Key Performance Indicators in Co-operatives: Directions and Principles

Louis Beaubien and Daphne Rixon

This paper examines the performance benchmarks adopted by co-operatives in the insurance sector. The research is conducted through a case study comprised of a documentary review and semi-structured interviews with two large North American insurance co-operatives. The research found that the insurance co-operatives use benchmarks that are developed for investor-owned companies to evaluate their performance. Furthermore, the measures used by insurance co-operatives reflect relatively little consideration of the co-operative principles and values and there is no comparison to other insurance co-operatives. Given the recent challenges in the financial services sector, coupled with increasing stakeholder expectations for performance reporting, it is timely to conduct this study.

Introduction

The use and development of a performance measurement system (PMM) is founded in the belief that an organisation can identify a causal relationship between certain actions and an end result; and by adjusting causal action, it can improve results (Vera-Munoz et al, 2007). The process of performance measurement is one that not only reflects the change in performance over time, but also measures progress toward (or above) a desired goal. The establishment of PMM goals are often based on industry benchmarks. Benchmarks are typically developed by commercial rating companies that gather a broad range of data and sell it to subscribers or by industry associations that gather data from the participant members. Since the data gathered by commercial rating agencies is usually based on a broad array of companies, some industries have formed voluntary associations to gather the data they require. For example, the workers' compensation boards (WCBs) in Canada, public sector insurance provider for work-related injuries, gathers data through the Association of the Workers' Compensation Boards of Canada (AWCBC). This association facilitates the compilation and reporting of comparative national statistical and financial reporting.

However, despite the widespread use of benchmarking there are a considerable number of questions raised in the extant literature concerning the validity of the causal links that connect action to goal; and the achievement of particular benchmarks to overall organisational success (Vera-Munoz et al, 2007; Maines et al, 2002). Ittner and Larcker (2003) found that in many cases such causal relationships were not tested or questioned. Rather, the establishment of action-performance drivers was the purview of organisational accountants (Ittner et al, 2003; Banker et al, 2000), and this identification was deemed as sufficient validation of the use of the PMM and associated benchmarks. The acceptance of the models and benchmarks is further endorsed through the increasing reliance (and acceptance) of auditors to use such benchmarks to judge the risk and operations of an organisation (Ballou et al, 2004). The use of benchmarks is complicated further, in that there is considerable subject bias in the selection and weighting of many models of action-performance and the establishment of benchmarks (Ittner et al, 2003; Malina and Selto, 2004), which can obscure useful analysis.

An additional complication arises in the framework of how benchmarks are selected, as their ability to provide reliable information is highly contextual (Ittner et al, 2003; Banker et al, 2000). Benchmarking, as a method of evaluation, is widespread in many industries (Dattakumar and Jagadeesh, 2003) and crosses over the threshold of investor-owned companies (IOCs) to the public-sector, non-profit and charity organisations, and co-operatives and credit unions (Rixon and Ellwood, 2011). The choice of which elements of organisational data may prove useful in measuring and driving performance is often a driven by the approach of formal industry associations or informal compilations of data of members (and competitors) in an industry (ibid; Dattakumar and Jagadeesh, 2003). As such, the determination of the metrics of success is

Journal of Co-operative Studies, 45:2, Autumn 2012: 5-15 ISSN 0961 5784

often subject to the institutional influences of significant participants in the field, ie, the largest competitors (Beaubien, 2008; Moerman and Van der Laan, 2005). While it is not necessarily common for non-profits and public-sector organisations to operate in the same industries as IOCs, co-operatives can be found in almost all industries in which IOCs operate (Beaubien, 2011).

While co-operatives face similar challenges as IOCs such as, the ability to develop a viable business and financial strategy to survive and thrive as an ongoing concern; the objectives of the two forms of organisation differ. Co-operatives are established to meet member and community needs, and are governed by seven guiding principles, including: voluntary and opened membership; democratic member control; member's economic participation; autonomy and independence; education, training and information; co-operation among co-operatives; and, concern for community (International Co-operative Alliance, 1995). By contrast, IOCs exist to generate and maximise wealth for shareholders. Given these differences, can the means of evaluation of IOCs suitably be applied to co-operatives? The research question posed in this paper is: How do co-operatives adopt benchmarks and performance measures?

In the current challenging time for the financial services industry it is important to discern how co-operatives are benchmarking and evaluating their performance relative to their peers. It is also beneficial to investigate whether their benchmarks are specific to co-operatives or if they are reflective of IOCs, organisations with markedly different priorities than co-operatives. While there is a considerable body of literature pertaining to benchmarking, this study contributes to the literature since there is a paucity of research focused specifically on benchmarking performance for co-operatives.

