

Cooperative Performance— Is There a Dilemma?

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Cooperative businesses have a wider range of objectives than investor-owned firms from which to legitimately choose, some of which include difficult-to-quantify member-centered goals. This paper reviews a technique adopted in the measurement of stakeholders' aspirations and perceived performance for ten agricultural cooperatives and farmer controlled businesses. Findings indicate that cooperative stakeholders embrace a range of member- and corporate-centered aspirations, although the various stakeholding groups may prioritize these alternative goals differently. Importantly, an examination of the relationship between member- and corporate-centered performance levels indicates that the achievement of one is not necessarily at the expense of the other.

Introduction

The Cooperative's Role in Society in the United Kingdom

Most recent U.K. records indicate that although less than 1 percent of businesses are cooperative in nature, membership totals indicate that anything up to one third of the U.K. population belong to such organizations (Registry of Friendly Societies 1992). These businesses include consumer, credit, housing, service, and agricultural co-ops. Although some members may not be active participants, the goals and performance of such institutions are clearly relevant to many individuals.

In U.K. agriculture, the importance of farmer self-determination in the market place is sometimes under-estimated (Plunkett Foundation 1995). The U.K. cooperative share of farm output marketing (in value terms) is 40 percent; the co-op market share is 17 percent of input supplies (Plunkett Foundation 1996). The evidence is clear, therefore, that co-ops do play a large part in U.K. farming.

The Cooperative as a Business Structure and its Choice of Objectives

Van Dooren (1982) detailed a long list of differing cooperative definitions. Authors like Bateman et al. (1979) have conceded defeat in searching for one. Although most nations recognize that cooperatives exist as separate legal entities, distinct from their member-owners, and although special pieces of legislation exist relating to this business form, precise legal definitions with universal applicability do not exist. Authors like Donnelly (1980) and Jacobsen and O'Leary (1990) have illustrated both the changing

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objectives of and adherence to cooperative principles over time. Indeed, the International Cooperative Alliance revised its own list of cooperative principles for adoption in 1995 (MacPherson 1994).

With this in mind, it is clear that cooperatives can be defined *only* broadly with respect to their behavior and not in any tightly prescriptive way. In broad terms, then, we can define a cooperative as an organization that exists to serve and benefit its member-users, as opposed to an investor oriented firm (IOF), which exists to serve capital investors through dividends and to share (stock) value appreciation. It is this definition that will be adopted in this work.

In the United Kingdom, there are now a number of organizations, originally incorporated as agricultural co-ops, which have recently changed their corporate structure. They have done so because: (1) this allows for a greater level of dividend payout than is currently permitted under legislation, (2) shares can be tradable at market valuation, and (3) non-farmer shareholding up to a maximum of 49 percent is possible (neither [2] or [3] are allowed for U.K. co-op constitutions). Such businesses within the U.K. that have undergone this conversion, but which still claim in their incorporation documents and corporate literature to exist “primarily to serve the farmer,” are given the nomenclature “farmer controlled business” (FCB). Indeed, some even claim in corporate literature to be cooperatives, despite having tradable stock, unrestricted dividend payout policies, and allowing non-farmers to hold shares.

Just as one cannot safely make tight, absolute assertions about what defines a cooperative, one is also not in a position to make generalizations about relative performance levels within the cooperative sector since the objective set from which a cooperative may select its goals is potentially broader than for a conventional business.

As illustrated by Hind (1994) and Schrader et al. (1985), from empirical data relating to cooperatives in the United Kingdom and United States respectively, it is by no means a foregone conclusion that cooperatives do, in fact, perform differently than their non-cooperative contemporaries. One might expect this from theoretical frameworks based on their different financial and organizational structures.

Cooperative Decision Makers

The difficulty that arises in setting corporate objectives is that all those with an interest in an organization will not necessarily share the same goals. Cockerill and Pickering (1984, 4) defined the principal areas of interest for IOF stakeholder groups as shown below in table 1. What differentiates cooperatives from conventional firms is the fact that the owners, directors, suppliers, and customers, illustrated as different interest groups in Cockerill and Pickering's analysis, can often be one and the same individuals (that is, members), thus making this particular classification less straightforward when applied to co-ops. Arguably, a member who belongs to a co-op that is considering conversion to a FCB might also consider themselves in the investor category, with investor interests.

