
California Agricultural Cooperatives
Managers' Strategies and Attitudes Towards
Finances and Risk

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**California Agricultural Cooperatives:
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Executive Summary

Agricultural cooperatives, like all types of agribusiness in California, are currently undergoing management adjustments as a result of recent changes in the focus of agricultural lenders. For many reasons, lenders have increased their level of analysis regarding a borrower's financial structure and attitudes toward risk and its management. As a result, agribusiness firms such as cooperatives must also assess their strategies regarding financial and risk management to assure that they are sufficient to satisfy lenders, as well as to serve the company's own business objectives. The first step in such an assessment involves identifying existing financial and risk attitudes. This paper provides a base of comparison for individual firms by presenting a summary of relevant information from a state-wide survey of agricultural cooperatives.

This article summarizes the results of a survey of 26 California agricultural cooperatives completed during the summer of 1993. Personal interviews were conducted with financial officers and managers of cooperatives of all sizes and types. The number of members in the cooperatives interviewed ranged from 3

to 6,500 with a mean of 873 members and a median of 325. Of the 26 cooperatives in the sample, 23 performed some sort of marketing function. Only three were strictly supply cooperatives. The marketing cooperatives were quite diversified in their activities: ten firms performed processing, warehousing, and output selling functions; three performed warehousing and output selling functions; four performed solely processing and packing functions; five performed solely output selling functions, and one performed solely warehousing functions. Additionally, eight of the marketing cooperatives also supplied production inputs to their members (and often nonmembers). As with sizes and functions, the commodities represented in the sample were diverse and included fruits and nuts (12 cooperatives), field and row crops (6), livestock (5), and other (3). As would be expected, the livestock cooperatives all engaged in some kind of processing, while none of the cooperatives involved with field crops did any processing. The Cooperative Finance Survey starting at page 15 presents all the results from the survey.

Summary of Survey Results

Cooperative Demand for Credit

All but 2 of the 26 cooperatives were currently carrying or had recently carried debt. All borrowers had some kind of short-term borrowing or line of credit, which was predominantly used as operating funds. In addition, half of the borrowing cooperatives carried longer-term debt, which was used for expanding capital such as machinery or buildings. The type of borrowing undertaken by the cooperatives was compared in relation to commodities, function, and size. The results indicate that cooperatives specializing in field crops tend to rely on short-term borrowing, as their functions are largely input supply and marketing. Cooperatives which perform processing functions, such as dairy cooperatives, are much more likely to carry long-term debt. The number of cooperative members also appears important to the borrowing decision. None of the smallest cooperatives carried long-term debt, while all but one of the five largest had long-term debt. Middle sized cooperatives were evenly split between those with only short-term debt and those that were also borrowing over the long term.

Respondents were questioned as to what factors influence whether and how much the cooperative borrows. The vast majority (80%) said that borrowing was driven by need - that is, by the cooperative's operating requirements. This seems to be largely the result of the timing of expenditures and revenues. Other influences varied with the size of the cooperative. Only 36% of the cooperatives mentioned interest rates, and several noted that they were not interest sensitive. None of the largest cooperatives mentioned interest rate, other borrowing costs, or any type of lender restrictions, though one stated that the entire deal was important. The smallest cooperatives were similarly, or symmetrically, unaffected by such factors, while some of the medium-sized cooperatives did mention them as influencing their borrowing decisions. These results are

similar to those of other studies of demand for agricultural credit (such as Turvey and Weersink).

Cooperative representatives were also questioned as to their memberships' demand for credit. Of the 25 responses, all said their members were borrowing, with 60% stating that producers hold both short-term and long-term debt. Most farmers belonging to field-crop cooperatives held only short-term debt, which is not surprising given the yearly planting and harvest cycle. Those belonging to cooperatives organized around fruits and nuts were more likely to have long-term debt as well as short-term credit, and all the livestock cooperatives stated that members borrowed for both the long and short term.

Asked about the factors which determine the extent of members' borrowing, most stated that commodity prices and/or production costs were important influences; this was true for all commodities. Unlike the cooperatives themselves, members appear to be more influenced by the interest rate, and 52% of the cooperative representatives thought lender restrictions were important considerations, especially on the amount borrowed. Again, this appears consistent for all commodities, though a bit more pronounced among the dairy producers.

Attitudes Concerning Agricultural Credit

To assess how the credit environment is perceived by cooperatives and by cooperative members, as they have related their concerns to the cooperative managers, a series of questions were asked on two topics: (1) requirements for borrowing and (2) financial services offered by cooperatives. The results provide insight into two commonly stated hypotheses concerning credit. First, it is believed that lenders have tightened their requirements for getting credit. This is believed to be a direct

result of the new risk environment in agriculture. Second, more financial services are being offered by non-traditional lenders. Financial services being offered by agribusiness firms, such as cooperatives, are thought to be less available from lenders or are of a type that traditional lenders no longer have any comparative advantage in offering.

Requirements for Borrowing

The results concerning requirements for gaining credit appear to indicate a large difference between the effects of recent changes on agribusiness firms and on individual producers. Over 70% of the cooperatives surveyed felt that lender requirements were no more difficult to meet than in previous years, and 88% said that financing had not curtailed cooperative activities. The other respondents tended to put a positive "spin" on their reply, stating that any restrictions on activity were due largely to internal discipline or helped to improve discipline. In contrast, over 95% of cooperatives said that members had complained of stricter lending requirements and over 46% said that their activities had been curtailed due to a lack of financing or to timing problems.

Beneath these numbers are some interesting differences according to commodity and cooperative size. Three out of the four dairy cooperatives felt that borrowing requirements are presently more difficult to meet, versus similar responses from only one-third of the field crop cooperatives, less than one-fifth of the fruit/nut cooperatives, and none of the supply cooperatives. Yet none of the dairy cooperatives felt that member activity had been curtailed by financing difficulties, whereas for other cooperatives, there was a fairly even split as to the impact of borrowing restrictions. At the producer level, this is probably due to the higher collateral value of livestock relative to field or perennial crops. At the cooperative level, this seems to be an effect due largely to the size of the cooperative.

Smaller cooperatives (with fewer than 100 members) perceived a greater strictness on the part of lenders, and it was the cooperatives in the middle range (between 100 and 1000 members) that said their functioning had been curtailed by lack or timing of financing. All the dairy cooperatives belong to this middle range. The information required in loan packages tends to support this perception. The most common requirement mentioned (by 65% of cooperatives), and noted consistently across size groupings, was for financial statements of some kind. These include retains, inventory, and collateral, which are all current (easily liquidated) assets. Indices of shorter term cash flow (i.e., accounts receivable, operating cash, and sales) were mentioned by 52% of total respondents. However, only 20% of the largest cooperatives mentioned such a requirement, whereas 60% - 67% of the small- and medium-sized firms did note it. Specific ratios (e.g., debt-to-equity) were mentioned by 50% and 80% of the cooperatives in the two medium-sized groups (100 - 400 and 400 - 1000 members, respectively), but none of the smallest cooperatives and only 20% of the largest cooperatives listed ratios. It is interesting to note that all of the dairy cooperatives mentioned that specific ratios were among the information requested by lenders.