Benchmarking: Existing Practice and the Co-operative Fit

The influence of subjective choice in the determination of benchmarks is interlaced with a number of factors including environmental and economic issues, as well as behavioural motivations and norms (Ittner et al, 2003). Dattakumar and Jagadeesh (2005) assert one of the most obvious motivations for the influence of subjective judgment in the choice of benchmarks is self-interest. Given that benchmarks are often a means to assess organisational performance, and an individual's ability to contribute to that performance which is tied to compensation, individuals are highly motivated to select benchmarks that they are able to achieve (Gibbs et al, 2004). Murphy and Oyer (2001) support this assertion arguing that individuals make a markedly lesser effort to influence benchmarks when the measures are not tied to incentives and compensation.

While there are significant studies demonstrating the economic imperative of influencing the choice of benchmarks and the measurement of performance (eg, Lambert, 2001; Liang, 2010), there is evidence that other factors influence these choices. Lipe and Salterio (2002; 2000) note that significant influence comes from cognitive biases of "useful" information and issues of information overload – or data that is more easily assimilated into an individual's mental map. Ittner, Larcker and Meyer (2003) further point out that this subjectivity places "greater or exclusive interest on certain types of measures" (729), and that financial/quantitative data takes precedence in many circumstances. In some cases financial data is used as a proxy for non-financial data, even if the non-financial data is attainable (ibid).

Kaplan and Norton (2001) argue that a balanced approach to analysis can mitigate the influence of subjectivity in benchmark choice and performance evaluation, stressing measures that are diverse and non-financial and financial in nature. Malina and Selto (2004) extend this perspective with an empirical study of a large US manufacturing firm. In the study, the authors assert organisations benefit from a greater diversity of measurements – both strategic and tactical in nature; both financial and non-financial in form. The practice of linking benchmarks and measurements to strategy is tied to the notion that right action can be implemented to achieve strategic success (Vera-Munoz et al, 2007). However, if benchmarks are derived from

market participant data and performance, as is the common practice (ibid; Kaplan and Norton, 2001) an implicit assumption is made that all participants in the market have similar goals and strategies. As Vera-Munoz et al (2007; Malina and Selto, 2004) have demonstrated, the causal link attributed to exist between action and measurement is important. By contrast if measures are incorrect, or if there is a discontinuity with strategic direction, the impact of measurement assessment and follow-up action has little impact (Cavaluzzo and Ittner, 2004). This raises an important question in case of co-operatives: are benchmarks that are commonly used in IOCs useful measures for co-operatives, even if in the same industry?

Passey (2005) makes the case that co-operative principles are akin to behavioural norms, and that organisational behaviour and strategy emergence of 'action recipes' associated with these principles. They are in fact a means by which a co-operative, "differentiates itself from, and competes with, other types of organisations" (29). The co-operative principles as a goal orientation differ from IOC companies in that they seek to achieve social aims in addition to economic ones. Birchall (2005) examines how the co-operative principles had been put into practice in a variety of sectors where organisations incorporated the identity statement, co-operative values and principles. The study concluded that insurance, pensions, financial services co-operatives and mutuals did not make significant use of the identity statement. By contrast, there was general assimilation of dominant commercial values. Which raises questions regarding the nature of "the co-operative difference," with respect to IOCs.

Hicks et al (2007) investigate the nature of the co-operative difference evidenced in member ownership, co-operative purpose, goals and principles. They conclude the duality of democratic and social associations as well as business functions of co-operatives, can result in an efficient combination of social and financial reporting as a means of accounting for economic and social goals. While some co-operatives incorporate the seven principles in the mission statement and include them on their websites, there is minimal reporting of performance in relation to the principles; and, managers, members and employees of co-operatives have difficulty in identifying, operationalising and measuring their co-operative's values and principles. (Brown and Hicks, 2007; Philp, 2004). Spear (2000) concludes this indicates co-operative values are viewed as something separate or extra, resulting in additional costs, and that the co-operative values and principles were not viewed as an integral part of the business.