Table 1. Interest Groups and Performance Indicators of Importance

Interest Group	Performance Indicators
Owners	<i>Profitability, growth, dividends, security, share price</i>
Directors	<i>Growth, market share, profitability, security</i>
Managers	<i>Growth, cash flow, discretionary expenditure</i>
Employees	<i>Earnings levels and growth, employment levels, security</i>
Suppliers	<i>Level, growth, variation and security of orders, payment period, prices</i>
Customers	<i>Prices, quality, after-sales service, efficiency of distribution channels, new product development, credit terms</i>
Investors	<i>Share price, dividends, asset composition and growth, financing of assets, return on capital</i>
Competitors	<i>Growth, profitability, market share, non-price behavior, advertising, investment rate</i>
Government	<i>Corporate taxation contribution, potential employment level, growth and regional distribution of output, trading practices, investment rate</i>

Extracted from Cockerill and Pickering (1984)

The membership set may not be homogenous, and some individuals (who, for example, no longer trade with the co-op but are still members) may prefer profit maximization with a large dividend payout at the expense of better prices for those who still trade (where the rules allow for such, as is the case in some long-established U.K. co-ops). Le Vay (1986) demonstrated the diversity of theoretical cooperative objectives through marginal cost analysis. Gasson (1977a and 1977b) also observed from empirical evidence, when reviewing surveys undertaken by herself, Beal (1954), Foxall and McConnell-Wood (1976), and Le Vay (1975), that there is a divergent set of member objectives both between and within cooperatives. In reality, therefore, a wide range of objective options are open to policy makers in both conventional firms and cooperatives. The options are potentially wider in a cooperative, however, and the internal structure of organizational decision-making is more democratic than in a non-cooperative. The choice of objective(s) will occur once (and if) any conflicts have been resolved or compromises reached.

A Cooperative Dilemma?

Some would maintain that there is an inherent conflict of objectives within the cooperative structure as evidenced by the following comments:

...an inherently inefficient way to run a business (Pickard 1970, 114);

...they are frequently perceived as not being particularly generous with remuneration packages... (they are) cosy and introverted, not generally innovative or progressive, run by committees of amateurs and politically socialist (Thirkell 1989, 14);

...a business cannot be successfully run if its customers or suppliers are deeply involved in running it. There is too much conflict of interest (Stewart 1993, 291).

Pestov (1995, 158), in reviewing local economic democracy and multi-stakeholder cooperatives, observed that,

There is frequently a lack of congruency between members and other groups with a fundamental interest in a cooperative; this mismatch often leads to performance difficulties and can contribute to the declining role of cooperatives in many sectors and countries of the world.

Objectives

The research described below attempts to explore;

1. whether cooperative objectives and performance *are* clearly focused toward member benefit rather than corporate needs across the two major stakeholder groups (farmers and employees);
2. the relationship between the achievement of member and corporate objectives, that is, whether the two are incompatible and whether the “cooperative dilemma” is a reality;
3. whether it is practical to measure successful delivery of member benefits as well as whether corporate goals are being achieved on an ongoing basis in order to provide stakeholders with an assessment of where the organization is and whether this is different than where the stakeholders want to be.

Methodology

Although corporate performance can be assessed in an objective way through an appraisal of annual accounts and market activity, as seen in Price (1993), this approach is not without its drawbacks. Thirkell (1993, 279) argued that:

The use of organisational profit as the mechanism for measuring performance in a co-operative is not only unnecessary but also often downright misleading. If the objective of the co-operative is member benefit rather than financial performance of his investment in the co-operative, then it is member benefit which should be measured, not the co-operative’s conventional corporate performance.

However, the assessment of member benefit from secondary data can be extremely problematic when one attempts to ensure a comparison of like against like.

This paper takes a different approach: it attempts to quantify the perceptions of various stakeholder groups across ten U.K. co-ops and farmer-controlled businesses. Each of these businesses had initially been incorporated as an agricultural cooperative, although two have, within the past five years, changed organizational structures to become farmer-controlled businesses rather than co-ops, as described above. In fact, one organization (coded as number 4 in this paper), still describes itself as an agricultural cooperative in corporate literature, despite not complying with most observers’ understanding of the term (since it allows limited non-farmer shareholding). Table 2, below, specifies the organizational structure of each of the ten businesses, as well as detailing predominant activities, membership levels, and turnover.