These results support the contention that borrowing restrictions have shifted away from traditional measures of equity and toward sources of repayment and that this change has affected medium-sized cooperatives and agribusiness firms. It is not completely clear why there should be this difference, but the greater stability of larger cooperatives may be a factor. Another factor may be the sources of financing available to cooperatives of different sizes. Results of the interviews indicate that the largest cooperatives draw on a greater variety of funding sources, with an average of 2.6 sources from those listed in Table 1. The smallest cooperatives have an average of 1.5 sources of credit while the medium-sized organizations draw on 1.7 and 1.8 sources on average.

The primary lender to cooperatives appears to be Bank for Cooperatives (CoBank) in Denver, which supplies credit in some form to 72% of the cooperatives interviewed. Broken down by size, the results show that only 25% of the smallest cooperatives, 70% and 83% of medium-sized cooperatives, and all of the largest cooperatives in the sample receive some financing from CoBank. The smallest cooperatives (with fewer than 100 members) are more likely to receive credit from local community banks, while 40% of cooperatives with between 100 and 400 members received financing from local banks and an equal percentage of them used large commercial banks such as Wells Fargo or Bank of America. Medium-large cooperatives (400 - 1000 members) were more likely to receive credit from larger banks; two-thirds mentioned this source. As firms grow in size, it appears they are more willing or able to do business with large commercial banks. Yet, even as they grow very large and more financially independent, agribusiness firms maintain contacts with small banks.

Membership borrowing is somewhat similar, with the vast majority of respondents (96%) mentioning the Farm Credit System as a source of financing. Similar numbers mentioned local community banks and large commercial banks. No major differences were noted among producers of various commodities, though growers of field crops seem slightly more likely to use local banks than state-wide commercial lenders. Only 16 out of 26 cooperative officers felt informed enough to comment on loan requirements for their membership, but results tend to agree with a similar shift from real estate collateral to cash flow requirements. Of the respondents, 75% mentioned cash flow or some other short-term measure of ability to repay, and this was consistent for all commodities. Fifty percent also mentioned financial statements to be indices of liquid assets. Relatively fewer of those specializing in field crops mentioned this information. This may be due to the nature of borrowing for crops which will be harvested and

sold within the year, as opposed to loans for perennial crops and livestock production.

Equity financing was designated as a source by all 26 cooperatives. Eighty-eight percent described a per-unit retain and revolving fund plan. One respondent stated that his cooperative had moved to a base capital fund. Additionally, 19% mentioned retained earnings and 8% specified interest on investments as sources of equity. A question was asked about why the cooperative decided to borrow instead of increasing equity financing. Fifty-eight percent of the respondents stated something to the effect that members would not stand for, or could not afford, an increase in per-unit retains or some other kind of equity contribution.

The managers and financial officers interviewed were asked to list the perceived advantages and disadvantages of the institutions from which they had borrowed. Differential interest rates between creditors appears to be an important factor. It is interesting that when credit sources are grouped into the categories of large banks, local banks, CoBank, commercial paper, life insurance companies, and Farm Credit Service leasing the primary advantage

Table 1.
Percent of Cooperatives Using Various Sources of Credit

Source	Size of Cooperative (no. of members)			
	N<100	100<N<400	400<N<1000	N>1000
Large bank	25	40	67	40
Small bank	75	40	16	20
CoBank	25	70	83	100
Insurance co.	0	10	0	40
Government	25	10	0	20
Other	0	0	16	40

given for each category is "lower rates." How can they all have lower rates? Other important considerations revolve around the services provided by the credit source, with convenience, continuity of relationship, responsiveness, and rapport being mentioned.

Financial Services Offered by Cooperatives

Cooperatives are formed to provide individuals greater market power than they would otherwise possess. Cooperatives may also be able to provide services to members that producers would otherwise have difficulty obtaining or would be able to obtain only at higher cost. Cooperatives were asked what types of financial services they offered their membership. Four cooperatives, or just over 15% of the sample, said they provided no financial services. Half of the cooperatives provide some type of advance on the sale of a grower's commodity. Most of these will make advances only after harvest. Only three cooperatives provided funds before or during the growing season: one for purchases exclusively from their

supply division; one only after the farmer's crop was far enough along for a yield to be estimated; and a third extending what is basically a line of credit to its qualifying members who agree to market their product through the cooperative. Fifty-eight percent of those cooperatives making advance payments charged interest on the amounts advanced. Members are able to obtain insurance through 42% of the cooperatives and a similar number offer credit on the purchase of inputs for production. Five cooperatives take assignments for lenders and, interestingly, this group includes all four of the dairy cooperatives which were interviewed.

The function of the cooperative determines to some extent the services provided to the membership. Cooperatives which engaged in supplying inputs to members were more likely to offer credit for purchases, whereas marketing cooperatives were more likely to provide advances on sales. However, size of the cooperative seems to determine to a great extent what services and how many services are offered. The smallest cooperatives offered only one service from those listed in Table 2, on average, to their members, and that service was either insurance or credit to be used for the purchase of inputs. The reason given for providing these services was that it is a normal business practice (e.g., for suppliers) or that it was for the benefit of the members. When asked why financial services were not offered, 75% of the smallest cooperatives answered that the risk to the cooperative was too large; only two cooperatives with more than 100 members mentioned risk as a reason for not offering financial services.

It appears that the cooperatives in the middle size ranges (100 - 400 and 400 - 1000 members) have the greatest demands placed on them for financial services. On average, cooperatives of this size offer 1.7 and 2.7 services, respectively. The number of services provided by the largest cooperatives declines again to an average of 1.8. Input credit, insurance, and advances are the most common forms of service offered by cooperatives in the

Table 2.

Percent of Cooperatives Offering Financial Services

Service	Size of Cooperative (no. of members)			
	N<100	100<N<400	400<N<1000	N>1000
Insurance	50	40	43	40
Input credit	50	50	43	20
Advances	0	40	86	60
Assignment	0	30	29	0
Other	0	10	71	60
None	25	30	0	0

middle two ranges, with advances being dominant in the medium-large cooperatives. These cooperatives were the only ones interviewed that took assignments for lenders. Member benefit is the primary reason given for offering financial services, but pressure from competition is a close second. At the same time, lack of demand is the major reason other financial services are not offered. It may be that these sizes of cooperatives are large enough to be capable of providing such benefits and small enough to feel the membership pressure. As noted above, these cooperatives are also of a size to feel the greatest pressure from new restrictions imposed by lenders.

The average number of services offered to members declines among the largest cooperatives. This may represent a reduction in cooperative activities that is easier to implement over larger groups which cannot bring personal pressure to bear on the cooperative officers. One respondent, for instance, stated that the trend is for cooperatives to offer fewer services. Whereas 40% of all cooperatives said they offered services to benefit the membership, only 25% of the largest cooperatives said that was a reason for providing services. Instead, 80% of this group said they did not offer more services because the cooperative lacked expertise in such areas.

