

# Revolving Finance Plans

farmer co-operatives in California have adopted many variations of the revolving finance idea

H. E. Erdman

**Revolving finance plans** keep the capital of a farmers' co-operative in the hands of the current group of patrons.

The main characteristics of revolving finance are: 1, Funds are obtained continually from patrons in some way proportionate to patronage; 2, Such funds are used as fixed or operating capital; 3, Ownership is readjusted periodically by a double process of *a*, continuing the withholding process as though more capital were to be raised but *b*, using the new contributions to pay back the older ones.

In California, where the revolving finance idea originated, it is applied to large and small associations, to associations with capital stock and to nonstock associations, and to associations with mostly fixed capital as well as to some with mostly operating capital. Practically all of the newer organizations such as those operating packing houses and wineries are incorporating revolving finance features in their legal structure. Most older associations which modernize by adopting new bylaws also use revolving funds.

This popularity is based on the fact that in any farmers' co-operative there is a membership turnover within each generation as members grow old and retire or die. The period of turnover often is shortened when farmers sell out to take up farming elsewhere or to enter other businesses. Farmers shift from the production of one commodity to the production of another. The hereditary process is not satisfactory as a means of transferring ownership in co-operatives from one generation to the next where it is necessary that the new owners also be patrons.

## Limits

Revolving finance plans have two dimensions—rate of withholding and length of time before repayment. Capital accumulates faster the larger the deduction, and—for a given deduction rate—the total may become larger the longer the period of revolution. There are limits in both dimensions.

Deductions from proceeds can not ordinarily go much beyond the point where current returns are below those of competitors. Withholding too large a part of savings may lead producers to lose in-

terest unless price alone is more attractive than that of competitors.

Too long a period of revolution tends to make producers distrust both the association and the method. The most acceptable and feasible period seems to be five to seven years. Dependence on savings as a source of revolving fund capital is less reliable than deductions from proceeds since a period of lean years may abolish savings. Under such circumstances the period of revolution is automatically lengthened.

In an established association the rate of revolution may not matter to the member who continues at an even pace. It matters to the newcomer and to the man who retires. The newcomer would like a long period to buy in. Whether the retiring member wants to be paid off at once may depend on his financial status and on whether interest is paid. An annual revolution would suit him best if he needs funds for a new undertaking, but an annual revolution might well keep the new man out if it required him to contribute his entire prorata share upon joining.

## Problem Areas

One problem area concerns due dates on revolving fund equities. Farmers favor this practice as they fear that expansion-minded directors might defer repayment indefinitely if they saw a stream of withholdings coming in just as some enlargement was being proposed. Also, documents with due dates are more satisfactory as loan collateral and, where transfer is permitted, tend to be discounted at more favorable rates than they would without due dates. Finally, the use of due dates is sometimes considered insurance against such funds being called profits by income tax collectors.

On the other hand, there are reasons for omitting due dates. Maturity may come at a time when repayment of the funds would seriously embarrass an association. Also, funds represented by certificates with due dates do not appear in the net worth section but on the debt side of the financial statement and thus indicate a situation of inadequate investment capital.

A second problem area is that of paying or not paying interest on revolving fund capital. Where contributions are

proportionate to business done with the association, the payment of interest is often considered merely an extra expense. However, the proportional investment rule is commonly violated in a sufficient number of cases to justify the payment of interest on the major part of the capital.

As a general rule, interest should be paid whenever there is significant departure from the proportionate contribution and holding ideal. Disparity may arise when some members put up relatively more initial capital than others; when some producers increase and others decrease their business with the co-operative; and when an old member retires and a new one enters. Payment of interest is particularly advantageous when the funds are to be assigned or sold.

The payment of interest should be at the discretion of the directors. No association can be sufficiently sure of good business to obligate itself to pay interest on all its capital each year. But payment of interest may well be an important factor in making co-operative securities a favored investment among farmers.

An operational aspect of revolving finance concerns the difficulty of recalling investment certificates upon maturity. Experience has shown that large numbers

Continued on page 14

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## REVOLVING

Continued from page 2

of certificates are lost and that frequently the wrong certificates are returned for payment. To avoid delay, confusion and unnecessary expense, book credits are being used. A statement is mailed to each member showing changes in his account during the year, and its status at the year's end adequately serves the purpose of a certificate.

## Intermember Adjustments

There are several plans by which western associations transfer investments from members in need of money to those with money to invest. One such plan has been in operation for over 20 years. These plans are a step in the direction of making revolving finance more popular among farmers, particularly those who are getting started in the business of farming and are short of capital.

Giving revolving fund credits negotiability touches two other problems. One concerns the extent to which an association considers revolving finance funds as security when it extends credit to members. Obviously, an association which extends credit to its members must protect itself in any plan to transfer revolving fund credits. For example, the bylaws may give the association a prior lien on all revolving funds to cover any indebtedness of the members.