Table 2. Description of Ten Participating Organizations

Organization	Predominant Activities	Membership Levels	Annual Turnover (million £ sterling)	Organizational Structure
1	Supply of a diverse range of farm inputs	4,500	140	FCB
2	Supply of a diverse range of farm inputs and grain marketing	8,700	100	Co-op
3	Supply of a diverse range of farm inputs	17,800	70	Co-op
4	Supply of fertilizer, seed, feed, and animal health products	10,500	35	FCB
5	Supply of feed, seed, fertilizer, fuel, and agrochemicals	750	10	Co-op
6	Brassica, onion, and potato marketing	45	23	Co-op
7	Brassica, onion, and potato marketing	30	11	Co-op
8	Brassica marketing	26	12	Co-op
9	Marketing a diverse range of fresh produce and flowers	112	10	Co-op
10	Marketing of beans	12	2	Co-op

This paper identifies what individual stakeholders associated with these ten businesses believe their organization *should* be doing and the extent of any divergence with what the organization is *actually* doing. As Parnell (1995, 198) states:

The only reality that counts is the perception that people hold about your organization. True or false, this is the only practicable starting point if you want to reposition your cooperative in their minds.

Sample Size

To gain as representative an impression as possible for each of the ten case study businesses, 2,437 stakeholders were surveyed (commensurate with relative population levels), which necessitated a postal questionnaire rather than a face-to-face survey. The overall response rate was 1,074 (44%). Table 3 below lists response rates for the two major categories of stakeholders associated with each of the ten businesses. Farmer and employee groups are identified as, theoretically, harboring diverse organizational aspirations.

Table 3. Response Rates by Stakeholder Group and Organization

Organi- zation	1	2	3	4	5	6	7	8	9	10
	Employees¹									
Sample size	156	195	109	73	35	24	74	28	35	2
Valid responses	103	128	73	50	19	20	30	24	24	2
Response rate	66%	66%	67%	68%	54%	83%	41%	86%	69%	100%
	Farmers²									
Sample size	300	300	300	300	300	15 ³	54	41	85 ³	12
Valid responses	105	100	130	115	78	10	19	20	44	9
Response rate	35%	33%	45%	35%	26%	56%	35%	49%	52%	75%
Overall response & rate	208	228	203	165	97	30	49	44	68	11
	46%	46%	50%	44%	29%	79%	38%	64%	57%	79%

¹ Employee group included poll of executive directors, poll of executive staff, and sample of non-executive staff.

² Farmer group included poll of farmer directors, poll of farmer members (where membership is less than 200; sample otherwise with minimum of 200), and sample of non-member farmer customers/suppliers where non-member farmers allowed to trade.

³ Organizations 6 and 9 operated restricted mail data base policies, which precluded polling members (sample based on 15 out of 45 members for organization 6, and on 60 from 112 members for organization 9).

Perception scores

While the instructions and introductory questions to potential respondents were customized by business, the questions relating to perceptions on importance ratings and performance levels were standardized, having confirmed the applicability of terminology across each of these ten U.K.-based businesses. There were two parts to the main section of the questionnaire, which asked the respondent to:

1. rate eight performance indicators with respect to their level of importance as goals for the business with which they were associated on a seven-point semantic differential scale;
2. rate the business on its perceived performance levels across these eight criteria on a seven-point semantic differential scale.

The use of a seven- as opposed to a five-point scale was adopted as recommended by Dolan (1994). The category responses were allocated numeric values of:

- 1 = of extreme importance)
 4 = of moderate importance) for stakeholder rating of eight co-op goals
 7 = of no importance whatsoever)
 and
 1 = performs very well on this indicator)
 4 = performs modestly on this indicator) for stakeholder rating perceived
 7 = does not perform on this indicator) performance levels on eight co-op goals

Choice of Performance Indicators

Some exploratory experimentation had suggested that eight was the maximum number of variables with which individuals could happily cope; it would have been possible to generate a list exceeding 50 possible member and corporate performance indicators. However, given the nature of some of the respondent categories (i.e., not familiar with the intricate workings of an organization that might be expected of only a few senior managers) and the desire to maximize response rates, eight variables assessed over two criteria (perceived importance and performance levels) were considered to be the desired maximum.