It appears that medium-sized cooperatives are feeling more pressure to provide services to members than are the smallest or the largest cooperatives, while at the same time encountering relatively more restrictions on their own borrowing abilities. It may be that members, who are bearing much of the weight of lender restrictions in the face of perceived changes in the risk environment, are able to direct cooperatives to address members' own needs when the cooperative is not too large. The cooperative, therefore, provides an important service in pooling some of the risk that growers face. Smaller cooperatives may lack the broad base to efficiently perform this service, and large cooperatives may not be so responsive to the individual members.

Risk Attitudes and Strategies

Risk is inherent in all businesses, and cooperatives are certainly not immune from business and financial risk. Moreover, risk can arise from various sources. During the interviews, the respondents were asked whether they considered certain categories to be a source of risk. Table 3 lists these sources of risk and the results of this question in percentages. Table 3 also includes the results from a question asking the respondents to identify the two main sources of risk to the cooperative.

Weather was the most commonly mentioned source of risk, with 92% of the respondents listing it. Pests and disease were also mentioned by about two-thirds of cooperatives, especially cooperatives dealing with fruits and nuts which must maintain quality standards.

The second most commonly mentioned risk was government regulations, cited by 88.5% of the cooperatives interviewed. When respondents were asked to specify the two

Table 3.

Sources of Risk to Agricultural Cooperatives (Percent of cooperatives responding)

Source of Risk	Considered a Source of Risk	Ranked in Two Main Sources of Risk
Weather	92	38
Pests	73	8
Disease	69	0
Input price variability	54	8
Output price variability	62	27
Labor cost changes	62	0
Government regulations	88	46

most important sources of risk, regulations were mentioned by about half the cooperatives, whereas weather was noted by just over one-third. This is a significant difference between producers and agribusiness: cooperatives consider government regulations to be a major source of risk, but individual producers do not (Blank). Regulations hit livestock cooperatives relatively harder than other commodities; all dairy cooperatives and the one poultry cooperative stated that regulations were one of the most important sources of risk. Regulations seem to increase risk for smaller cooperatives relatively more than for larger ones. Of the smallest cooperatives (those with fewer than 100 members), 75% mentioned government regulations as one of the two most important sources of risk, and 60% of the cooperatives with between 100 and 400 members agreed. In contrast, 29% and 40% of the two groups of larger cooperatives listed regulations as one of the most important sources of risk.

A third group of risks that cooperatives face, input and output price variability and labor costs, was mentioned by 54% to 62% of the respondents. As would be expected, supply

cooperatives are more concerned with changes in input prices while cooperatives engaged in marketing care more about changes in output prices. Interestingly, labor costs are not ranked as one of the two most important sources of risk by any cooperative. Finally, 23% of the cooperatives, all medium-sized, mentioned environmental concerns among the risks they face and 19%, all in the three smallest sizes, said competition was a source of risk.

Risk management strategies include insurance, diversification, forward contracting, participation in government programs, hedging, and the purchase of risk-reducing inputs. Cooperative managers were asked whether each strategy was used by the cooperative to manage risk. Table 4 shows the results for this question, and also the results of a question about the two main strategies employed. Diversification, insurance, and forward contracting were employed the most often, but their use and the use of the others listed in Table 4 are far from overwhelming. When asked what other risk management strategies are used, the respondents provided a list of forty separate techniques, which were often as unique as some of the activities of the cooperatives. These included lobbying, safety programs, staying competitive, strategic planning, staying abreast with technology, managing market position, credit management, etc.

Risk management tools appear to be under-utilized by a majority of cooperatives interviewed, although cooperatives make much more use of risk management tools than do individuals. Over 46% of the cooperatives surveyed listed day-to-day management, such as "knowing customers' character" or "serve customers," as a strategy for dealing with risk. Almost as many, 42%, listed such strategies as one of their two most important means of dealing with risk. This response may reflect a poor understanding of the question or a lack of explicit mechanisms to deal with problems related to risk as distinct from other business problems.

By far the most common strategy for man-

Table 4.

Risk Management Strategies of Agricultural Cooperatives

Strategy	% Using	Ranked in Two Main Strategies (%)
Insurance	88	15
Diversification	62	27
Forward contracting	42	12
Government programs	31	8
Hedging	12	4
Risk-reducing inputs	62	0

aging risk by cooperatives is using some type of insurance (cited by over 88% of the respondents). However, less than 16% of cooperatives listed insurance as one of the two most important strategies, implying that coverage for many of the risks faced by agribusiness is limited. Diversification is the preferred strategy of over one-third of the cooperatives interviewed, but the inability of the smallest cooperatives to diversify may be a major constraint. The smallest cooperatives were more likely to use risk-reducing inputs, but as the most important strategies insurance and day-to-day management were the common responses for this group of cooperatives. The smallest cooperatives also appeared unable to take advantage of government programs or of market mechanisms like forward contracting or hedging which were used by the larger-sized cooperatives.

Also of interest are differences between cooperatives and proprietary firms in their perceptions and responses to risk. Cooperative officials were asked two questions on this subject to elicit their opinions. The first was: "Are the risks and strategies identified above different from those faced or pursued by a proprietary firm engaged in a similar activity?" The large majority (84.6%) of cooperatives said that there was no difference between the two types of businesses. A few qualified their responses by noting that no proprietary firm was engaged in the type of activity which they pursued. Of those who gave an affirmative response, all were in the medium to medium-large range in size. Dairy cooperatives also tended to answer affirmatively.

Respondents were also asked if they agreed with this statement: "A cooperative can manage risk better than a proprietary firm because the cooperative has more complete and ready access to relevant information about its members." Again, most (73.1%) said no, that cooperatives did not have a significant advantage over other firms. About three-fourths of those disagreeing did so on the grounds that cooperatives do not have better access to infor-

mation on their membership, while the rest believed that cooperatives had no advantage in risk management. Perhaps the most telling argument was made by one respondent who noted that the cooperative was organized for the benefit of the membership and may thus increase its own risk in order to reduce the risk to the producer. The cooperative has the goal of increasing its input costs, that is, the return paid to the member, rather than lowering costs. Those who agreed with the statement noted that the cooperative structure provided information about markets that may not be available to proprietary firms and insured a constant supply of inputs. Again, affirmative responses were dominated by dairy cooperatives, but the size of the cooperative appeared to be unimportant in determining the respondents' answers.

Conclusions

Agricultural cooperatives in California depend on both debt and equity financing. They borrow primarily from commercial banks and the Bank for Cooperatives, with only a small number of larger cooperatives using commercial paper or life insurance companies. The main purpose for borrowing is to fund cash flow needs; little funding of expansion was going on at the time of this study. There was only moderate interest rate sensitivity in determining whether to borrow and the amount to borrow, but interest rates do influence the source of funds that is used.

Agricultural cooperatives offer limited financial services. The most frequent are group insurance plans and trade credit on the purchase of inputs. Only 23% of the sample made loans to their members, with half of these being short-term advance payments on outputs and half being term loans for specific purposes. Cooperatives have not moved into increased credit activity because they believe they do not have the expertise, the risks are too great, they have insufficient capital, and there

is no demand for such services from their members.

