \$394,990, and the nonreal debt of \$81,572, for a partnership net worth of \$313,418. Junior will buy half interest in the partnership. Since he is contributing \$10,175 of cattle, the rest of half of the partnership equity will be \$146,534. He will purchase this from senior with a loan for \$146,534 at seven percent interest with a seven year term.

The real estate (owned by senior) will be rented to the partnership for \$30,000 per year. Senior will pay the real estate taxes (\$6,800 in the year before the partnership is formed), but all other expenses will be paid by the partnership. The loan on the real estate of \$180,000 at eight percent interest with 17 years remaining and monthly payments of \$1,616.86 will remain senior's responsibility.

Available cash flow is calculated as the net cash income of the business minus principal payments (or equivalently, net cash flow plus nonoperating debt interest payments minus debt payments). Each partner will receive a minimum draw (starting at \$20,000 and inflating at two percent annually). If the draw is greater than the available cash, the partnership will borrow funds

³ LaDue, E., and C. Crispell. "Farming-Together Relationships in the Process of Intergeneration Farm Transfer." Information Bulletin 223, Cornell Cooperative Extension, June 1992.

Table 2. S and J Farms Income							
Year	Total Cash Receipts	Operating Expenses Excluding Interest & RE Tax	Real Estate Tax Expense	Net Cash Income Excluding Interest	Depreciation	Accrual Adjustments (Inventory change)	Appreciation
0	\$337,000	\$211,200	\$6,800	\$119,000	\$35,000		
1	343,740	215,424	6,936	121,380	35,500	\$ 1,000	\$24,420
2	356,093	223,166	7,075	125,853	36,010	1,057	24,713
3	452,622	362,679	7,216	82,727	56,744	25,743	31,809
4	616,951	492,054	7,361	117,536	57,275	27,426	44,247
5	669,724	506,298	7,508	155,918	57,816	15,768	44,827
6	689,059	520,915	7,658	160,486	58,368	7,559	45,255
7	711,929	538,204	7,811	165,914	58,931	5,843	45,648
8	741,618	560,648	7,967	173,002	59,506	8,775	46,091
9	772,209	583,775	8,127	180,308	53,092	9,703	39,565
10	803,728	607,602	8,289	187,837	54,261	8,584	40,595
11	816,523	617,275	8,455	190,793	54,870	-1,608	40,906
12	836,199	632,149	8,624	195,425	55,492	-1,223	41,216
13	856,334	647,371	10,617	198,346	41,626	600	27,069
14	863,021	652,427	10,792	199,802	42,273	-6,088	27,326
15	894,480	676,209	10,972	207,299	43,504	3,318	28,294

to make the minimum payments (i.e., cash is provided through a reduction in equity). If available cash flow exceeds the total minimum draws, each partner gets his half of the funds available from the partnership.

50-50 Partnership - 15 Year Loan (50-50, 15 Year)

This is the same as the 50-50 partnership with the seven year loan except that the loan from senior to junior has a 15 year term. This approach recognizes that the cattle and machinery that junior is buying will be maintained and replaced as needed by the partnership, so that senior's security is more than just the initial cows and machinery that are purchased. In effect this method assumes that junior is really buying a share of the partnership and that the repayment period should be determined by the needs and expectations of the partners, rather than the character of the assets ostensibly purchased.

Guaranteed Payments for Labor and Management, Interest on Equity Paid, if Cash Flows Allow, and Change in Equity Shared Equally (= a L & I)

S and J partnership will be formed. Each partner will contribute all of his assets (including real estate) to the partnership. Each partner receives a guaranteed payment for labor and management (starting at \$20,000 and inflating at two percent annually). Available cash flow is calculated as the net cash income of the business minus principal payments (or equivalently, net cash flow plus nonoperating debt interest payments minus debt payments). If available cash flow minus guaranteed labor and management payments is positive, each partner receives interest on his equity at four percent (or a prorata share if funds are not sufficient to meet the complete interest payment). The net available cash remaining after these payments are made is used to pay down nonreal estate debt if it is positive and is added to the nonreal estate debt if it is negative.

The change in equity of the business that results, after the above debt adjustments, is shared equally between the two partners.

Guaranteed Payments for Labor and Management and Change in Equity Shared Equally (= a labor)

S and J partnership will be formed. Each partner will contribute all of his assets (including real estate) to the partnership. Each partner receives a guaranteed payment for labor and management (starting at \$20,000 and inflating at two percent annually). Available cash flow is calculated as the net cash income of the business minus principal payments (or equivalently, net cash flow plus nonoperating debt interest payments minus debt payments). The net available cash remaining after the guaranteed labor and management payments are made is used to pay down nonreal estate debt if it is positive and is added to the nonreal estate debt if it is negative.

The change in equity of the business that results, after the above debt adjustments, is shared equally between the two partners.

Guaranteed Payments for Labor and Management, and Change in Equity Shared by Equity Ownership (O a labor)

S and J partnership will be formed. Each partner will contribute all of his assets (including real estate) to the partnership. Each partner receives a guaranteed payment for labor and management (starting at \$20,000 and inflating at two percent annually). Available cash flow is calculated as the net cash income of the business minus principal payments (or equivalently, net cash flow plus nonoperating debt interest payments minus debt payments). The net available cash remaining after the guaranteed labor and management payments are made is used to pay down nonreal estate debt if it is positive and is added to the nonreal estate debt if it is negative.

The change in equity of the business that results, after the above debt adjustments, is shared in proportion to the beginning of the year equity ownership of the business.

Payments for Interest, and Change in Equity Shared Equally (= a int)

S and J partnership will be formed. Each partner will contribute all of his assets (including real estate) to the partnership. Each partner receives interest on his investment (at four percent). If the interest payment is less than the minimum draw (starting at \$20,000 and inflating at two percent annually), the partner receives the minimum draw. Available cash flow is calculated as the net cash income of the business minus principal payments (or equivalently, net cash flow plus nonoperating debt interest payments minus debt payments). The net available cash remaining after the interest payments (or minimum draws) are made is used to pay down nonreal estate debt if it is positive and is added to the nonreal estate debt if it is negative.

The amount by which the minimum draw exceeds the interest payment the partner should receive is treated as a withdrawal of equity. The actual change in equity of the business that results, after the above debt adjustments, plus the equity withdrawn by the partners for the minimum draw, is shared equally between the two partners. End of year equity is the beginning equity plus the share of total equity minus equity withdrawn.

Time Share: Junior Equity Share = Junior Years/Senior Years, Equal Draw (Jr/Sr)

S and J partnership will be formed. Each partner will contribute all of his assets (including real estate) to the partnership. Each partner receives a guaranteed payment for labor and management (starting at \$20,000 and inflating at two percent annually). Available cash flow is calculated as the net cash income of the business minus principal payments (or equivalently, net cash flow plus nonoperating debt interest payments minus debt payments). The net available cash remaining after the guaranteed labor and management payments are made is used to pay down nonreal estate debt if it is positive and is added to the nonreal estate debt if it is negative.

The total equity of the business that results, after the above debt adjustments, is shared between the two partners in proportion to the number of years each has been an operator of the business. It is assumed that the senior partner has been on the farm 25 years at the time the partnership is formed. For example, junior's share of the equity in the business at the end of the year is:

$$\text{Total farm equity} \times \frac{\text{Number of years junior has been an operator of the business}}{\text{Number of years senior has been an operator of the business}}$$

Livestock Share: Junior Owns Half of Calves Born, and Receives a Guaranteed Wage (1/2 calves)

No partnership is formed. The junior generation receives salary (starting at \$20,000 and inflating at two percent annually). Available cash flow is calculated as the net cash income of the business minus principal payments (or equivalently, net cash flow plus nonoperating debt interest payments minus debt payments). Junior's salary is included in the farm expenses. The senior partner takes a draw (starting at \$20,000 and inflating at two percent annually). The net available cash remaining after senior's draw is used to pay down nonreal estate debt if it is positive and is added to the nonreal estate debt if it is negative.