Novkovic (2006) provides evidence that the awareness of the co-operative principles, and subsequent governance and operations of co-operatives consistent with those principles is not uniform across co-operatives. Awareness and action varies across the industries in which co-operatives operate, the size of the co-operative and the average tenure of co-operative members. The equivocal and variant nature of adherence to the co-operative principles suggests that business practices may vary between otherwise similar co-operatives and that in some cases there may be some departure from a co-operative 'identity' that was the constituting rationale for the organisation (Novkovic, 2006; Hicks et al, 2007). Which raises the questions are co-operatives developing strategies, operating, and measuring performance in a fashion consistent with this 'identity.' Kerr (1975) asserts the folly of measuring for "A" and hoping for "B"; and given the dissimilar nature of the goals of co-operatives and IOCs, it is relevant to question the metrics and methods of benchmarking used in co-operatives. Given this variation in business practices, it is worthwhile asking, how consistently do co-operatives measure their own performance; and are they able to create benchmarks that can reflect both the social and economic ambitions they strive to achieve?

The Case Approach

A case study of two North American insurance co-operatives is adopted for this study. The study included semi-structured interviews with 22 respondents and a documentary review of the key performance indicators (KPIs) published by the co-operatives spanning five years¹. This time period was used to provide a comprehensive picture of insurance co-operative reporting over a five-year period. To gain a better understanding of the information published

in the annual reports, in-depth face-to-face interviews were held with various members of senior management, ranging from managers and directors to vice-presidents of the focal organisations. It was necessary to conduct interviews with multiple representatives from each co-operative since several departments contributed to the reports and were responsible to report on various aspects of the co-operatives' operations. The interviews were audio taped, transcribed and coded using NVivo software. The interviews were between one and two hours in duration and took place during May, June and July 2010 at the worksites of the respondents.

Case studies are defined as a multi-faceted research strategy, which typically involves an in-depth examination of one organisation, situation or community (Yin, 1994). Furthermore, face-to-face surveys are useful to examine complex issues, allow for maximum degree of probing, yield a better response rate, provide flexibility over question content and facilitate clarification of questions and terminology (Singleton and Straits, 2002). This methodology results in richer and more in-depth information than could be derived solely from a survey of a statistical sample of the population at large. The methodological approach can be described as an holistic investigation, which generates both quantitative and qualitative data from archival material, interviews, surveys and observations (Hill, 1993). While case studies yield greater realism than quantitative methodologies, it must be recognised that they are time consuming, their findings cannot be generalised and their lack of rigorous control compromises validity (Bennett, 1991; Hill, 1993). Although all the disadvantages cannot be mitigated, a case study is the most appropriate for this research due to the complex nature of the research questions and the need to solicit in-depth feedback from a small number of respondents.

Semi-structured interviews were constructed around the theme of the study, such as, "Can you tell me what work-role is like?"; "How do you use information technology for reporting and measurement in your work?" The interview protocol questions can be found in the Appendix. Data was collected and analysed alongside existing theory in an iterative fashion. This allowed for deeper exploration of theoretical concepts such as why certain methods of evaluation and measurement were used (Prasad, 2005). Analysis was performed initially by coding and data aggregating. Interviews were transcribed and compiled in databases. This set of data was then further coded reflecting recurring themes and practices. Data were re-sorted and re-analyzed through multiple rounds in order to develop a robust theoretical framework (Cadili & Whitley, 2005).

Case Analysis

The documentary review covered the five-year period 2007–2011 (interim reports were examined for 2011). During this time period, many changes in non-financial reporting were observed. These changes were primarily due to mergers and acquisitions and the resulting difficulty encountered in presenting comparable data. The insurance co-operatives are part of larger co-operative groups that offered banking and investment services and one also provided unrelated services such as grocery stores. A description of the co-operatives can be found in Table 1.

Table 1: Description of Co-operatives in the study			
Canada	The insurance co-operative interviewed in Canada was one of the largest insurance co-operatives in the Country. It provides property and casualty and life insurance, has operations in all provinces and employs over 5,000 people. It provides insurance to over 2 million people.		
United States	The insurance co-operative interviewed in the United States was also one of the largest. It provides property and casualty and life insurance. It has over \$20 billion in annual revenue and in excess of \$150 billion in assets.		
United Kingdom	The UK participant was a general co-operative which provided not only property, casualty and life insurance, but its business also included supermarkets, funeral homes, pharmacy and appliances.		

The primary KPIs reported and used by the co-operatives are depicted in Tables 2 and 3. These KPIs reflect the consolidated operations, rather than each line of business, with the exception of a few insurance-specific measures such as claims loss ratio, combined ratio and capital adequacy. The majority of the KPIs are financial in nature (Table 2). The remaining KPIs are grouped into non-financial categories including: staff profile; community investment; members; and, environment (Table 3).