Cooperative managers and financial officers perceive weather, government regulations, and output price variability to be the three main sources of risk that their cooperatives face. Many strategies to manage risk were mentioned, with diversification, insurance, and forward contracting considered the three main strategies.

In summary, agricultural cooperatives in California vary in their financial structure and risk management strategies, but there are some similarities. First, cooperatives have generally been able to get the amount of credit necessary for their operations, which is important because virtually all cooperatives surveyed expressed concern about their ability to raise additional equity from members. This is an important point; it indicates that large-scale expansions or capital improvements may be difficult to undertake if lenders are unwilling to loan 100% of the amount needed. Second, despite the interest of some members in receiving additional financial services from their cooperative, cooperative managers have recognized the financial risk in offering such services and have resisted expanding into these

financial markets. Finally, the list of risk management tools available to cooperatives is limited, requiring managers to be more creative in developing strategies to manage the various sources of risk faced by the cooperative firm. In the future, risk and its management will receive more attention from agricultural lenders. Thus cooperatives will need to continually develop risk management plans to ensure access to the credit necessary for the survival of the firm.

References

Blank, S. (ed.), *Financing Agriculture in California's New Risk Environment*, University of California Agricultural Issues Center, 1994.

Turvey, C. and A. Weersink, "The Demand for Agricultural Loans and the Lender-Borrower Relationship," paper presented at the NC 207 Agricultural Finance Conference, Chicago, October 1993, 34 pp.

Cooperative Finance Survey

Interview Outline and Summary of Results

Twenty-six personal interviews were completed between August 9, 1993, and September 10, 1993. The names of the cooperatives in the sample are omitted to insure confidentiality.

I. General Information

The commodity categories were field crops (six cooperatives), fruit (eight), livestock (five), wine/grapes (two), nuts (two), and other (three).

Title of Respondent

Fourteen respondents were general managers; twelve were financial managers (chief financial officers, vice presidents of finance, controllers, treasurers, etc.).

Is the cooperative organized on the basis of a specific commodity, a geographical location, or a function? Please describe.

Comments on three classifications were solicited from each respondent. The commodity groups are listed above. Only one of the cooperatives was not commodity (or commodity group) specific.

The extent of the geographical area serviced was usually a function of the size of the cooperative. Eight cooperatives have members in several areas of the state. Four cooperatives have some members from outside California. The dairy cooperatives tend to encompass two to three counties. Nine cooperatives could be considered "local."

The functions varied a lot from one cooperative to the next. Twenty-three cooperatives in the sample performed some sort of marketing function. The other three were strictly supply cooperatives. Of the twenty-three marketing cooperatives —

- Ten performed processing, warehousing, and output selling functions.
- Three performed warehousing and output selling functions.
- Four performed solely processing

(including packing) functions.

- One performed solely the warehousing function.
- Five performed solely the output selling function.

Six of the marketing cooperatives also supply inputs to their members (and often nonmembers). Two of these six pointed out that their supply divisions are larger than their marketing divisions.

How is the cooperative managed?

All twenty-six cooperatives were managed by a full-time professional.

How many members are there presently?

The numbers of members ranged from 3 to 6,500. The average was 873 members. The median was 325.

The membership represents what percent of the commodity/region?

This is a difficult set of answers to interpret, because the respondents used different bases. The local cooperatives sometimes answered for their geographical region and sometimes for the state. The larger cooperatives tended to have more reliable knowledge on this subject. Of the twenty-three who responded to this question, the average was 24%. The median was 15%. The range was 1% to 78%. Again, these numbers should be interpreted cautiously.

When was the cooperative established?

Many of the cooperatives were old. The oldest cooperative was established in 1893 and the newest in 1988. Two cooperatives were established in the 1890s; two between 1900 and 1909; seven between 1910 and 1919; four in the 1920s; one in the 1930s; two in the 1940s; three in the 1950s; one in the 1960s; two in the 1970s; and two in the 1980s.

Do any associated government programs support the cooperative?

Five respondents answered yes. Three

were dairy cooperatives. Curiously, one dairy cooperative answered no. The other yes answers were from one that takes part in the export enhancement program and deals in a commodity on which there is a volume control marketing order, and one that benefited from Agricultural Stabilization Conservation Service programs. Two answered no but mentioned that they take part in the export enhancement program. Two others answered no but mentioned that their members take part in government programs.

Are there any government programs that compete with the cooperative?

All twenty-six said no.

II. Financing the Cooperative

What are the primary sources of funding for the cooperative?

All twenty-six respondents mentioned equity financing of some sort. All but two said that they currently or recently have had debt. On the equity side, twenty-three described a per-unit retain and revolving fund plan. Five mentioned profits and retained earnings. Two listed interest on investments as a source of funds. One stated that they had a base capital fund, which means that each member pays an equity contribution in advance based on his historical production. Other unique responses were (1) selling drying rights in drying tunnels to finance the construction of these tunnels; (2) charging a membership charge per acre (which sounds similar to the base capital fund); (3) a service fee paid by canners; and (4) using price support funds. Two respondents listed leases as a source of funding. The sources of debt financing are addressed below.

Does the cooperative borrow money and, if so, for what purposes?

Again, twenty-four cooperatives are bor-

rowing or have borrowed recently. All twenty-four listed short-term loans to finance operational cash flow needs. Thirteen also listed longer term borrowing to finance property, plant, and equipment purchases and replacements.

Have these purposes for borrowing changed in the last five years?

Twenty-three said no to this question. The three that answered yes explained that (1) they are now just using short-term debt, but they had some long-term debt within the last five years that they have paid off; (2) they had financed capital expansion with member equity before and now have switched to using long-term debt; and (3) they are currently borrowing for a tree-pull program, which is a different purpose than the last time they borrowed.

Why is the cooperative borrowing instead of using some other financing mechanism such as self-financing or expanding equity?

Except for the cooperatives who are not borrowing, the most frequent sentiment was that the members would not stand for an increase in per-unit retains or some other kind of contribution to equity. Fifteen of the twenty-six said something like this. Some of the comments were —

- There's no way a viable cooperative can get by without borrowing.
- If they kept enough cash, the members would string the manager up.
- Their financing requirements exceed the ability to self-finance.
- The only way to self-finance is for growers to put in money. This is not very popular.
- Their (the cooperative's) competitors would take advantage of this.
- They've looked into self-financing, but they have such a favorable borrowing rate from lenders.
- Growers don't have the money.
- It would be a cash flow hardship on

members if they tried to ask for more equity. Also, it's a capital-intensive industry they operate in.

- They have had substantial growth in the last eight years and couldn't have done it with equity financing (the revolving fund of five years is too short).
- Expanding equity is too expensive (for tax reasons), and going to members is prohibitive.
- They need money fast.
- The growers don't want to give up any more. The cooperative tried to keep a balance.