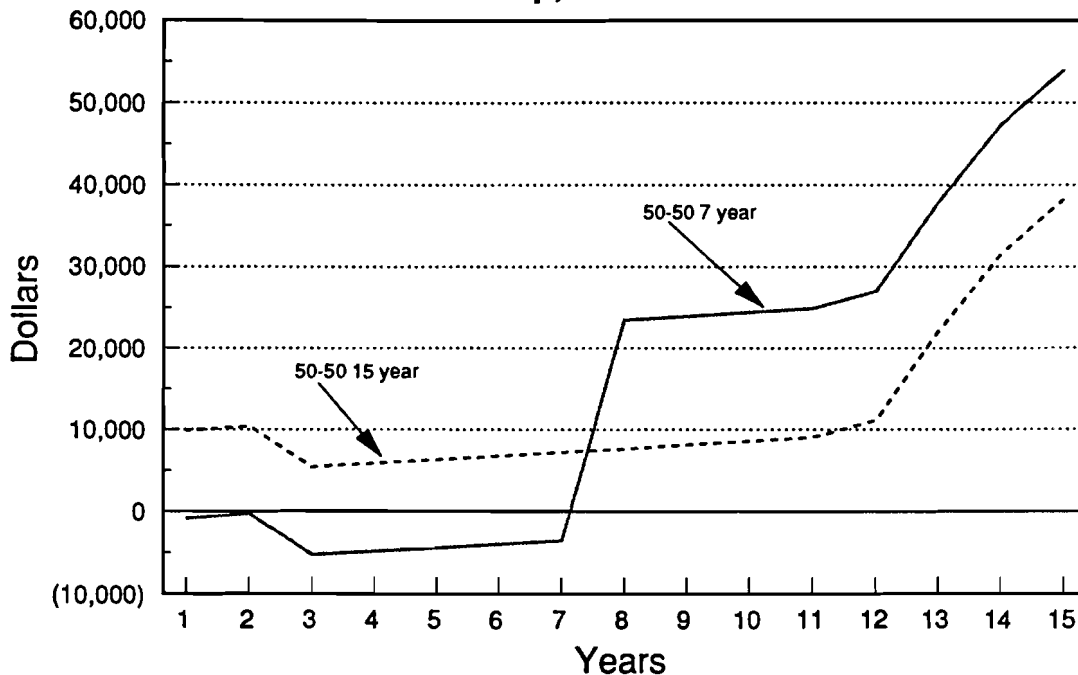
The junior partner receives half of all heifer calves raised on the farm. Calves that junior secures from senior's animals are a gift from senior to junior (as long as the value of calves transferred is under \$10,000 there would be no tax consequences of the gift). The senior generation provides the feed and care for all of junior's animals in return for the milk produced and the value of all cull animals. Junior's animals are handled in the same manner as the rest of the herd. Heifer calves equal to 35 percent of the herd are raised each year.

In most cases this alternative would be converted to some form of partnership before the end of a 15 year period. However, no conversion is assumed in this analysis.

Results with 50-50 partnerships

The basic problem with the standard (seven year loan) 50-50 partnership agreement is illustrated in Figure 1. The junior partner does not receive enough income in the first few years of the partnership to make the payments to senior required to service the loan. Some other source of funds, frequently nonfarm employment by the spouse, is required to provide family living and provide some investment in the farm. Once the loan is paid off, income from the business is at or above the guaranteed payment for labor and management.

Figure 1. Cash Received by the Junior Partner*
50-50 Partnership, Profitable Farm



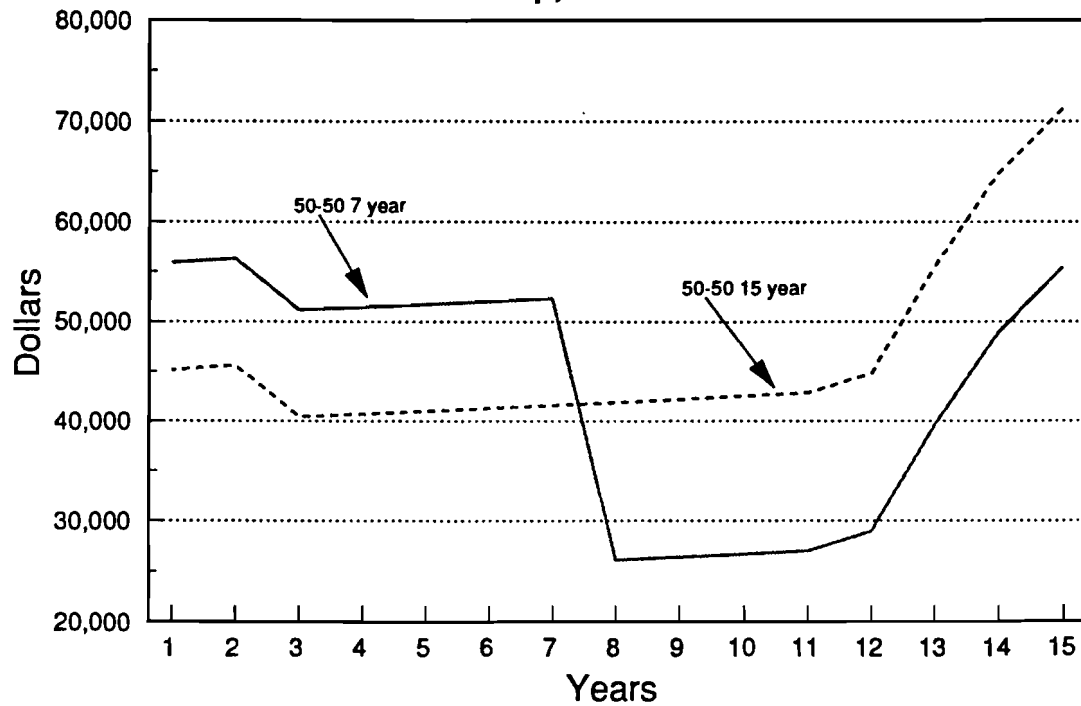
*Net of loan payments to senior partner.

Alternately, the income picture for the senior generation is quite good (Figure 2). The combination of the guaranteed labor and management payment plus the junior partner loan payments provides a very good income for the first few years. After that, senior is at or above the guaranteed labor and management payment level.

The 50-50 partnership with a seven year loan does allow the junior generation to achieve quite rapid equity growth (Figure 3). The lost capital⁴ connected with the expansion caused a decline in equity in year four, but growth resumed after the expansion. The percent equity shown in Figure 3 includes all farm assets (including real estate) for ease in comparison to alternate methods. In year eight, junior owns half of the partnership assets (cattle and equipment). By year 15 junior's equity amounts to about \$300,000 - a superior position to that achieved by most of his/her peers with good nonfarm jobs.