These eight performance indicators were selected from a review of secondary data. Authors like Beal (1954), Blümle (1985), Foxall and McConnell-Wood (1976), Gasson (1977a, 1977b), Le Vay (1975), Price (1983, 1993) and Schrader et al. (1985) had reviewed and empirically assessed the applicability of potential performance criteria to various cooperative businesses. The eight variables that most commonly appeared across these works were incorporated into the questionnaire for the purposes of this study. The eight descriptive performance goals to which cooperatives and other producer-owned organizations may aspire and that were assessed in this work are as follows, with the description in parentheses indicating whether each particular goal is corporate or member focused. This description is included since the hypotheses of this paper are based on the assumption that there is a dichotomy in the objectives set and, therefore, in performance of cooperatives:

A business that maximizes profit (margin)	(Corporate)
A business that is financially secure	(Corporate)
A business that gives the best deal to farmers	(Member)
A business that pays maximum dividends to farmers	(Member)
A business with a good image in the industry	(Corporate)
A business that pays a maximum bonus on trade (patronage)	(Member)
A business that goes for growth	(Corporate)
A business in which the farmer can participate in decision making	(Member)

Analysis, Results, and Discussion

The questionnaires were color coded to assist with data entry following completion and return. The data was analysed using SPSS Professional software.

The results and discussion are presented in answer to the objectives and questions as laid out above.

Are co-ops' objectives and performance clearly focused toward member benefits rather than corporate goals across the major stakeholder groups?

The perception score data were subject to a factor analysis procedure; the resultant factors were easily interpretable as shown below in table 4. It was anticipated that this procedure would have resulted in a simple two-factor result (i.e., a member centeredness and a corporate centeredness factor!). Interestingly, however, a three-factor solution was generated that offers an insight into how stakeholders perceive the alternative goal sets facing cooperatives. This three-factor solution accounted for 66% of variance in the data; examination of the scree plot and the fact that the fourth factor accounted for only a further 9% of data variability justified a three-factor solution. Factors 1 and 3 might be judged member goals, and Factor 2 a corporate goal.

Table 4. Rotated Factor Matrix

	Factor 1 (Financial achievement factor)	Factor 2 (Corporate centeredness factor)	Factor 3 (Farmer focused factor)
Trade (patronage) bonus	0.83543	0.07241	0.24997
Best deal to farmers	-0.08040	0.29773	0.71537
Share dividend	0.88840	0.12624	0.01258
Corporate financial security	-0.01303	0.84776	0.03132
Farmer decision making	0.14996	0.01850	0.83570
Corporate growth	0.37342	0.50712	0.11752
Corporate image	0.21929	0.66991	0.23371
Profit (margin) maximization	0.67799	0.35864	-0.32765

(Bold text denotes where variables are positively highly associated with a factor.)

On condensing the performance variables to an absolute essence (i.e., to factors) a picture of relative goal preferences and desired organizational orientation across the two main stakeholder groups (farmers and employees) was identified, as can be seen from table 5 below.

Table 5. Illustration of Importance Factor Score Means (Standard Deviation)

	Farmers' Mean Score (s)	t-value	Employees' Mean Score (s)
Financial Achievement Factor	0.12 (0.99)	4.89	-0.18 (0.99)
Corporate Centeredness Factor	0.17 (1.09)	7.81	-0.27 (0.77)
Farmer Focused Factor	-0.10 (0.93)	3.95	0.16 (1.09)

Note: The lower the value, the more important the factor is rated; the factor analysis procedure results in factor scores with a mean of zero and a standard deviation of 1.0. Negative factor scores, therefore, indicate more preferred goal factors than positively scored factors.

One can see that, for both the farmer and employee group, standard deviations tend toward 1 for the financial achievement factor, providing evidence of relatively similar within-group coherence of opinion. It is evident, however, that, on the issue of corporate centeredness for the employee group, there is a notably greater degree of agreement within this group than for the farmer group, as illustrated by the relatively low standard deviation. Conversely, there is more agreement within the farmer group regarding the importance of a farmer-focused orientation of objectives than within the employee group.