One respondent sounded like he planned to expand equity, saying "The current retain has been in place for twenty-five years. This should go higher, and [the] bank expects [us] to raise this retain."

What factors determine whether the cooperative borrows? (e.g., interest rate, other borrowing costs, length of loan, lender restrictions, commodity price and price stability, production/marketing costs, etc.).

If the interviewer just asked the question without listing the examples given in parentheses, the respondent would usually say "because of short-term cash flow needs." When pinned down, they would admit that commodity prices, price stability, and production/marketing costs were involved in their cash flow answer, but also the point was made that cash flow needs result partly from the timing of inflows and outflows, regardless of the output prices and the operating costs. Fourteen reported that cash flow is a reason for borrowing.

Only eight cooperatives listed interest rate as a factor (which is probably a reflection of the low level of current rates). One pointed out that the interest rate they receive on their investments would determine whether they borrow. One listed "other borrowing costs," another listed "length of loan," and two others listed "lender restrictions" as factors.

Six respondents listed commodity price or price stability. Nine listed production (processing) and marketing costs. Other factors mentioned were the weather, the size of the crop, and the type of the project the cooperative is undertaking.

What factors determine the amount the cooperative borrows?

It was difficult for the people interviewed to distinguish between this question and the preceding question. Even when they understood the difference, they tended to give the same answers for both. The answers were —

- Cash flow needs, fourteen listings
- Interest rate, five
- Borrowing costs, one
- Length of loan, one ("With low rates, they want to increase their long-term borrowing.")
- Lender restrictions, one
- Commodity prices and price stability, five
- Production/marketing costs, four
- Size of the crop, four
- Size of the carryover, one
- Timing of harvest, one
- Cheapest deal, one
- The decision of the board, one
- To remain competitive, one
- The size of the project, one

Who are the major suppliers of credit to the cooperative?

The sources that were used by the respondents were —

- Commercial banks, twenty-one (three specified Bank of America, three specified Wells Fargo, two specified Union Bank, and eight specified local independent banks)
- CoBank, sixteen
- Commercial paper, three
- Life insurance companies, two
- Farm Credit Service leasing, two
- Small Business Administration, one
- Commodity Credit Corporation, one

Many of the cooperatives utilize more than one source of credit. One listed four suppliers; six listed three; eight listed two; and, nine listed one.

What are the advantages and disadvantages of each of these institutions?

The number of similar responses is given in parentheses after each advantage or disadvantage listed below:

CoBank

Advantages:

Competitive or lower rates (eight); understand cooperatives because they are also a cooperative (seven); good rapport (four); you share in CoBank's profits because you own stock (two); their style of loans fit our business (two); they waived fees (one); the loan was unsecured (one); better service (one); only lender that would talk to them (one).

Disadvantages:

You have to buy CoBank stock (three); inflexible (one); punitive if you're having problems (one); inconvenient because they are in Denver (one); there have been problems generated by regulators (one); must have 50% of your business with members to qualify (one); stodgy (one).

Large Commercial Banks (*Bank of America, Wells Fargo, Bank of California, Union Bank, Rabobank*)

Advantages:

Competitive or lower rates (four); continuity of a long-term relationship (three); do other banking with them (three); service oriented (two); convenient (two); no annual service charge (one); don't have to supply a monthly report (one); more efficient (one).

Disadvantages:

Higher rates (three); they don't always understand cooperatives (two); a little stodgy (one).

Local Independent Banks (*Tri-Counties Bank, Bank of the Sierra, Farmers and Merchants Bank, First National Bank, Ventura National Bank, Citizens State Bank, Valley Independent Bank, US Bank*)

Advantages:

Competitive or good rates (five); local (four); convenient (four); know the people (two); flexible (one); fast (one); responsive (one); fair (one); solid (one); easier (one); aggressive (one); better service (one).

Disadvantages:

Only one listed a disadvantage, and that was that the bank was small, meaning that wire transfers and other services were unavailable. A few stated that there were no disadvantages to local independent banks.

Commercial Paper

Advantages:

Lower rates (two); institutionally and geographically diverse (one).

Disadvantages:

Maturity date is dictated (one).

Life Insurance Companies

Advantages:

Best rates (three).

Disadvantages:

More covenant oriented (one); higher fees (one).

Farm Credit Service Leasing

Advantages:

Same as CoBank (one); low cost of funds (one).

Disadvantages:

None listed.

What criteria do lenders require for loans to the cooperative?

Only four people listed specific underwriting standards. One said that their debt-to-asset ratio must be less than .6:1 and their current ratio must be greater than 1:1. Another said debt-to-equity must be less than 3.5:1 from October through February and less than 7:1 from March to September, their current ratio must be greater than one to one, their debt coverage must be greater than 1.1:1, they must not have grower advances of more than \$6.5 million, and their net worth must be maintained at more than \$3 million. The third just said that their debt-to-equity ratio must be less than .6:1 (probably he meant their debt-to-asset ratio). The last of the four to specify ratio standards said their debt-to-equity ratio must be less than 4:1.

Otherwise, three cooperatives who borrow admitted that they did not know the criteria that their lenders apply. Financial officers gave better answers to this question than general managers did. The remainder fudged and listed the following requirements or factors: financial statements (nine), debt-to-equity ratio (seven), coverage ratio (six), current ratio (five), budgets (three), accounts receivable aging (two), an analysis of the cooperative's industry (two), deposits held with the lender (two), inventory (two), net tangible assets (one), operating cash (one), management (one), reputation (one), sales (one), retained earnings (one), retains (one), the percentage of membership business (one), collateral (one), and source of repayment (one); in one case no more than 15% increases in management's salaries without lender approval was written in as a covenant.

Are the present requirements stricter than those of five years ago in the sense that they are more difficult for the cooperative to meet?

Six said yes; seventeen said no; one said yes and no; and two did not answer because they don't borrow. Of the six that said yes, the

explanations were:

- There are more restrictions on maintaining certain ratios, more covenants on the ratios. But the cooperative's loans are unsecured, so lenders have a good reason to be careful.
- The amount that is loaned on accounts receivable and inventory is now less than it was as a percentage.
- The bank keeps requiring more equity and more control on the cooperative's position in the market.
- Lenders' questions show the effects of bad times in agriculture and in lending.
- They are looking at things more closely. They want to see deposit amounts in all banks, and the cooperative spreads its deposits out to be sure to get the FDIC insurance.
- When all CoBanks were merged, the standards became stricter and there were more paperwork requirements.
- Yes, they follow the loan covenants more strictly, and no, they have fewer (but more meaningful) loan covenants.

How do the criteria vary with the purpose of the loan?

Five respondents said that the criteria do not vary. Seven did not know if the criteria varied. Two said that the question did not apply to their situation. Of the twelve remaining, five expressed the idea the lenders are tougher and more careful with long-term loans; four said that repayment and risk are greater concerns with short-term, whereas long-term lenders are more concerned with collateral as well as repayment; two made the distinction that short-term collateral is accounts receivable and inventory whereas long-term collateral is capital equipment and said that the loan-to-value percents are different for these two types of collateral; one claimed that his interest rate was higher on short-term borrowings.