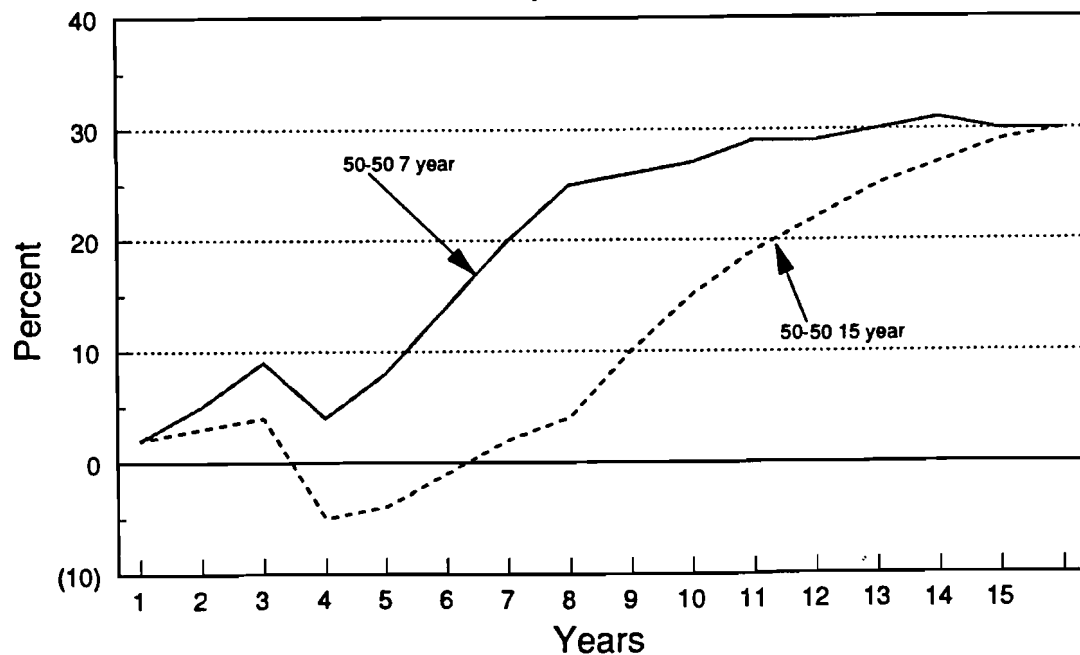
⁴ Farm equity lost because the cost of the expansion buildings exceeded the increase in market value of the farm resulting from construction of the buildings.

Figure 2. Cash Received by the Senior Partner*
50-50 Partnership, Profitable Farm



*Includes loan payments from the junior partner and real estate rent from the partnership net of taxes and loan payments

Figure 3. Percent Equity Ownership
by Junior Partner*
50-50 Partnership, Profitable Farm



*In all farm assets. Includes loan from senior partner.

Even with a 15 year loan, the 50-50 partnership results in cash flow problems for the junior partner (Figure 1). The business is not profitable enough to provide more cash flow than the guaranteed labor and management payment until year 13. After making debt payments to senior, the amount left is insufficient for family living. The level of guaranteed payments likely could be increased modestly, which would provide enough for family living for some, but not all, families. In most cases nonfarm income, such as nonfarm work by the spouse, would be needed to provide family living for much of the 15 year period.

The 15 year loan actually improves cash flow stability for the senior generation (Figure 2). The guaranteed labor and management payment and the loan payments are received throughout the entire 15 year period.

Equity growth by the junior partner, however, takes a much less favorable path. Because the loan is paid off slower, the equity gained from principal reduction is much lower, particularly in the early years when most of the loan payments goes towards interest. The amount of equity gained during the first three years of the partnership is less than the junior partner's share of the lost capital resulting from the expansion. This places the junior partner in a negative equity position for the first three years after the expansion. While the equity level at the end of the 15 year period is the same as with the seven year loan, the junior partner has little to lose, financially, by leaving the business during the first few years after the expansion. Without considerable foresight and confidence in the long run success of the business, a junior partner with wavering commitment to the farm business could become discouraged and leave the business during this period.

Clearly, 50-50 partnerships have their shortcomings. Many farm families would like a method of bringing the younger generation into the business that avoids some of these problems. This leads them to other alternatives that have the possibility of coming closer to meeting their goals.

Results with Alternatives to 50-50

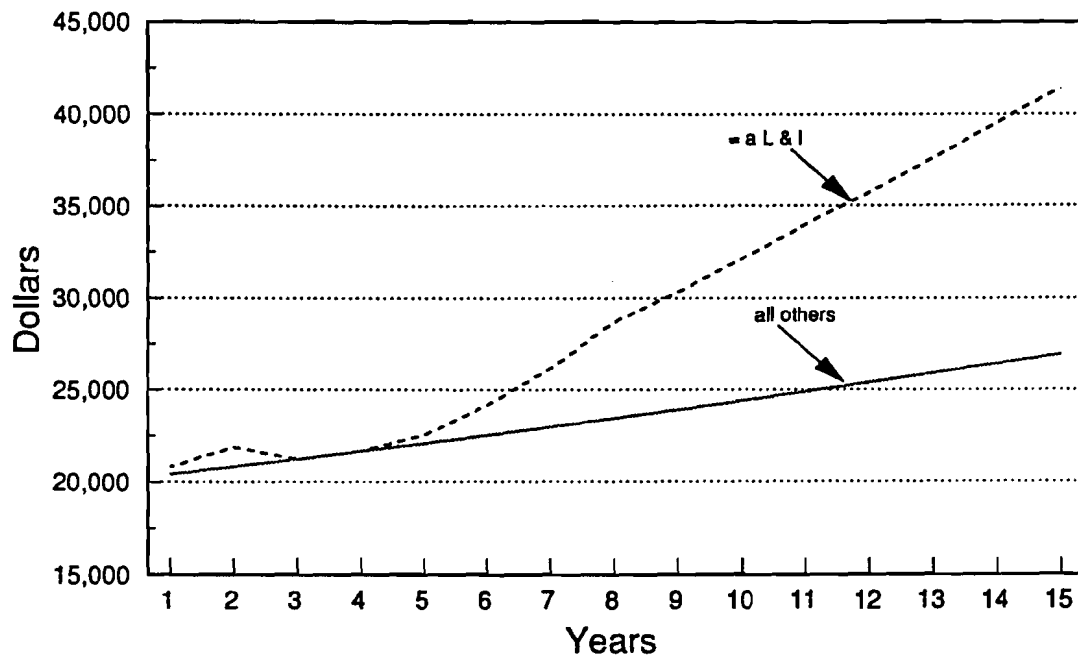
Cash Received. With most of the alternatives, the cash received by the junior partner is the guaranteed draw or payment for labor and management (Figure 4). When combined with noncash perquisites, this should provide a reasonable minimal level of living for the family. Only when the partners receive payments for interest and labor does the junior partner receive more than the minimum cash payment. There are no funds available for interest payments in years three and four and the junior partner's interest payments are small in the first few years because his/her ownership share is small. However, the interest payments become an important source of income within the first seven or eight years.

Each of these alternatives provide better cash income for the junior partner than the 50-50 partnerships. The farm business provides at least a minimal level of family living in all cases.