Not surprisingly, the farmers prefer their businesses to aspire to be: first, farmer focused (by offering best deals to trading farmers and by involving farmer-members in the decision-making process); second, to display financial performance (by maximizing profit, which is then allocated as a trade [patronage] bonus or share dividend); and, last, to be corporate centered (by being financially sound, going for corporate growth, and pursuing a good corporate image). Conversely, the employee preference is reversed with

corporate centeredness scoring lowest (i.e., most important), followed by financial performance and the farmer focused factor last. A clear divergence of opinion is, therefore, evident on the relative importance of these three performance factors between the employee and farmer groups.

Since some degree of direct comparability between importance rates and performance rates is useful, a set of performance variables weighted by the importance factor coefficient matrix were computed. The three variables generated are called financial achievement performance, corporate centered performance, and farmer focused performance, so mirroring the names given to the goal factors.

Table 6, below, illustrates the combined stakeholder group perceptions of performance on the three performance factors. The results have not been presented separately for the two groups since there was a general consensus on perceived performance (i.e., no statistically significant difference at the 5% level). Small differences were apparent only for organization 4, where employees perceived performance as better than the farmer group across each of the three goal sets, and for the employees of organizations 6, 8, and 10, who perceived corporate centered performance as marginally better than did the farmer group.

Table 6. Mean Factor Weighted Performance Indicator Scores¹

	Financial Achievement Performance	Corporate Centered Performance	Farmer Focused Performance
1	3.41	1.47	3.11
2	2.99	1.22	2.61
3	4.87	0.34	1.97
4	3.75	1.72	2.96
5	2.66	1.18	2.19
6	4.34	1.14	2.64
7	4.39	1.15	1.93
8	3.51	1.37	2.26
9	3.25	0.73	2.91
10	4.44	1.17	1.74
Mean score across all 10 businesses	3.76	1.15	2.43

¹ Lower score denotes *better* perceived performance levels.

The mean score results across the ten businesses indicated that performance is perceived to be better on corporate-centered goals and less so on farmer focus and financial achievement, both "member" goals. Clearly, with the evidence from tables 5 and 6, not all stakeholders making up these businesses do aspire solely to member goals, nor are these cooperatives perceived to perform only on member-focused criteria.

So, are member-centered and corporate goals incompatible?—Is there a dilemma?

Using the three performance variables, generated by weighting the performance rate scores by the importance rate factor score coefficients, any relationship between different foci of performance can be assessed. Regression models were used to determine the extent of any relationships between perceived performance in the three areas under

scrutiny (farmer, corporate, and financial), in order to assess whether there really is a “cooperative dilemma” (i.e., does good performance in one factor inevitably mean poor performance in another, as the observations above would suggest?).

From the results shown in the regression models below (where y = farmer focused performance, x_1 = financial achievement performance, and x_2 = corporate-centered performance, and t values are given in brackets), one could determine that there was no evidence to indicate a significant, inverse relationship between member and corporate performance. Indeed, for both member and employee groups, regression analysis generated positive (albeit small, with very low coefficients of determination), significant (10% level) relationships between farmer-focused performance, financial achievement, and corporate-centered performance.

$$\text{For the farmer group: } y = 0.36 + 0.7x_1 + 0.18x_2 \\ (1.89) \quad (3.99) \quad R^2 = 0.03$$

$$\text{For the employee group: } y = 0.32 + 0.14x_1 + 0.11x_2 \\ (3.31) \quad (1.90) \quad R^2 = 0.02$$

This is encouraging for businesses structured with cooperative constitutions since the implication is that giving members the best deal and involving them in decision making is *not* inimical to corporate interests as some would postulate. One is able to conclude that there is not necessarily a negative relationship between member-centered achievements and corporate performance levels but that it is feasible to aspire successfully toward both concurrently. This conclusion is in line with the findings of Jakobsen (1995, 147) who, in his review of an insurance co-op, found that:

The study of an old cooperative which has remained loyal to the classical cooperative principles, with good economic results, showed that the business side of the enterprise relied strongly on its particular classical set-up for its economic success. This is contrary to what is normally assumed to happen when there is economic success and contrary to many empirical cases as well.