Table 2: Financial Indicators Title Description				
	•			
Gross Written Premium	Component of revenue which represents the total insurance sales transactions.			
Return on equity	Ratio of net income to the average of opening and closing shareholders' equity excluding accumulated other comprehensive income.			
Combined ratio	Ratio of total expenses to net earned premium, expressed as a percentage.			
Loss ratio	Ratio of claims and adjustment expenses to net earned premium, expressed as a percentage.			
Expense ratio	Ratio of the total premium and other taxes, commissions and agent compensation and general expenses to net earned premium, expressed as a percentage.			
Claims Development	It represents the difference between any prior estimates in the claims costs and the claims costs actually paid on closed claims, plus any change in estimates for claims still open or unreported.			
Minimum Capital Test	Regulatory formula-driven, risk based test of capital available over capital required (by government regulation).			
Dividend coverage ratio	Measure of a company's liability to pay dividends due to its shareholders out of its current year earnings. It is calculated as a net income divided by dividends declared.			
Assets under management	Total assets that we manage to earn profits. It includes both assets on our balance sheet and segregated funds. It is an indicator of business volume.			
Shareholder net income	Portion of net income which will provide capital to support products or fund dividends to policyholders.			
Return on required capital (ROC)	Is the ratio of net income of a business segment to the average of opening and closing required capital.			
Net income	Refers to the income amounts that have been adjusted for income taxes and par for transfer to shareholders.			
New annualised premiums	Full year premium of new products sales			
Assumption changes	Present value impact on actuarial liabilities due to changes in actuarial assumptions, changes to margin levels in actuarial liabilities, changes to actuarial methodologies and error corrections made during the year.			

Some of the KPIs are expressed in nominal terms while others are in a percentage format. The significant number of financial KPIs reported by North American co-operatives relative to nonfinancial is explained by two respondents:

The reality is your return on investment and your growth that sustains you ... if you don't have a reasonable return on investment, how do you sustain your business. (NA-1)

Financial strength is critical, because if you don't have it, you can't do much of anything else. (NA-2)

Table 3: Non-financial measures	Ta :
Measure	Category
Number of employees	Staff Profile
Employee turnover	Staff Profile
Employee engagement	Staff Profile
Community investment	Community investment
Percentage of pre-tax profit invested	Community investment
Staff volunteering	Community investment
Total members	Members
Tonnes of CO ₂	Environment
Energy Used	Environment
Renewable energy	Environment
Total mileage	Environment

As illustrated in Table 2, the majority of the nonfinancial indicators are not specific to the insurance sector. For example, staff profile, community investment, members and environment are applicable for all co-operatives. Of the 14 financial KPIs depicted in Table 1, nine (64%) are specific to the insurance sector. The remaining financial indicators, comprised of dividend coverage ratio, shareholder net income, return on capital, net income and assumptions, are relevant for other industrial sectors. While an insurance co-operative would likely desire to maintain performance comparable to the commercial sector for certain KPIs such as combined ratio, loss ratio, expense ratio, it could be argued that the return on equity, return on capital and net income for co-operatives might have a lower target than pure maximisation of shareholder wealth. The combined ratio, claims loss ratio and expense ratios all measure the efficiency and effectiveness in managing insurance claims. The nine financial KPIs are generic in nature for the insurance industry and reflect typical reporting for this sector. Other KPIs such as minimum capital adequacy are required by government regulators.

The documentary review revealed that the choice of KPIs in the participant organisations was informed by their practice of comparing performance against IOC benchmarks (eg, profitability) rather than a more customary measurement of a co-operative's success such as education of the membership or support for other co-operatives (Hicks et al, 2007). Respondents indicated that comparisons to co-operative insurance organisations are difficult due to size and variation in operations. One respondent explained further they would "never think to compare ourselves to other co-operatives;" rather, they compare to other financial services companies.

The extent of reliance on comparison to commercial benchmarks rather than co-operative benchmarks may be explained by management perceptions. Some of the respondents believed the KPIs used by co-operatives should be the same as those used by IOCs:

[KPIs] they're exactly the same as the industry. There would be no reason for them to be different ... where I think you might find there's a difference is if you look at ROE or ROI. (NA)

The choice of benchmark may also have been influenced by the co-operatives' perceptions of what constitutes a valid comparison. Many respondents focused on their relative size, since they are the largest in their respective countries, as the main reason for not comparing to other co-operative benchmarks. Respondents believed that comparison of large co-operatives with small co-operatives would not be valid or reliable. However, this concern can be addressed by expressing KPIs in percentage terms rather than in nominal values. This approach would facilitate comparisons among large and small co-operatives.