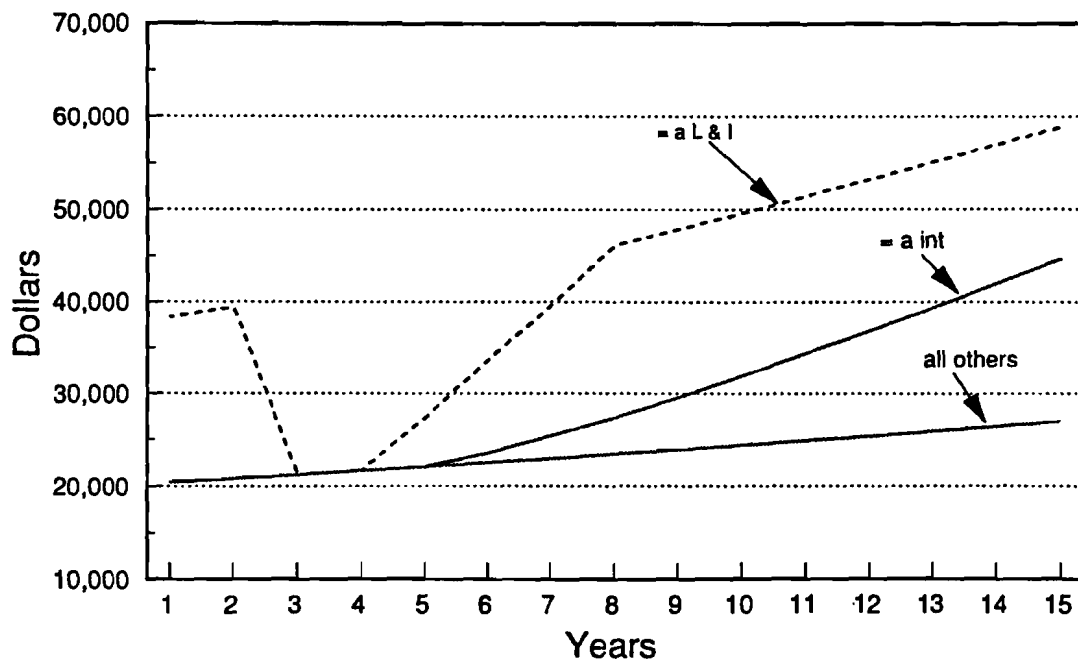
Cash received by the senior partner is, however, generally poorer with the alternatives than with a 50-50 arrangement (Figure 5). With four of the alternatives the senior generation receives only the minimum labor and management payment, the same amount as is received by the younger partner. Although this will be sufficient for many families, it is not a large amount of money. Senior receives the largest payments when payment is made for both labor and interest. Because the senior party has a large investment in the business, the interest payments are substantial, amounting to over \$20,000 throughout much of the period. Clearly, when the business is profitable, making cash payments for both labor and interest gives both families more money for personal use.

The senior partner also receives more than the minimum amount of cash much of the time when only interest is paid before dividing the remainder equally. For S and J Farms, interest by itself exceeds the minimum labor and management payment by the sixth year.

**Figure 4. Cash Received by the Junior Partner
Alternate Farming Together Methods
Profitable Farm**

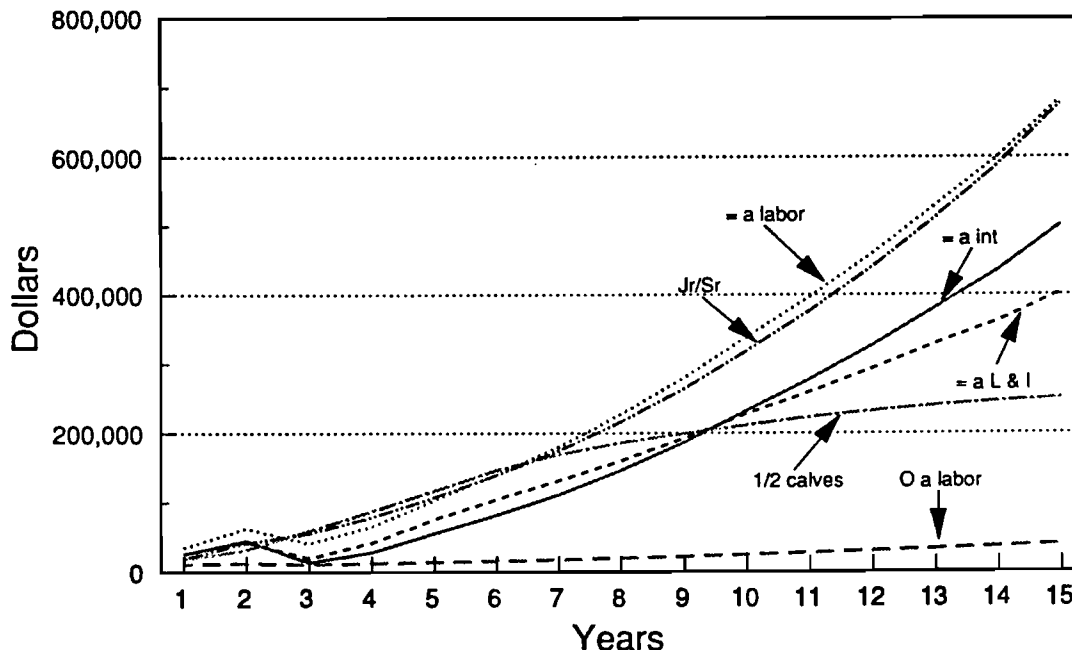


**Figure 5. Cash Received by the Senior Partner
Alternate Farming Together Methods
Profitable Farm**



Equity Growth. The junior partner shows considerable equity growth with all of the alternatives except when income is shared by ownership after making the guaranteed payment for labor and management (Figure 6). This is, of course, the method of sharing that IRS will assume to be used unless the partnership meets the three tests described earlier. Since the junior partner starts with very few assets, sharing by asset ownership insures that (s)he never does own much of the business. Regardless of the profitability of the business, receiving nearly zero percent of the profits provides very little basis for growth.

**Figure 6. Equity Ownership by Junior Partner
Alternate Farming Together Methods
Profitable Farm**



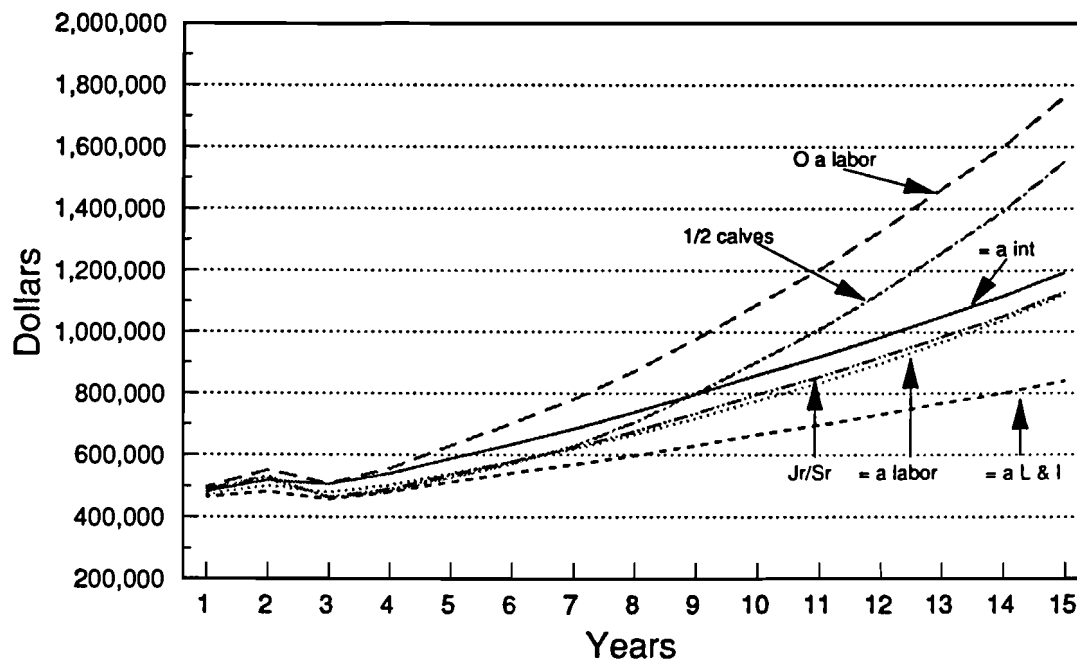
Receiving half of the calves provides quite rapid equity growth for the first five to 10 years. At that point, the junior generation owns half of the herd and growth occurs only as the price of animals inflates or the number of animals increases. In many cases this type of arrangement would be expected to last only the five to 10 year period. At that time a formal partnership would be formed that would allow the junior generation to start increasing ownership of other assets, or the junior generation would split off and start farming on his/her own.