He found that the “cooperative consciousness” of employees and members was maintained through cooperative education and training and that this was probably a determining factor of the apparent successes on both member and corporate grounds.

Is it practicable to provide stakeholders with a “gap analysis” of aspirations and performance with respect to a range of objectives on an ongoing basis?

From the approach taken above it was possible to gain an overview of satisfaction levels by computing a satisfaction variable for each respondent, which was then used to compute satisfaction on the three goal factor areas. This satisfaction variable generates a negative score where individuals perceived performance did not meet aspirations and a positive score where individuals perceived an organization performed better than considered necessary. To accord greater weight to under-performance on important goals (as perceived by respondent), this satisfaction variable is based on:

$$(\text{importance rating} - \text{performance rating})/\text{importance rating}$$

so that a variable for which a respondent rated importance as 1 (extremely important), but performance as 2 (very good but not perfect), would score a satisfaction rating of -1 (based on $\{[1-2]/1\} = -1$). Another goal perceived as relatively unimportant (rating 6)

with a very poor performance level (of 7) would, therefore, receive a satisfaction score of -0.17 (based on $\{(6-7)/6\}$). The use of this variable assumes that respondents completed the importance rating and performance rating grids with the same levels of discrimination.

Table 7 illustrates the results for each of the ten businesses by main stakeholder groups. From this one can see the extent of satisfaction (or dissatisfaction) for each goal set. For example, for organization 8, farmers are particularly dissatisfied with farmer-focused performance, while the employees associated with organization 6 perceive that farmer-focused performance is better than necessary! Organization 3, on the basis of these results, would appear to have the most satisfied stakeholders across goal sets. Generally, across all businesses, the employee group is less satisfied with corporate-centered performance relative to financial achievement or farmer focused performance, whereas the farmer group is broadly satisfied to the same extent across each goal set. It is also noteworthy that the two FCBs (organizations 1 and 4) enjoyed relatively low levels of farmer group dissatisfaction on financial achievement when compared with dissatisfaction levels on farmer focus (arguably a consequence of conversion).

The use of stakeholder perceptions is useful in identifying performance levels on the different criteria and certainly offers an insight not possible solely from conventional accounting procedures. Such analysis would allow decision makers to identify the different stakeholder groups' aspirations, assessments of performance, and satisfaction levels across a range of criteria. Individual businesses may choose to incorporate a wide range of performance indicators that they feel to be of potential importance to the stakeholders and to trade off simplicity of data collection with the inclusion of a greater number of goal options within any survey. Likewise, an individual business may restrict or expand the stakeholder set depending on views as to who the business is there to serve and, therefore, who matters. Discrepancies between and within stakeholder groups could be identified. Weaker areas of performance, relative to aspirations and changes in goal preference, perceived performance, and satisfaction levels, could be highlighted, and actions could be taken to strengthen them where necessary.

Of course, where stakeholder aspirations are disparate, decisions need to be made on whether:

1. to bring those whose aspirations aren't being pursued on board by some educational/public relations exercise;
2. to risk alienating those whose interests are not being pursued and losing them as stakeholders completely;
3. to change the focus of goals to reflect stakeholder aspirations, depending on the number of those who are dissatisfied.

The procedures above would allow rigorous assessment of all identified objective sets and should help set priorities when individual business decision makers are debating alternatives. The approach described above is a workable and useful procedure that allows stakeholders to incorporate the duality of cooperative businesses into corporate strategy in a quantifiable way. The special nature of such businesses can also be reinforced by adopting an evaluation methodology that is flexible, even-handed in its treatment of stakeholding groups, and, importantly, transparent and, therefore, open to scrutiny. While some might shy from too much transparency, many authors have identified a positive relationship between communications and participation, the latter being associated with economic success. As O'Donohue (1994, 34) commented:

If clear measurable performance indicators have not been established then it is impossible to pass any judgement on the performance of management and naive to expect that members be loyal to such a cooperative.