A second point concerns the matter of paying interest. Revolving fund credits bearing approximately current interest rates are likely to be salable at something like par. In cases where no plan has been worked out to facilitate such transfers, needy members must sometimes assign accounts at heavy discounts.

## Risk Aspects

Co-operatives face many of the same risks as other types of business. Associations which derive their revolving capital from stated percentage deductions from proceeds may find themselves short of funds in years of low prices. On the other hand, a flat deduction—say 1¢ per dozen eggs—may seem burdensome to producers with eggs at 20¢ a dozen, equivalent to 5%, but be negligible with prices at 75¢, equivalent to  $\frac{2}{3}$  of 1%. Associations which revolve capital out of savings will find that savings vary from year to year. Decreased savings may require such lengthening of revolving periods as to cause trouble under fixed maturity plans.

Another sort of risk concerns equities after violent price level changes, particularly in case of dissolution and liquidation when articles and bylaws have not been carefully drawn. In times of significant inflation some well-established co-

operatives could pay off all revolving funds and have a large amount of money left. Bylaws could allot such a residual to the stockholders in case of liquidation and not to those who contributed most of it.

Co-operatives, like other businesses, set up reserves for numerous purposes. Recently there has been a tendency to set these up as revolving funds. Some of these so-called reserves are more in the nature of risk capital and should perhaps be so treated. In that case they might be revolved, perhaps on a book value basis.

*H. E. Erdman is Professor of Agricultural Economics, University of California College of Agriculture, Berkeley.*

## ORANGE

Continued from page 4

over the 22 years of the experiment was detrimental to the structure of the soil, causing a marked deterioration of tree condition and yields. However, when these fertilizers were used with manure in such a manner that the manure supplied one half of the nitrogen, harmful effects did not occur and the yields were not depressed. When soil conditions are such that the continuous use of these fertilizers is harmful, organic matter supplements appear to be particularly desirable.

In these treatments dairy or steer manure from fattening yards was used. Other treatments with manure, alfalfa hay, cereal straw or lima bean straw indicate that these have equally good effects on yields if equal quantities of organic matter are applied and their use is supplemented with nitrogen fertilizers to reach the same total quantity of nitrogen. The most important consideration in the use of different bulky sources of organic matter appears to be the ratio of the amount of organic matter to the amount of nitrogen—from all sources—applied annually. In the most productive treatments this ratio has been close to 20 to one. This is equivalent to a carbon-nitrogen ratio of about 10 to one.

## Fruit Size and Grade

The use of covercrops—with chemical sources of nitrogen—caused a small increase in the size of the fruit. Larger increases resulted from the use of manure.

The effects of organic matter from covercrops and manure on fruit size appear to be due to two factors. One is their beneficial effect on soil structure and the infiltration of water; the other is the effect of applied organic matter upon the supply of potassium which affects fruit size.

The grade of the fruit was not appreci-

ably affected by the growing of covercrops or the use of manure. However, these factors slightly affected the internal quality of the fruit. In general, manure appeared to act very much like a potash fertilizer and made the juice slightly more acid.

*E. R. Parker is Horticulturist, University of California College of Agriculture, Riverside.*

*W. W. Jones is Associate Horticulturist, University of California College of Agriculture, Riverside.*

*The above progress report is a summary of part of the results of a long-term experiment at the Citrus Experiment Station at Riverside. The full report is available as Bulletin 722 of the California Agricultural Experiment Station.*

## POTATO

Continued from page 13

about 6° F, the average 4° F. This was true in early April when the foliage gave only partial cover to the bed, as well as in late May when the foliage almost completely shaded the ground.

Records were obtained from irrigated and nonirrigated fallow beds. Water was first applied to the irrigated beds on April 17, after which they received daily irrigations in alternate furrows. Temperatures obtained at the 6" depth show that, during late April, soil of the irrigated bed was on the average approximately 2° F cooler than that of the nonirrigated beds. During May, the difference was approximately 3° F, and near the end of the test, in June, the irrigated beds were approximately 4° F cooler. It appeared that the higher the air temperature the greater was the degree of cooling of the soil by irrigation. It would seem that growers planting potatoes in this soil at the 6" depth during periods of high temperature might expect a cooling of approximately 4° F, or possibly slightly more, in irrigated as contrasted with a dry soil.

*O. A. Lorenz is Associate Professor of Truck Crops, University of California College of Agriculture, Davis.*

*The above progress report is based on Research Project No. 1175.*

## CARTONS

Continued from page 11

April 2, a premium has been paid for the new box over the old, often amounting to 25¢ per standard box.

Retail markets gain from the one-half box carton. Many stores find the old box uneconomical because of its size. Decay and shrinkage become serious before all the fruit is sold. The new boxes are lighter to handle and, when empty, can be used as consumer tote box.

*Roy J. Smith is Associate Professor of Agricultural Economics, University of California College of Agriculture, Los Angeles.*