The other four alternatives (=a L&I, =a int, =a labor, and Jr/Sr) all resulted in greater equity growth by the junior partner than did the 50-50 partnerships, which provided a total equity of about \$300,000 by the end of the 15 year period. The Jr/Sr time share and sharing equally after a guaranteed labor and management payment were best from the junior party's point of view and resulted in an equity level of nearly \$700,000. The two methods that made cash payments for interest resulted in somewhat lower equity, at least in part because more cash was paid out each year leaving less equity in the business to be shared. In spite of that, the junior partner ended up with about \$400,000 in equity with equal sharing after labor and interest, and about \$500,000 with equal sharing after interest with minimum draw.

Since the business performance is assumed to be the same regardless of the type of partnership arrangement used, any sharing procedure that increases the junior party's equity will decrease the senior partner's equity. Thus, sharing by ownership after a labor payment is best for

the senior generation (Figure 7). (S)he receives 98 percent of all equity growth, and thus, owns most of the business at the end of the period. Likewise giving up half of the calves results in considerable shift of equity during the first few years, but little after that, resulting in a strong equity position at the end of the period.

**Figure 7. Equity Ownership by Senior Partner
Alternate Farming Together Methods
Profitable Farm**

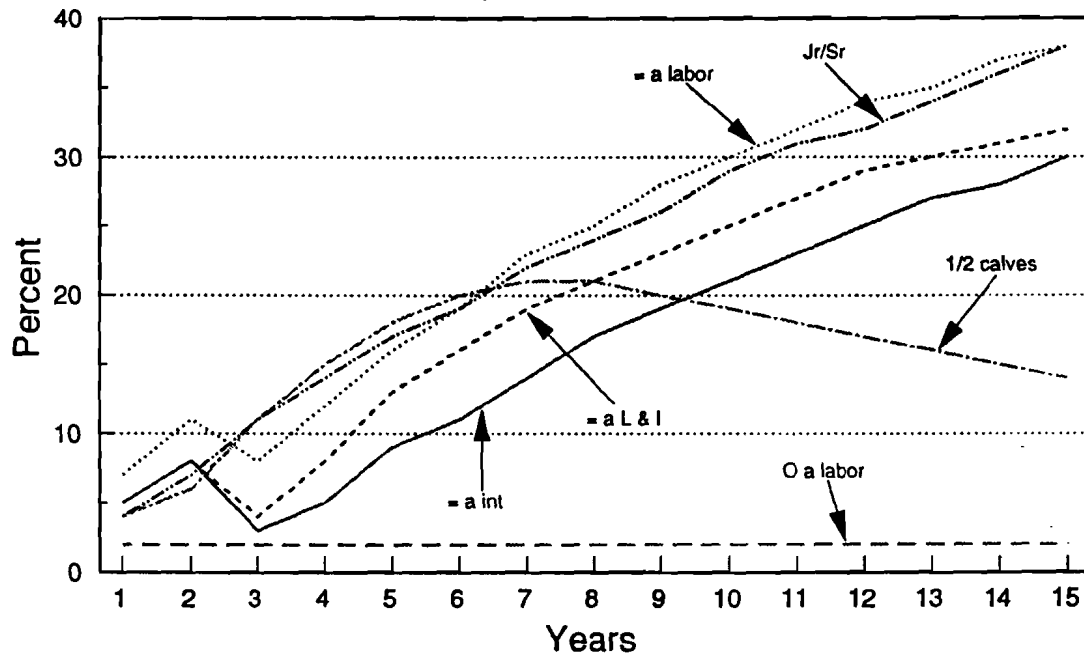


When the partners receive annual payments for labor and interest, more cash is removed from the business and equity increases slower than with other alternatives. This method results in the lowest equity for the senior generation. Of course, (s)he has had the benefit of a much higher level of living throughout the 15 years.

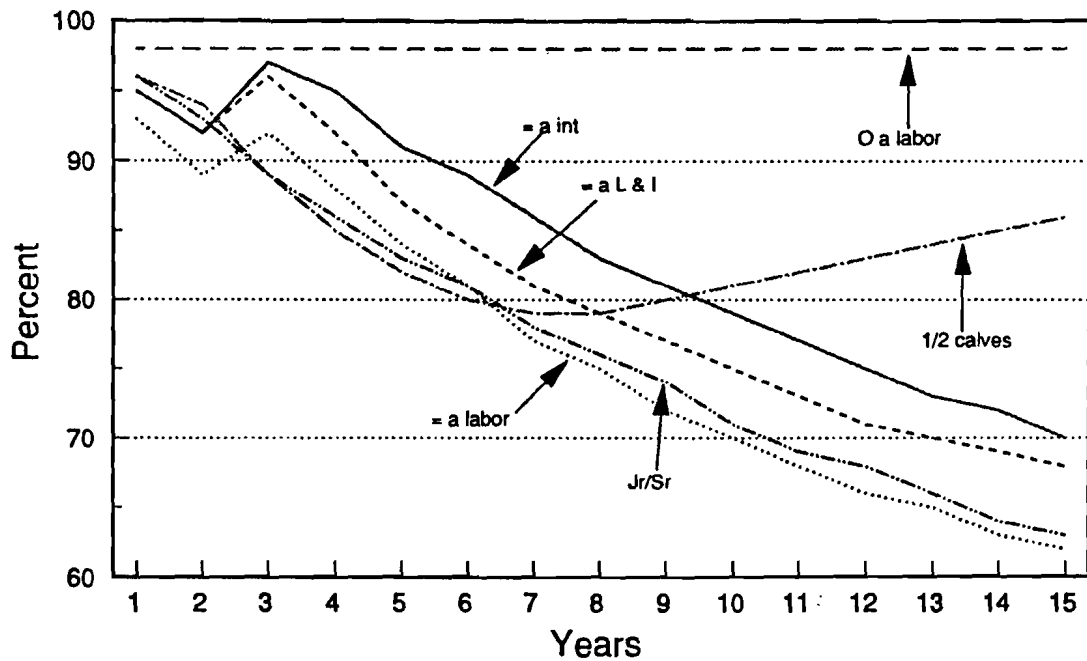
As expected, since they were best for the junior partner, the Jr/Sr time share and sharing equally after labor methods resulted in quite low equity levels for the senior partner. However, equity had increased significantly. It had slightly more than doubled to \$1.1 million over the 15 year period. The alternative that involved equal sharing after interest payments had similar results.

Percent Equity Growth. Another way to look at the change in equity is to look at percent equity ownership by both parties over the 25 year period (Figures 8 and 9). As the junior partner's share increases, the senior partner's share decreases. With a 50-50 partnership equity ownership (of all assets) would be shared 30 percent junior partner and 70 percent senior partner by the end of the 15 years. Junior partner does better than that with four of the alternatives. Sharing by ownership does not change the ownership shares over time unless the senior partner withdraws funds or the junior partner infuses funds. With the 1/2 calves alternative, the junior partner shows growth in equity share for about the first eight years, but after that equity growth in the entire business is greater than equity growth in the cattle so that percent equity ownership declines.