With respect to setting market prices, the determination of standards of production quality, and appropriate levels of profitability and return, IOCs are more influential in industries in which

they compete with co-operatives (Rixon, 2011). This position of primacy is often due to greater economic resources, their number (there are typically fewer co-operatives than IOC firms) and recognition in the marketplace by participants such as analysts and industry commentators. When asked how an insurance co-operative determined the targets or benchmarks for their strategic plans, respondents indicated that they acquire industry data from research companies and rating agencies such as JD Power and Gallop. This information is available from trade associations such as the Canadian Life and Health Insurance Association, International Cooperative and Mutual Insurance Federation, Insurance Institute for Highway Safety, these reporting organisations provide data for all insurance companies, not just co-operatives.

The acceptance of benchmark standards developed by industry reporting agencies that implicitly focus on IOC firms is an isomorphic (cf Scott, 2008) influence that shapes the behaviour and practice of organisations that adhere and comply to this standard. Isomorphism is a concept of Institutional Theory (Scott, 2008), which suggests organisational values are adopted through imitative pressures, and organisations adopt socially legitimised structures and practices (Scott, 2008; DiMaggio and Powell, 1983); such as the public-sector adoption of double-entry accounting resulting from environmental pressures as a function of the desire to appear to be operating in a fashion consistent with perceptions of legitimacy (Bernal, et al, 2005).

The form of isomorphic influence to which organisations may be subject can be evident diverse, and can have variable rationales and impacts on the organisation. The imitation of, and congruence with, the practices and standards of industry leading firms may allow smaller firms to gain benefits in the form of legitimacy and increased market share because the organisation is "accepted." One such example is normative isomorphism, where the values and regulations of an industry cause organisations to conform to similar practices and procedures. While this may provide insurance co-operatives with increased business, it may cause a shift in the organisations core values that de-emphasise its values, which engenders its initial success, in favour of broad undifferentiated values of the industry.

Mimetic isomorphism occurs when organisations choose to adopt practices consistent with industry leaders, as they are perceived to be "best practices" and will provide superior results. As with the case of normative isomorphism, insurance co-operatives may adopt practices, which lead to more effective operations. However, adopting these practices may cause insurance co-operatives to not adopt practices that are more consistent with the values and mission of the organisation. Finally, coercive isomorphism occurs when organisations must adopt practices deemed legitimate by the community authority or regulations in order to operate. This form of isomorphism is aggressive in that the benefit for compliance is survival, rather than the possible improvements to the organisation that occur in the previous forms. For instance, insurance co-operatives adopt KPIs and benchmarks in association with industry practice in order to qualify for access markets to raise capital. Organisational reporting practices are adjusted to ensure targets are met. In other words, as insurance co-operatives accept IOC insurance organisations as holding a position of primacy in the industry and assent to the benchmarks they dictate as indicative of success, insurance co-operatives are ceding the development and pursuit of their own goals and strategies.

In fact, respondents indicated many of the performance indicators are accompanied by targets developed to measure and monitor strategic plans. The only way to meet the benchmark standards established by IOC firms is to adopt strategies and practices that are consistent with those benchmarks. In addition, another respondent explained that most insurance companies also have their own proprietary methods of tracking customer satisfaction, but everyone also buys into the JD Power satisfaction study. Purchased studies that compare companies on the same metrics. The co-operative also conducts its own analysis, which collects additional metrics. However, while respondents indicated they used various sources of data to develop their targets, for the most part, the source of the benchmark – whether derived from co-operative principles or industry standards – was not explicitly identified in the annual report.

The insurance co-operatives' choice of IOC benchmarks can be explained by the influence of their peers. Relying on Lave and Wenger's (1991) notion of communities of practice, Beaubien (2008) asserts that within "communities" of organisations, such as industry groups, or organisations that operate in the same region; institutional structures emerge in concert with the values and practices of elevated, or "master," participants in that community. In other words, organisations that have established reputations consistent with "leading" the community, either through accomplishment or tenure, exert influence and institutional pressures that shape the ordinary practices of how organisations operate. For instance, by virtue of the size and longevity of their operations and their reputations and demonstrated economic success, the "Big 4" accounting firms are able to exert influence over the accounting industry that helps to shape standards and perceptions of what "best practices" are acceptable (ibid; Fogarty, 1992). For new or smaller accounting firms to be accepted by the industry (and acquire clients) they have to ascribe to these practices and support them, which reifies the position of the standardsetter as an elevated one. However, it is possible as new entrants join the industry and ascend to more prominent positions that they are able to incorporate new or altered approaches into the assemblage of best practices that are accepted by the community.