Table 7. Mean Satisfaction Scores for the Ten Businesses by Stakeholder Groups

		Financial Achievement Satisfaction	Corporate Centered Satisfaction	Farmer Focused Satisfaction	Mean Satisfaction¹
1	Farmers	-0.15(0.99)	-0.78(0.99)	-0.99(1.59)	-0.62(0.66)
	Employees	-0.48(0.87)	-1.51(1.09)	-0.09(1.34)	-0.84(0.61)
	t-value	2.52	4.96	4.34	2.51
2	Farmers	0.00(0.78)	-0.94(1.03)	-0.58(1.06)	-0.58(0.68)
	Employees	-0.31(0.86)	-1.15(0.85)	-0.31(1.08)	-0.67(0.51)
	t-value	2.84	1.66	1.86	1.13
3	Farmers	-0.02(0.60)	-0.41(0.66)	-0.65(0.97)	-0.34(0.48)
	Employees	+0.09(0.32)	-0.54(0.69)	-0.73(0.99)	-0.35(0.38)
	t-value	1.65	1.29	0.55	0.21
4	Farmers	-0.03(0.93)	-0.95(0.93)	-0.94(1.04)	-0.61(0.66)
	Employees	-0.07(0.81)	-1.42(0.90)	-0.91(1.08)	-0.78(0.50)
	t-value	0.23	2.82	0.17	1.61
5	Farmers	-0.04(0.86)	-0.58(0.69)	-0.60(1.21)	-0.40(0.51)
	Employees	-0.06(0.31)	-0.92(0.65)	-0.27(0.63)	-0.43(0.30)
	t-value	0.12	1.38	1.24	0.29
6	Farmers	-0.74(1.19)	-1.40(1.30)	-0.37(0.88)	-1.00(0.52)
	Employees	-1.03(0.90)	-0.68(0.78)	+0.63(0.55)	-0.59(0.32)
	t-value	0.67	1.56	3.18	2.24
7	Farmers	-0.19(1.15)	-1.37(1.15)	-0.82(1.67)	-1.01(1.06)
	Employees	-0.30(0.79)	-0.73(0.81)	-0.25(0.87)	-0.52(0.45)
	t-value	0.36	2.09	1.37	1.93
8	Farmers	-0.63(1.21)	-0.72(0.91)	-1.13(1.57)	-0.81(0.64)
	Employees	-0.56(0.92)	-0.09(0.59)	-0.14(0.80)	-0.29(0.38)
	t-value	0.22	2.68	2.63	3.27
9	Farmers	+0.03(0.53)	-0.42(0.68)	-0.72(1.06)	-0.38(0.44)
	Employees	-0.36(0.81)	-0.46(0.51)	-0.02(0.74)	-0.33(0.35)
	t-value	1.82	0.25	2.94	0.42
10	Farmers	+0.02(0.24)	-0.87(0.79)	-0.33(0.64)	-0.42(0.47)
	Employees	-0.27(0.54)	-0.29(0.40)	-0.11(0.43)	-0.26(0.10)
	t-value	0.87	1.69	1.35	1.00
Mean for all farmers		-0.77(0.85)	-0.73(0.90)	-0.76(1.20)	-0.53(0.63)
Mean for all employees		-0.30(0.81)	-1.04(0.96)	-0.33(1.12)	-0.62(0.53)
t-value		4.23	5.26	5.89	2.66

¹ This overall mean satisfaction mean score is generated from the eight raw satisfaction variables rather than the three factor-weighted variables.

Conclusions

Agricultural cooperative businesses do have a diverse set of goals from which to legitimately select. These include financial, corporate, and farmer-oriented indicators. Inevitably, conflict will occur when priorities are being assessed. It is, therefore, crucial that all stakeholder groups have the opportunity to contribute to decisions and to be kept informed of final outcomes in as clear and transparent a way as possible. Importantly, member-centered performance and corporate-oriented goals are not incompatible, and the attainment of both can go hand-in-hand.