**Figure 8. Percent Equity Ownership
by Junior Partner, Alternate Farming Together
Methods, Profitable Farm**



**Figure 9. Percent Equity Ownership by Senior
Partner, Alternate Farming Together Methods
Profitable Farm**



A Low Profit Farm

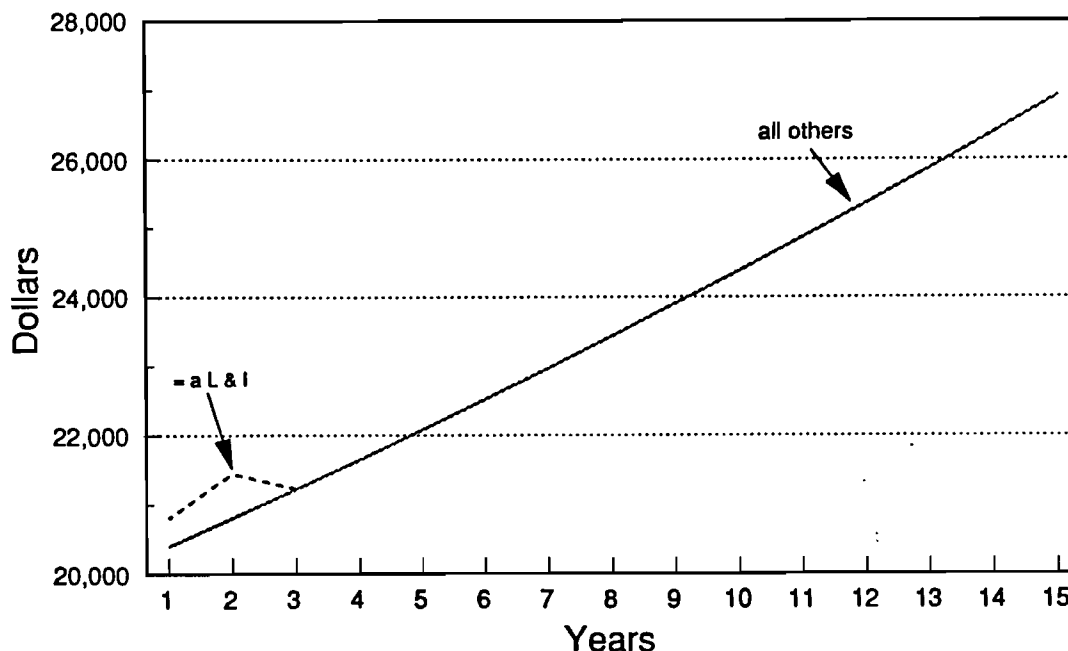
Some of the biggest problems with partnership arrangements occur when the business is not particularly profitable. Such businesses have little excess cash or equity growth to share. To assess the alternative methods under these conditions, the S and J Farms business was modified to represent a low profit situation. This was accomplished by using the same business except that the expenses start out \$20,000 higher at the time the partnership arrangement was initiated. As a result of the expansion, the expenses increased by the same \$85,000, to cover added labor and land rent, as was used for the profitable situation. Again assuming that the value of labor and management for the two partners totals \$50,000 the rate of return on assets (ROA) for this business would be about two percent.

The low profit in this case results from high costs. The same basic result would, of course, be achieved if the lower profit resulted from lower income (same costs and \$20,000 less income) or a combination of lower costs and much lower income (say, \$5,000 lower costs and \$25,000 lower income).

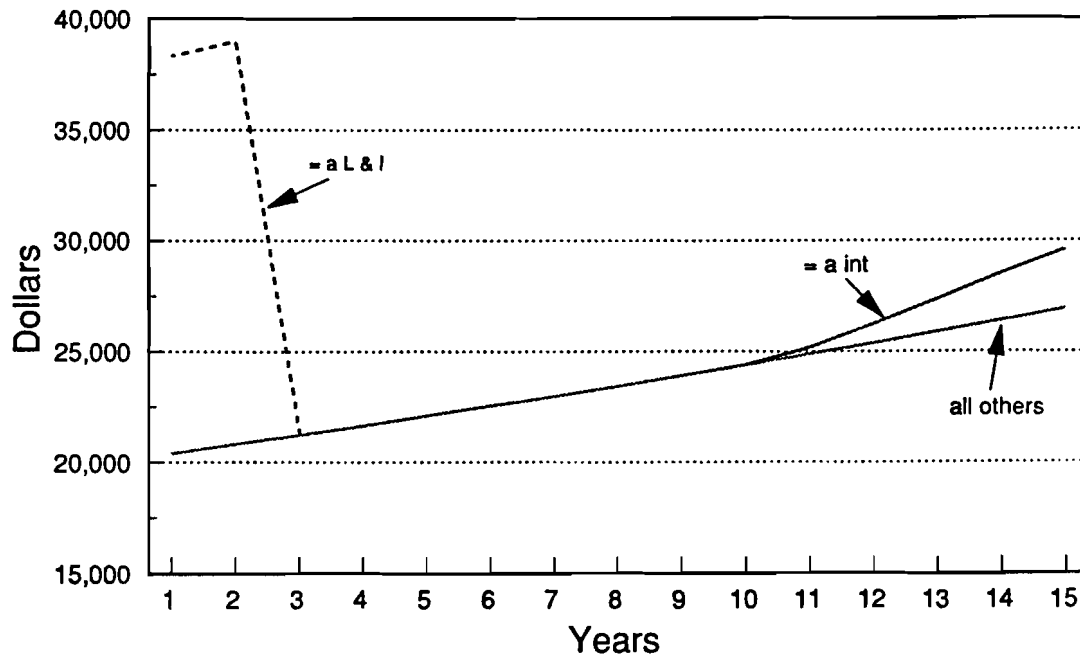
With the low profit situation, the 50-50 partnership would have the same cash payments for the partners. Each would receive the same guaranteed labor and management payment and the loan payments from junior to senior would be the same. Thus, the cash position of the junior generation would not change based on the profitability of the farm. The major difference would be that the net worth of the partnership business would grow at a slower rate.

With the alternative farming-together methods, cash received by both partners is the minimum draw or labor and management payment in most years (Figures 10 and 11). There is cash available for some interest payment before the expansion and the amount of funds available for senior partner's interest payment slightly exceeds the minimum payment during the last few years. Basically, both partners receive the agreed upon minimum level of living 15 year period.