Perhaps the lack of comparisons and availability of co-operative industry benchmarks can also be explained by what is being measured. As suggested by one respondent: "we need to think about what is performance, what is co-operative performance and why measure co-operative performance." The conflation of indicators of performance in annual reports suggests a deviation from measurement and goal-setting targeted at the co-operative principles, as one respondent indicated, the organisation gathers information on insurance agencies and they break it down into the format needed, as "the property and casualty business is very competitive ... so we're very aware of what other companies are doing and we pay close attention to that." It is worthwhile to note the individual respondent referred to *other companies* implicitly describing the organisation as an IOC, rather than as a co-operative.

Wenger (1998) argues that identity is shaped by the assumption and expression of values and the practices that are enacted in association with those values. The examination of the two insurance co-operatives in this study suggests that while there is acknowledgement of the co-operative principles, the fulfilment of these principles is not always the goal for modern co-operatives. In fact, strategies are developed and practices are shaped to satisfy performance measurements that are benchmarked against IOC organisations with goals that are explicitly different from co-operatives (Hicks et al, 2007). Thus, while co-operative principles may be valued explicitly, IOC principles are implicitly given greater value, as they are the governing components in the development of practice and strategy. This engenders the question: do co-operatives give up their identity as a "co-operative" in the adoption of IOC appropriate performance indicators and benchmarks?

The financial indicators of performance detailed in Table 1 are representative of organisations operating in the insurance sector – both co-operatives and IOC firms. The non-financial measures do have representative elements that suggest an awareness of social issues that are consistent with co-operative principles, for example, tonnes of CO₂ produces, community investment, and number of members. However, comparable non-financial measures can be seen in the annual reports of IOC firms in the form of tonnes of CO₂ produces, charitable donations, and shares outstanding. Staff volunteerism and engagement do appear to be two forms of reporting that are unique to the co-operatives studied here. However, this represents two measures out of twenty-six, which is unlikely to substantively differentiate co-operatives from IOC firms. The scarcity of co-operative principle-based measures in light of the total indicators used is further exacerbated, given the primacy that respondents gave to the financial measures over non-financial measures.

Conclusions

The research question posed at the outset of this paper was: *How do co-operatives adopt benchmarks and performance measures?* Through our analysis of two insurance co-operatives, Journal of Co-operative Studies, 45:2, Autumn 2012: 5-15 ISSN 0961 5784

the research found that the method of adoption is consistent with IOC firms in the same industry. This research contributes to the literature on co-operatives through its findings that insurance co-operatives use IOC benchmarks to evaluate performance. Furthermore, the study contributes to the literature on benchmarking through its examination of the possible influences on why the co-operatives' adopted IOC benchmarks as a method of measuring and evaluating performance.

The findings of this study provide considerable scope for further research. A second question that emerged in the analysis asked, *do co-operatives give up their identity as a "co-operative" in the adoption of IOC appropriate performance indicators and benchmarks?* Therefore, it would be beneficial to extend this study to examining the how the adoption of IOC benchmarks has impacted the co-operative identity. Since this study focused on the insurance sector, it would also be worthwhile to conduct further research on other co-operative industrial sectors, to determine if these findings are unique to the insurance sector. Cote (2000) argued that the methods of performance evaluation of co-operatives should be consistent and reflect the co-operative principles, despite the fact that contemporary studies show that co-operative members are not always familiar with what the principles of the co-operative are (eg, Birchall, 1998).

Given the adoption of strategies, driven at attaining certain benchmarks determined by IOCs; it is arguable that the co-operatives in this study have adopted practices and values more consistent with IOCs than with co-operatives – which in turn shapes and structures their identity as something more similar to an IOC than a co-operative. As James Whitcomb Riley, an American poet noted, if it walks like a duck and quacks like a duck; it's a duck.

The Authors

Dr Daphne Rixon, PhD, FCMA is an Associate Professor, Accounting in the Sobey School of Business and the Executive Director, Centre of Excellence in Accounting and Reporting for Co-operatives (CEARC). Her research interests include accounting and performance reporting for the public and not-for-profit sectors. Louis Beaubien, PhD, CMA, CGA is an Assistant Professor, Accounting in the Sobey School of Business. His research interests include governance, performance, and decision-making. The authors gratefully acknowledge the support of the Centre of Excellence in Reporting and Accounting for Cooperatives (CEARC), Saint Mary's University, Halifax, Nova Scotia, Canada; and the Accounting Education Foundation of Nova Scotia.