Has the functioning of the cooperative been curtailed or altered by a lack of financing or timing of financing?

Three said yes, twenty-two said no, and one claimed the question did not apply because his cooperative doesn't borrow. For the three yes answers, the explanations were:

- The lack of financing was because of internal discipline, not an external limitation.
- Lack of financing does not just apply to cooperatives. The Savings and Loan situation created the overreaction of regulators. Also, Deloitte and Touche gave a negative report on the wine industry. The result is that banks forced wineries to reduce inventories, which led to solid wineries becoming troubled businesses.
- The lack of financing worked to the cooperative's benefit. The lowered line of credit (which was due to the bank's problems) made the cooperative more disciplined.

III. Financial Services

What financial services does the cooperative offer to members?

- Ten cooperatives offered insurance (usually workers compensation or health insurance).
- Eleven offered input credit (this would include the three supply cooperatives, the six marketing cooperatives that have supply divisions, and two solely marketing cooperatives that also provide seed to their members).
- Twelve offered advances of some type on the crop. Eight cooperatives would only make advance payments if the crop had been harvested, and

three cooperatives would make pre-harvest advances (with one, this issue was indeterminate). These advances could be called lines of credit. However, for one cooperative, advances would not be made more than eight months before harvest; for another, advances were limited to purchases by growers from the cooperative's supply division. Seven of these twelve cooperatives which make advances to growers mentioned that they charge interest on the amounts advanced.

- Three cooperatives mentioned that they will take assignments for lenders, but the interviewer imagines that there are more than three that will do this.
- Four cooperatives said that they don't offer any financial services to their members.
- Two cooperatives listed deferring payments to growers for tax reasons as a financial service.

Other Answers:

- Not requiring the grower to pay all drying costs at the time of drying.
- Allowing growers to finance their portion of dryer construction through long-term notes.
- Drying contracts which assure the grower that there will be drying capacity for his rice.
- Acting as an intermediary in equipment leasing.
- Futures trading pools, but not customized for each grower.
- Long-term loans for equipment purchase.
- Paying bills for the growers and deducting amounts from crop proceeds.
- The member can loan to the cooperative.
- A real estate lending subsidiary which offers bridge loans for pur-

chase of orchards.

- Finding a home for off-grade fruit.

If financial services are offered:

(a) When did the cooperative begin offering financial services?

The answers varied a lot. Usually input credit for cooperatives that sell supplies existed from the beginning of the cooperative. Most of the cooperatives started making advances to growers within the last couple of decades. Specifically, four said "a long time ago" in answer to this question; one said he did not know; eighteen gave specific dates (1901 through 1993). Very often the date corresponded to the cooperative's date of establishment.

(b) Why did the cooperative begin offering these services?

Most answers fell into five categories. Four said that the service was a normal business practice (this comment usually applied to input credit); four said that the services were requested by the members; four said that services were offered to keep or to benefit their members; five said that their competitors had similar programs and the cooperative did not want to lose members (this comment usually applied to advance payments); two said that growers were hurting and need help (this also applied to advances). Other individual answers were "they offered health insurance to the members when they got it for the employees" and "the service evolved over time."

(c) What information does the cooperative require from its members?

Health insurance:

- No requirements beyond those of the insurance company

Assignments:

- No requirements mentioned

Input credit:

- Only require information if the member gets behind.
- Require a credit application.

Long-term credit:

- A full credit check, tax returns, etc.
- Cooperative allows long-term loans up to a percent of a member's retains.

Advances:

- Property description, UCC filing, crop insurance from February through May, and a field inspection by the cooperative after June 1st.
- The cooperative looks at the member's milk check.
- A credit report, collateral, a lien on the crop.
- Application, financial statements, tax return, historical production, budget, equipment list, appraisals.
- Don't need anything because the cooperative has first claim on their cash flow.
- Cooperative already knows size of the crop and the price.
- Credit history, production information.
- Rain insurance and assignments.
- Crop in the ground or in the warehouse, some track record.

(d) What does the cooperative require in terms of equity or profitability?

Fourteen of the cooperatives that had some kind or kinds of financial service said they had no requirements for equity or profitability. Even those who gave answers didn't really answer the question. Their comments were:

- Enough cash to cover the service; it's revenues, not profits.
- The cooperative's membership agreement says that the cooperative can attach the grower's equity.
- Equity in the cooperative, no requirement on profitability.
- They ask who the member's CPA is when the member gets behind. Then they check with the CPA.
- Cooperative checks on the grower's credit worthiness.

- Look at financials for new or unusual cases, but don't have equity or profits standards.

(e) Do the financial services offered by the cooperative have different requirements depending on farm size or crop produced?

Three said yes; seventeen said no; and six claimed the question did not apply.

Comments were:

- The larger the advance, the more levels of approval.
- Some crops are riskier and they use a five year grower's average price in their budgets.
- A larger dairy would need more cash.

If financial services are not offered:

(a) Why has the cooperative decided not to offer them?

Seven answered that there was no demand or no need; ten answered that these services were not within the cooperative's expertise, often using the phrase "we are not a bank;" four said that the services were never considered; five said that the risk would be too great; three said that the cooperative had insufficient capital to offer the services; and two said that these services are already offered elsewhere.

(b) Has the membership expressed an interest in such services?

Twenty-two said no and four said yes. Comments (even some of the no people made comments):

- Yes, they want crop financing.
- Yes, more requests all the time for advances as inter-generation transfers occur.
- Yes, they have requested crop loans.
- Yes, only the members who are broke.
- No, just the opposite, the members don't want the cooperative involved.
- No, but a few comments requesting lines of credit.
- No, but the interest would be there if

the services were offered.

- No, they all know when they join that lines of credit aren't going to be offered, so they don't ask.
- No, the members never have been asked however.
- No, management has proposed a line of credit system for small growers and the board and some members said don't make the Association the bad guy.
- No, not so much the members expressing an interest as the management.

Are these services, offered or not, available through other cooperatives?

Twelve said yes, eleven said no, two didn't know, and one said yes and no. The yes and no answer added an explanation: yes for insurance plans, no for line of credit financing in dairy cooperatives in California; this person added that the trend has been for cooperatives to provide fewer services to members.

IV. Membership Credit Situation

For what purposes are your members borrowing?

Twenty-five stated that their members are borrowing for production (operational, cash flow) purposes. Twelve said that members are using credit for capital replacement and expansion. Ten said that there is not much or only some intermediate or long term moneys for expansion.

How has this changed in the last five years?

Eighteen stated that it hasn't changed. Four said that they don't know how it's changed. The four that detected changes explained as follows:

- Many new varieties in stone fruit make it so growers are always having

- to replant.
- There used to be more expansion, now its members are consolidating.
 - Growers are going to shift into long-term from short-term if they can because of low rates.
 - A big surge in plantings occurred in 1989 and 1990.

Why are the members borrowing instead of using some other mechanism such as self-financing, partnerships, or sharecropping?