References

- Barton, D. G. 1989. Principles. In *Cooperatives in agriculture*, ed. David W. Cobia. London: Prentice-Hall.
- Bateman, D. I., J. R. Edwards, and Clare Le Vay. 1979. Problems of defining a cooperative as an economic organisation. *Oxford Agrarian Studies* 8:53-62.
- Beal, G. M. 1954. *The roots of participation in farmer cooperatives*. Ames, Iowa: Iowa State Press.
- Blümle, E. B. 1985. Methods of measuring success and effect in a cooperative. In *Cooperatives in the clash between member participation, organisational development and bureaucratic tendencies*, eds. E. Düller and W. Hamm. London: Quiller Press.
- Cockerill, T. A. J. and J. F. Pickering. 1984. The firm in economics. In *The economic management of the firm*, ed. J.F. Pickering. Oxford: Philip Allan Publishers
- de Vaus, D.A. 1991. *Surveys in social research*. 3rd ed. London: UCL Press.
- Dolan, C. V. 1994. Factor analysis of variables with 2,3,5 and 7 response categories: A comparison of categorical variable estimators using simulated data. *British Journal of Mathematical and Statistical Psychology* 47:309-326.
- Donnelly, R. 1980. *Goal displacement and the British cooperative movement*. Ph.D. thesis, Dept. Economics, University of Strathclyde, Glasgow.
- Foxall, G. R. and M. M. McConnell-Wood. 1976. *Member-society relations in agricultural co-operation*. Report 22, Dept. Agricultural Marketing, University of Newcastle-upon-Tyne, Newcastle.
- Gasson, Ruth. 1977a. Farmers' approach to cooperative marketing. *Journal of Agricultural Economics* 28:27-37.
- _____. 1977b. Farmers' participation in cooperative activities. *Sociologia Ruralis* 14 (1):107-123.
- Hind, A. M. 1994. Cooperatives - Under-performers by nature? *Journal of Agricultural Economics* 45 (2):213-219.
- Jacobsen, R. E. and C. O'Leary. 1990. *Dairy co-op issues in Ireland with special reference to Plc activities*. Cork: Centre for Cooperative Studies, University College Cork.
- Jacobsen, G. 1995. When education in cooperation leads to participation in cooperatives: A study of educational processes. *Journal of Rural Cooperatives* XIII (No. 2):119-150.
- Le Vay, Clare. 1975. *Cooperative theory and farmers' attitudes - A preliminary study*. Aberystwyth: Dept. of Agricultural Economics, University College of Wales.
- _____. 1986. *The micro economic theory of agricultural co-operation*. Aberystwyth: Dept. Agricultural Economics, University College of Wales.
- MacPherson, I. 1994. The cooperative ideal in the twenty first century. *Review of International Co-operation* 88.
- O'Donohue, S. 1994. How do co-ops measure up? *Co-op Ireland* Jan.-Feb.:32-39.
- Parnell, E. 1995. *Reinventing the cooperative—Enterprises for the 21st century*. Oxford: Plunkett Foundation.
- Pestov, V. A. 1995. Local economic democracy and multi-stakeholder cooperatives. *Journal of Rural Cooperation* XIII (No. 2):152-167.
- Pickard, D. H. 1970. Factors affecting success and failure in farmers' cooperative associations. *Journal of Agricultural Economics* 21:105-119.
- Plunkett Foundation. 1995. *1995 Directory of statistics*. Oxford: Plunkett Foundation.

- _____. 1996. *1996/97 Directory of agricultural co-operatives and other farmer controlled businesses in the U.K.* Oxford: Plunkett Foundation.
- Price, D. C. 1983. *Financial analysis for agricultural cooperatives in the United Kingdom*. Oxford: Institute of Agricultural Economics, University of Oxford.
- _____. 1993. *Aspects of agricultural cooperative performance measurement*. Ph.D. thesis, Oxford University, Bodleian Library.
- Registry of Friendly Societies. 1992. *Annual report of the Friendly Societies Registrar 1991/92*. London: HMSO.
- Schrader, L. F., E. M. Babb, R. D. Boynton, and M. G. Lang. 1985. *Cooperative & proprietary agribusinesses: Comparison of performance*. Research Bulletin 982, Purdue University, West Lafayette, Indiana.
- Stewart, A. I. T. 1993. Have traditional cooperative structures outlived their usefulness? *Farm Management* 8(6):287-296.
- Thirkell, J. D. 1989. Attracting and motivating managers in U.K. agricultural cooperatives. In *Yearbook of Cooperative Enterprise 1989*. Oxford: Plunkett Foundation.
- _____. 1993. Co-operation—A key to success. *Farm Management* 8(6):287-296.
- van Dooren, P. J. 1982. *Cooperatives for developing countries*. Oxford: Plunkett Foundation.