References

- Ballou, B, Earley, C and Rich, J (2004) "The impact of strategic-positioning information on auditor judgments about business process performance." *Auditing: A Journal of Practice & Theory* 23 (2): 71-88.
- Banker, R, Potter, G and Srinivasan, D (2000) "An empirical investigation of an incentive plan that includes non-financial performance measures." *The Accounting Review* 75 (1): 65-92.
- Beaubien, L (2008) "Constitutive practice and institutional change: ethics and behavior." *Journal of Accounting and Organizational Change* 4 (1): 47-66.
- Beaubien, L (2011) "Co-operative Accounting: Disclosing Redemption Contingencies for Member Shares." *Journal of Co-operative Studies* 44 (3): 38-54.
- Bennett, R (1991) "How is management research carried out?" In Smith C and Dainty, P (Eds) *The Management Research Handbook.* Routledge, New York: 85–103.
- Bernal, M C, Pinzo'n, P A and Espejo, C (2005) "Accounting regulation, inertia and organizational self-perception: double-entry adoption in a in a Spanish Casa de Comercio accounting." *Business and Financial History* 15(2): 145-69.
- Birchall, J (2005) "Co-operative principles 10 years on." *Review of International Co-operation* 98(2), (2005) 45-63.
- Birchall, J (1998) "Co-operative values, principles and practices: a commentary" *Journal of Co-operative Studies*, 30 (2): 42-69.

- Brown, L and Hicks, E (2007) "Accounting for the Social: Incorporating Indicators of the Cooperative Difference into Strategic Planning." *CIRIEC Conference*, Victoria, BC.
- Cavaluzzo, K, and Ittner, C D (2004) "Implementing performance measurement innovations: evidence from government." *Accounting, Organizations and Society* 29 (2): 243–267.
- Cadili, S and Whitley, E A (2005) "On the interpretative flexibility of hosted ERP systems", *Journal of Strategic Information Systems*, Vol 14: 167-195.
- Cote, D (2000) "Cooperatives and the new millennium: the emergence of a new paradigm." In Fairbairn, B and Russell, N (eds), Cooperative Membership and Globalisation. Saskatchewan: Centre for the Study of Cooperatives.
- Dattakumar, R and Jagadeesh, R (2003) "A review of literature on benchmarking." *Benchmarking: An International Journal* 10 (3): 176-209.
- DiMaggio, P and Powell, W W (1983) "The iron cage revisited: institutional isomorphism and collective rationality in organizational fields." *American Sociological Review,* 48: 147-60.
- Elnathan, D, Lin, T and Young, S (1996) "Benchmarking and Management Accounting: A framework for research." *Journal of Management Accounting Research* 8 (1): 37-48.
- Fairbairn, B (2004) "Cohesion, adhesion and identities in cooperatives." In Fairbairn, B and Russell, N (eds) Cooperative Membership and Globalisation. Saskatchewan: Centre for the Study of Cooperatives.
- Fogarty, T (1992) "Organizational socialization in accounting firms: A theoretical framework and agenda for future research." *Accounting, Organizations and Society* 17 (2): 129-149.
- Gibbs, M, Merchant, K and van der Stede, W (2004) "Determinants and Effects of Subjectivity in Incentives." *The Accounting Review* 79 (2): 409-436.
- Hicks, E, Maddocks, J, Robb, A and Webb, T (2007) "Co-operative Accountability and Identity: An examination of reporting practices in Nova Scotia Co-operatives." *Journal of Co-operative Studies* 40 (2): 4-16.
- Hill, F (1993) "Research methodology and the management disciplines: The need for heterogeneity." *Irish Business and Administrative Research*, 14 (2), 46-55.
- International Co-operative Alliance (ICA) (1995) *International Cooperative Alliance: Statues.* Geneva: ICA. Ittner, C D, and Larcker, D F (2003) "Coming up Short on Non-financial Measures." *Harvard Business Review* (November): 88-95.
- Ittner, C D, Larcker, D F and Meyer, M W (2003) "Subjectivity and Weighting of Performance Measures: Evidence from a balanced scorecard." *The Accounting Review* 78 (3): 725-758.
- Kaplan, R S and Norton, D P (2001) *The Strategy-Focused Organization: How balanced scorecard companies thrive in the new business environment.* Cambridge, MA: Harvard.
- Kerr, S (1975) "On the Folly of Rewarding A, While Hoping for B." *The Academy of Management Journal* 18 (4): 769-783.
- Lambert, R (2001) "Contracting Theory and Accounting." *Journal of Accounting and Economics* 32 (1-3): 3-87.
- Lave, J and Wenger, E (1991) Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.
- Liang, P (2010) "Equilibrium Earnings Management, Incentive Contracts, and Accounting Standards." Contemporary Accounting Research 21 (3): 685–718.
- Lipe, M G and Salterio, S (2002) "A note on the judgemental effects of the balanced scorecard's information organization." *Accounting, Organizations and Society* 27 (6): 531-540.
- Lipe, M G and Salterio, S (2000) "The balanced scorecard: The judgmental effects of common and unique performance measures." *The Accounting Review* 75 (3): 283-298.
- Maines, L, Bartov, E, Fairfield, P, Hirst, E, Innaconi, T, Mellett, R, Schrand, C, Skinner, D and Vincent, L (2002) "Recommendations on the Disclosure of Non-financial Measures A commentary." *Accounting Horizons* 16 (4): 353-362.
- Malina, M A, and Selto, F (2004) "Choice and change of measures in performance measurement models." Management Accounting Research 15 (4): 441-469.
- Michelson, J (1994) "The Rationales of Cooperative Organizations: some suggestions from Scandinavia." *Annals of Public and Cooperative Economics* 65 (1), 13.
- Moerman, L and Van Der Laan, S (2005) "Social reporting in the tobacco industry: all smoke and mirrors?" *Accounting, Auditing & Accountability Journal* 18 (3): 374-389.
- Murphy, K J and Oyer, P (2001) *Discretion in Executive Incentive Contracts: Theory and Evidence.* Available at SSRN: http://ssrn.com/abstract=294829 or doi:10.2139/ssrn.294829
- Novkovic, S (2006) "Co-operative Business: the role of co-operative principles and values." *Journal of Co-operative Studies* 39 (1): 5-15.
- Passey, A (2005) "Co-operative Principles as 'action recipes': what does their articulation mean for co-operative futures?" *Journal of Co-operative Studies* 38 (1): 28-41.