The answers were:

- How do you self-finance?
- Borrowing is the norm.
- There are as many reasons as there are members.
- Self-financing takes a lot of cash.
- Some growers do self-finance, but some can't borrow anywhere but at the cooperative.
- The return in agriculture has not been great enough to self-finance, but growers now put more equity in.
- Larger ones might do their own financing, banks have a comfort level lending to dairymen with cooperative equity.
- There is no sharecropping, they're flat broke (the ones that borrow).
- They can't do anything but borrow, if they have a good year they can self-finance, but only for a year or two.
- Borrowing is their only means.
- Lack of capital.
- Borrowing is the only alternative available.
- They don't have the money, and sharecropping is almost a thing of the past.
- They have no other alternatives.
- Because of cash flow, most are diversified and require large amounts.
- If they can self-finance they will, it's hard to get there if you're developing.
- There is some consolidation, share-

cropping became almost illegal, there is a lack of ability to self-finance.

- Quickest, cheapest way.
- Other mechanisms don't apply.
- The younger guys are expanding and borrowing is the only alternative.
- He doesn't have the money, maybe due to poor management.
- Some farmers are self-financing, using trade credit for support, for most they prefer borrowing and can qualify.
- If he had the money, he'd self-finance.
- Borrowing is where they can get it, other sources are usually unavailable.

What factors determine whether members borrow? (e.g. interest rate, other borrowing costs, length of loan, lender restrictions, commodity price and price stability, production/marketing costs, etc.).

Fifteen said interest rate; four listed other borrowing costs; three length of loan; eight lender restrictions; thirteen commodity price and price stability; seventeen production costs. Other answers were:

- Feed inventories are purchased ahead to lower costs.
- Degree to which the grower is planting new grapes.
- To keep his head above water.
- Unless the rate is way too high, they will still borrow.
- Expansion.
- Interest rate determines where they borrow, not whether.

What factors determine the amount members borrow?

Four listed interest rate, none listed other borrowing costs, one length of loan, twelve lender restrictions, ten commodity price and price stability, eleven production costs. Other responses were:

- Two said the size of the operation.
- Three said the farmer's "needs."

- The small ones can't make it at their present size and good producers want to increase income.
- Their optimism about their future in the industry.
- Expansion, factors in the industry, and alternatives as far as other crops they could raise.
- They go to the maximum amount possible with the low interest rate offered by the cooperative on advances for the commodity.
- Cash flow pattern.

Who are the major suppliers of credit for the membership?

Twenty-four mentioned the Farm Credit Service (Production Credit Associations and Federal Land Banks); twenty-two mentioned large commercial banks; twenty-three mentioned local community banks; four mentioned the FmHA; two mentioned life insurance companies; four mentioned processor credit; and one mentioned a supplier of replacement heifers as a source of credit.

What are the advantages and disadvantages of these particular institutions?

Ten respondents said they did not know the answer to this question. (In this section, the numbers in parentheses indicate the number of responses stating an advantage or disadvantage. All others were stated once.)

Farm Credit Service

Advantages:

Easier to get a loan, they understand and specialize in agriculture (six); can usually go to them if you can't get credit at big banks; are around for the long haul (three); cooperative attitude; lower interest rates; a known entity.

Disadvantages:

A bureaucratic nightmare, it's like they don't want to lend to growers; not financing as much as before, less

competitive on pricing (three); a lot of people know your business, lower quality personnel, paperwork requirements, lending restrictions, bureaucratic.

Larger Commercial Banks

Advantages:

Lower rates (three); full service (three); better training; understand business (two); fewer restrictions; their portfolio is diversified; easier to work with; more intelligent; have dairy centers whose personnel have dairy expertise; and bigger growers can get a good deal.

Disadvantages:

Have turned away from agriculture except for certain accounts; not as aggressive as they once were; more hoops to jump through; bureaucracy; subject to bank's perception of your industry; higher rates; tighter; can pull out and leave farmers in a sad state (two); they don't specialize; fickle in lending portfolio; more restrictive; and require more cash equity.

Local Community Banks

Advantages:

Aggressive (three); full service; able to do smaller sized loans (two); quicker; personal relationship (two); more flexible; their portfolio is diversified; easier to work with; more intelligent; some know the citrus business; and loyal borrowers.

Disadvantages:

Will be like the big banks soon, higher rates (three); there could be a lack of understanding; tighter; they don't specialize; fickle in lending portfolio; and more restrictive, require more cash equity, getting tougher.

Life Insurance Companies

Advantages:

There for long-term loans, lower rates, not as regulated.

Could the cooperative improve on the services offered by these lenders?

Two said yes. Their reasons were "The cooperative is better able to understand the grower's needs," and "Yes, in theory. The cooperative would help out the little guys (the average operation is 40 acres). Fees kill the little guys."

The explanations for those who answered no fell mostly into the following categories: seventeen said that they did not have the expertise of lenders; two said that lenders have lower costs of funds or are more efficient; four said that there would be too much risk to the cooperative; two said that the cooperative was financially unable to offer such services; one said that their members are happy the way the cooperative is; and one said that the cooperative would not be any less strict in giving credit than existing lenders.

What criteria are required by lenders for loans to members?

Ten said that they did not know. The others were not specific, but listed the following factors: equity in the cooperative (three), equity in the business (five), repayment ability or cash flow (seven), collateral (two), documents and statements (three), marketing (two), ratios, global factors, the farm program, use of flex acres, water, production history, lend money if farmer doesn't need it, assignments, what are assets?, trends, management, profits, performance record, prices, need as much money in bank as you need to borrow.

How do the criteria vary with the size of farm or crop produced?

Nine said they don't know; three said that the criteria don't vary. Other responses were:

- Diversification reduces risk (three).
- Tremendously.

- Lenders are more willing to give a lower rate to a larger farm, higher rates for permanent crops due to risk (two).
- Large farms can get credit more easily; also, length of time in business affects the ease of getting credit (two).
- More stringent lending to small operations.
- More assets, the more they can borrow (two).
- It depends on how much the bank has in each commodity.
- The bank wants to diversify its portfolio.
- Varies by grape variety reflected in grape prices.
- Lenders look at the flowers the farmer grows; roses are in the hole right now.
- Lenders don't want to handle the smaller farm due to higher cost.
- Riskier loans would carry higher interest rates.
- Lenders will loan on high priced crops.
- Smaller farmers have to have higher percent cash equity.
- Example of the white fly and produce.
- Some lenders are backing off depending on the farmer.

Are the present requirements stricter than those of five years ago in the sense that they are more difficult for members to meet?

Three reported that they didn't know. Sixteen said yes and two said no. Of the yes answers, their explanations were usually that their members were telling them that requirements are stricter. Some respondents also explained how the requirements had changed, indicating greater emphasis on cash flow over collateral and that loan to value percentages are lower. One said that the change is due to the overreaction of regulators. Another said

that lenders are enforcing covenants more strictly and are stricter from an environmental standpoint. The two persons giving no answers explained that lenders are less strict now than they were five years ago, and that it was ten years ago that they started getting more strict. Another said that documentation and paperwork are more strict (is this what is meant by the word requirements?) but he didn't think that underwriting standards have changed in the last five years.