**Figure 10. Cash Received by the Junior Partner
Alternate Farming Together Methods
Low Profit Farm**



**Figure 11. Cash Received by the Senior Partner
Alternate Farming Together Methods
Low Profit Farm**

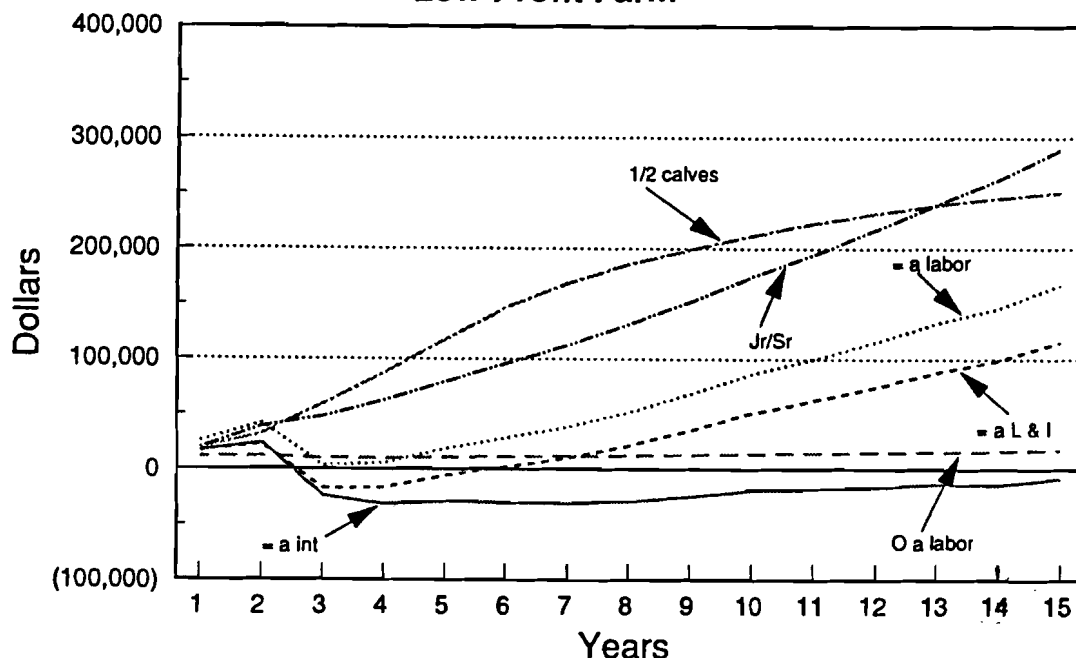


From the junior partner's perspective, the best alternatives with a low profit farm business are those where junior's financial position is not tied to the income generated by the business (Figure 12). Valued at the end of the 15 year period, the best alternative is the Jr/Sr time share method. The junior partner ends up with a little less than \$300,000 of equity. Comparing Figures 6 and 12 shows that this method is good for the junior generation with either a profitable or low profit farm.

Receiving half of the calves is also a good alternative for the junior generation. Even though the rate of gain slows down after eight or 10 years, there is still some gain throughout the period, and equity at the end of the period is about \$250,000. Throughout all of the period, except the last three years, junior's equity is highest with this alternative. If there was an expectation that the younger generation would split off to start his/her own business sometime before the end of the 15 year period, this would clearly be the preferred method. This type of arrangement would also be useful where the younger generation believed that his/her participation in the business was unlikely to improve profitability, either because of lack of real influence or low basic resource quality.

The poorest alternative from the junior partner's perspective is equal sharing of income after payment of interest. Since the younger generation starts with little equity, the interest payment on that equity in the early years of the partnership is small. There is no guaranteed salary payment, so when the draw exceeds the interest payment plus the partner's share of income, the excess withdrawals reduce equity. With the low profit farm, the income was about equal to the draw in most years, so the younger generation was able to achieve little equity growth. The expansion period was especially hard because lost capital and low income combined to reduce the junior partner's equity and (s)he was never able to recover.

**Figure 12. Equity Ownership by Junior Partner
Alternate Farming Together Methods
Low Profit Farm**



This arrangement (equal sharing after interest) was used by more farms than any other type on the businesses visited for the LaDue and Crispell study. It is not surprising why many of the less profitable farms were not keeping equity share records. None of the parties involved in such arrangements want to see the junior partner in a negative equity position. The partnership arrangement was not coming close to meeting their goals, so they were basically ignoring it.

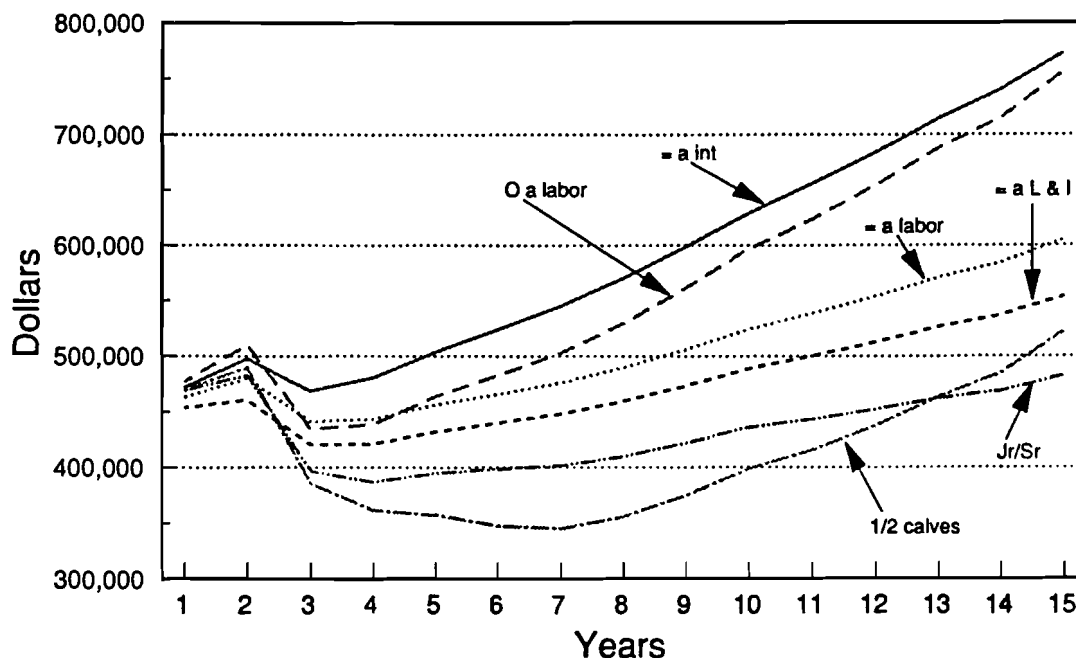
The junior partner achieves no progress when income is shared by ownership. With a small share of equity, his/her share of any income after labor payments is small. With low profit, the income after labor payments is small or nonexistent. Thus, little or no gain is achieved. This alternative is a poor choice for the younger generation with both a profitable or low profit farm (Figures 6 and 12).

Equal sharing after labor and interest also results in a negative equity position immediately after the expansion. The cash interest payments made in the first two years reduced equity growth during that period so that the lost capital more than wiped out all of the junior party's equity. However, modest equity growth did occur over the 15 year period.

Equal sharing after labor payments also resulted in modest, but significant, equity growth by the end of the period. Ending equity is about \$160,000.

Since the total equity is the same for all alternatives, the equity position of the senior partner is poorer for those alternatives where the younger generation achieves good equity growth and better for those alternatives where the younger generation shows poor equity growth (Figure 13). For all of the arrangements the ending equity is about equal to, or higher than it was at the initiation of the partnership. With all of the alternatives, the senior partner experiences a sharp decline in equity with the expansion and transfer of equity to the younger generation, but recovers over time.