Has the functioning of members' farms been curtailed or altered by a lack of financing or the timing of financing?

Ten said yes, fourteen said no, two didn't know. Comments were:

- Yes, in some cases, but they were marginal farms.
- Yes, the growers have been forced to go to the cooperative's competitors because they can get credit from these competitors.
- Yes, on some farms and for some processors (there are fewer processors in the industry than before).
- Yes, they can't plant as many acres as they would like.
- Yes, it affects their choice of crops, need a two- or three-year program, water can be a factor.
- Yes, in some cases. Some farms have subleased their acreage and have gone to agreements with processors.
- Yes, less new equipment, put in wheat instead of a more expensive crop to raise, cut back on fertilizers.
- Yes, a few guys that wanted to plant peaches without a contract were turned down.
- No, in a few cases only.
- No, in last six or seven years, farming has been more curtailed by a lack of water.
- Capital has been tighter, but farmers have found it.

- No, after the freeze, a lot of members couldn't get money to prune, spray, etc., but most have survived.
- No, farmers have been reluctant to borrow, self discipline.
- No, not for dairy.
- No, real crunch was in 1983-86, borrowing was very difficult then.
- No, even young guys are starting on a shoestring and making it.
- No, if they want the money, they'll find it.
- Hard to say "lack of financing;" there are always guys going out of business, but it's more their operational problems at fault.
- Hard to say; a lot of growers just want to pay back what they already owe.

To what extent have problems with financing impinged on the operation of the farm?

This question is very similar to the preceding one. Fourteen said things like "to no great extent." Other comments were:

- Some farms have gone under.
- Less grafting and replanting and a reduction in land farmed (land has been switched to houses).
- It indirectly affects the cooperative; a highly leveraged member may be tempted into switching to another firm.
- Dairymen always want to milk more cows, and bankers limit the amount of expansion.
- It has lowered the farmers' net income and the volume coming into the cooperative.
- Cooperative has less product, but most of its farmers are still farming.
- Maybe 20% have had some kind of problems.
- Decreases flexibility and amount farmer plants;.
- Changed what crops are planted.

V. Risk Management

What are the sources of risk faced by the cooperative?

Weather: twenty-four yes, two no.

Pests: nineteen yes, ten no (some said yes and no).

Disease: eighteen yes, ten no (some said yes and no).

Input price variability: fourteen yes, twelve no.

Output price variability: sixteen yes, ten no.

Labor cost changes: sixteen yes, ten no.

Government regulations: twenty-three yes, three no.

Other sources of risk that respondents added were: air and water quality controls, environmental risk (six), competition (four), casualties (three), collection of accounts receivable (two), over-advancing producers, fire, water availability, down time in the milk plant, lawsuits (two), interest rate, losing members (three), lack of volume (two), proper management, marketability of growers' products, urbanization (two), restrictions on access to foreign markets, food safety scares, labor restrictions on growers, foreign competition, workers' compensation, maintaining sales.

Of those mentioned, which are the two main sources of risk?

Ten voted for weather; two for pests; two for input price; seven for output price; twelve for government regulations; two for collection of accounts receivable; two for environmental

risk; two for competition; and one each for over-advancing producers; interest rates; lack of volume; proper management; access to foreign markets; urbanization; food safety; foreign competition; and maintaining sales.

Often, the people interviewed were quite vehement in their inclusion of government regulations as a source of risk.

What strategies and/or tools are used by the cooperative to manage risk?

Insurance: twenty-three yes, three no.

Diversification: sixteen yes, ten no.

Forward contracting: eleven yes, fifteen no.

Government programs: eight yes, eighteen no.

Hedging: three yes, twenty-three no.

Risk reducing inputs: sixteen yes, ten no.

Other strategies that were added were: lobbying (three), using alternative fuels, complying with environmental regulations, board committees, audits, legal counsel, delivery contracts, applying basic credit criteria to buyers, safety program (three), a workers' compensation program to reduce claims, try to hire best people they can, stay abreast of technology, stay competitive (three), took workers' compensation supplement out of union contract, dust control equipment, producing a high quality product, strategic planning (two), sell grapes at all prices (pooling), advising growers, looking for best price on purchases, providing services to maintain customers, increasing the retain, increasing nonmember business, being familiar with their customers and operations, a good credit manager, managing their market position, establish the appropriate capital level, make their own deliveries

of chemicals, triple rinsing of pesticide containers, stopped using Class One pesticides, training, forego trucking because of labor costs, baby sitting the place, cleanliness, tightening collection rules, raising prices because of government regulations, the tree-pull program, collecting money upfront from foreign buyers, sliding scale of payments related to tonnage, manage workers' compensation.

Of those mentioned, which are the two main strategies employed?

Four voted for insurance, seven for diversification, three for forward contracting, two for government programs, one for hedging, two for lobbying, three for strategic planning, two for staying competitive, and one each for applying credit criteria to buyers, hiring the best people, staying abreast of technology, producing a high quality product, selling grapes at all prices (pooling), advising growers, looking for best prices on purchases, providing services to maintain customers, increasing retain, increasing nonmember business, being familiar with their customers, having a good credit manager, managing market position, establishing the appropriate capital level, baby sitting the place, tightening collection rules, sliding scale of payments.

Are the risks and strategies identified above different from those faced or pursued by a proprietary firm engaged in a similar activity? Explain.

Twenty-two said no, usually adding that both types of firms face the same risks and apply the same strategies. Three said yes. Their explanations were: "A proprietary creamery can reduce members and cancel contracts" and "They have a different set of goals." One manager said neither yes nor no because, he explained, there are no proprietary firms that do what they do.

Do you agree or disagree with the statement that a cooperative can manage risk better than a proprietary firm because the coop-

erative has more complete and ready access to relevant information about its members?

Seven agreed, twenty disagreed (one respondent both agreed and disagreed).

Of the seven that agreed, the explanations were:

- The proprietary firm doesn't have as much interest in the grower. A proprietary firm is only interested in its profits and not involved in farm legislation.
- They know they will keep getting a constant supply of milk by having the cooperative structure.
- The cooperative knows what their members are doing and what their needs are; the cooperative has more information on a year-round basis than a proprietary firm.
- The board of directors provides feedback to the manager as to what's going on in the markets.
- Every one of their dairymen is similar, so that makes it easier to keep track.
- Especially because of the input of the board and the information they can provide.

Of the twenty who disagreed, four or five said that cooperatives can't manage risk any better than a proprietary firm. The rest disagreed with the part of the statement that cooperatives have more information about members.

The respondent who said "agree and disagree" explained: I agree that knowledge of members gives insights into what impacts the cooperative's source of supply. I disagree because the policy a cooperative sets is for the benefit of members, and stresses on the members ripple through to the cooperative and can increase the cooperative's risk to the benefit of members. The cooperative has the goal of increasing its revenues and also increasing its costs of inputs (the return to the member), but the proprietary firm wants to increase revenues and lower its costs.