**Figure 13. Equity Ownership by Senior Partner
Alternate Farming Together Methods
Low Profit Farm**



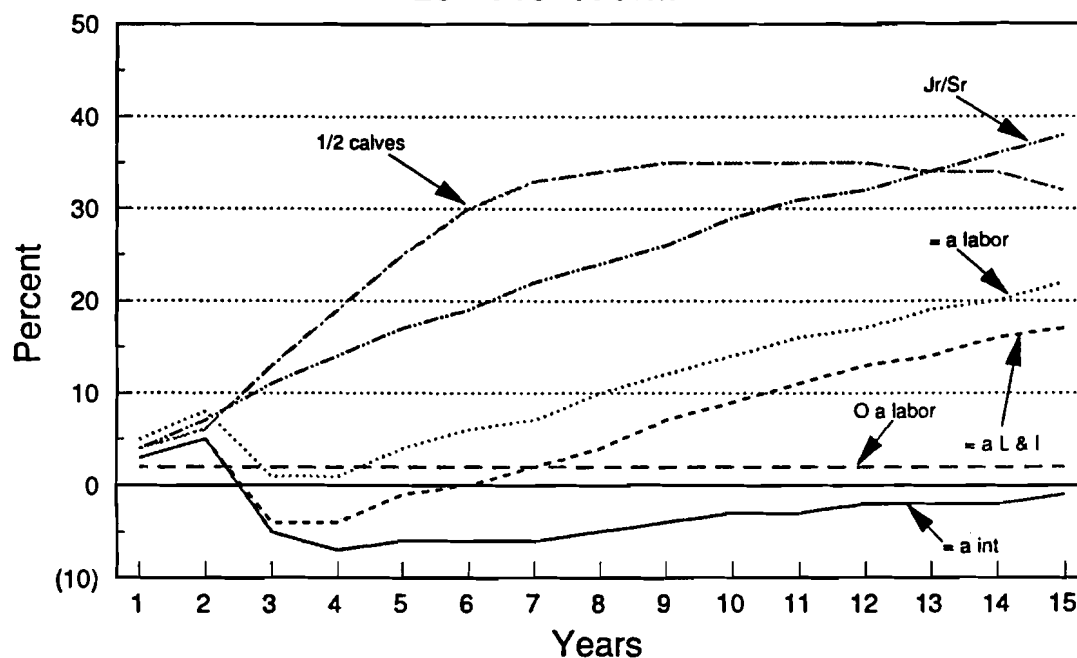
Percent equity ownership in the business shows a similar picture to that observed with dollar equity values (Figures 14 and 15). Jr/Sr time share and 1/2 calves succeeded in getting the junior generation established in the farm business. With limited profitability, this basically meant shifting equity ownership from the older to the younger generation. At the other end of the scale, equal sharing after interest and sharing by ownership did not achieve what the parties had in mind. The younger generation was not established in farming at the end of the 15 year period. They had received enough cash for a modest level of living, but had achieved no asset gain.

With three of the alternatives (equal after interest, sharing by ownership, and equal after labor and interest) the junior partner's equity after five or six years showed no gain or a loss. It would not be surprising if the younger generation, observing that, would get discouraged with the farm business and leave. Some might say that (s)he is better off because the business is not worth being part of anyway, but it will not have achieved the family's objective of getting the younger generation into the business.

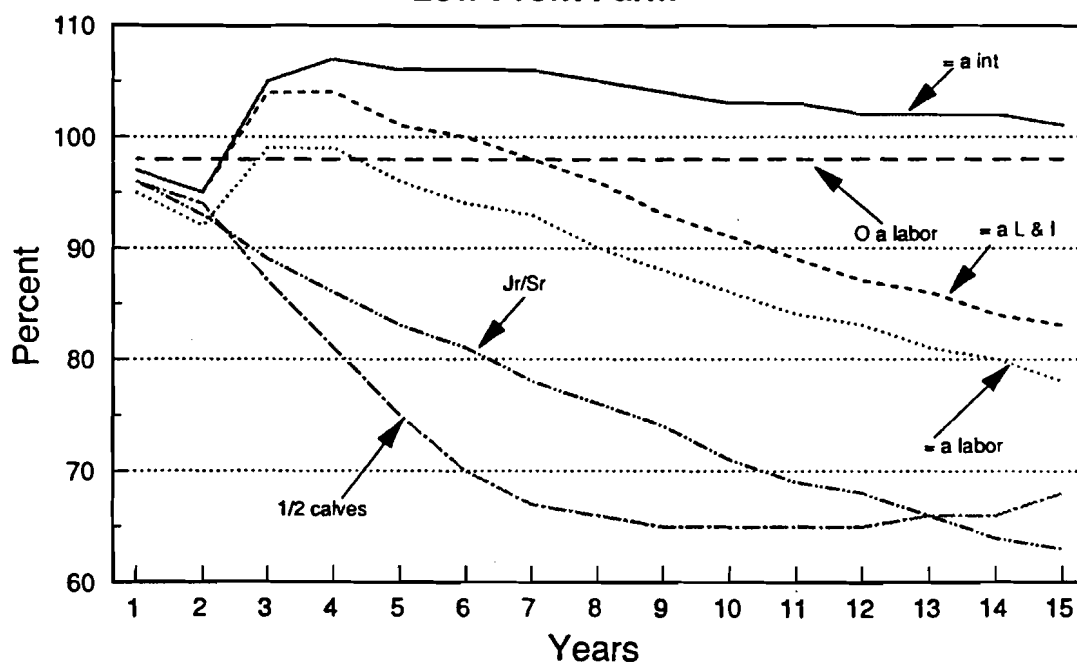
Summary

All of the alternatives considered solve the basic cash flow problem that is attendant with the 50-50 partnership arrangement. A minimum level of cash, that can be set to provide a basic level of living, is provided to both parties. Subsidization from nonfarm sources is not required. The degree to which the younger generation accumulates investment in the farm depends on the alternative selected and the profitability of the business. However, with an accurate assessment of the financial character of their farm business and careful selection of the method to use, most families should be able to develop an agreement that will bring the younger generation into the farm business, or at least into the ownership of considerable farm assets, without extreme hardship.

**Figure 14. Percent Equity Ownership by Junior Partner, Alternate Farming Together Methods
Low Profit Farm**



**Figure 15. Percent Equity Ownership by Senior Partner, Alternate Farming Together Methods
Low Profit Farm**



Nonstandard procedures, such as the Jr/Sr time share, or 1/2 calves, may be quite useful for a number of situations. Methods like these may be necessary for low profit or unprofitable farm situations. The Jr/Sr time share method stood up quite well with both the profitable and low profit farm situations.

Sharing income or equity growth by ownership shares is generally ineffective in improving the ownership shares of the younger generation. To achieve any shift in ownership using this technique will normally require direct gifting, and possibly capital withdrawal, by the senior generation.

Some Caveats

Some of the alternatives discussed involve the senior party accepting little or no return to some of the resources contributed to the business. The partners are contributing their labor, management, and equity capital. Whenever payments are not incorporated for each of these assets, partners are not being compensated for their different levels of contribution of these assets. For example, if income is shared equally after a guaranteed labor and management payment, the senior is being paid nothing for the fact that (s)he has much more capital invested in (being used by) the business than does the junior generation. This is essentially a gift to the junior generation and could be viewed as disguised gifting. Nonfarm heirs may find this unfair. On the other hand, the farm business might deteriorate significantly, or at least not experience much growth, if the younger generation did not return to the farm. In many cases, the senior party, and thus the heirs, will be better off as a result of the gifting, if it insures that the junior partner will stay on the farm.

This paper has not discussed the income tax consequences of the alternatives. Income will be taxed differently with the different alternatives. Some of the implicit gifting may need to be made explicit. For example, the 1/2 calves alternative likely involves gifting of the value of the calves. This is unlikely to be a problem since 100 calves, valued at \$100 each, could be transferred and still be within the \$10,000 free gifting rule. But, this paper has not analyzed the tax consequences of the alternatives.

The value of this analysis is limited because only two specific farm situations have been analyzed. The results for farms with basically different financial characteristics could differ markedly from those observed for these two situations. Further, only one economic environment has been considered. Results would be somewhat different with different inflation and interest rates.

Only two 50-50 partnership and six alternate arrangements have been considered. Many other alternatives and variations on the alternatives could be considered. Draws and guaranteed salaries could be set at other levels. Interest payments to partners could be guaranteed. Real estate rental rates could be higher or lower. Explicit gifting could be an alternative or incorporated into some of the alternatives.

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