- Philp, K (2004) "The challenges of cooperative membership, social cohesion and globalisation." In Fairbairn, B and Russell, N (eds) *Cooperative Membership and Globalisation*. Saskatchewan: Centre for the Study of Cooperatives, 68.
- Prasad, P (2005) *Crafting qualitative research: Working in the postpositivist traditions.* New York: M E Sharpe.
- Rixon, D (2011) "Are Cooperative Principles Reflected in Key Performance Indicators? A Case Study of Insurance Cooperatives." *International Workshop on Accounting for Cooperatives*, at Valencia, Spain.
- Rixon, D and Ellwood, S (2011) "Reporting for Public Sector Agencies: A Stakeholder Model." In *Social Accounting and Public Management: Accountability for the Public Good* ed Osborne, S and Ball, A. London: Routledge.
- Scott, W R (2008) Institutions and Organizations. Thousand Oaks: Sage.
- Singleton, R and Straits, B (2002) "Survey Interviewing." In: Gubrium, J and Holstein J (eds) *The Handbook of Interview Research*. Thousand Oaks: Sage: 59-82.
- Spear, R (2000) "Reasserting the Co-operative Advantage Project Overview." *Journal of Co-operative Studies* 33 (2): 95-101.
- Vera-Munoz, S C, Shackell, M and Buehner, M (2007) "Accountants' Usage of Causal Business Models in the Presence of Benchmark Data: A Note." *Contemporary Accounting Research* 24 (3): 1015-1038.
- Wenger, E (1998) *Communities of practice: Learning, meaning, and identity.* Cambridge: Cambridge University Press.
- Yin, R K (1994) Case Study Research: Design and Methods, (2nd ed) Applied Social Research Methods, 5. London: Sage.

Note

1 The source(s) for KPIs used in industry both in the case of IOCs and co-operatives have been drawn from a number of industry associations and like sources. Some of these KPIs are regulatory in nature and drawn based on the requirements of the regulating entity in each of the UK, US and Canada. These sources are: The Office of Superintendent of Financial Institutions (CA), Financial Services Authority (UK), and the Federal Insurance Office (Department of Treasury) (US). Other sources were drawn from jurisdictional associations (eq. Insurance Bureau of Canada).

Appendix

Semi-structured interviews were conducted in the study of a bank.

Terms in the interview protocol as described below have been disguised to maintain anonymity and confidentiality.

Intervi	Interview Protocol		
1.	You and the organisation		
a.	Can you tell me about your role at X?		
b.	How long have you been at X?		
c.	Can you tell me about the unit(s) you have worked in?		
d.	Can you tell me about working with other unit(s)?		
e.	Can you tell me about the [information system] you used?		
2. You and the performance management (KPI) activity			
a.	Can you tell if you had a role in the establishment of KPIs?		
b.	Can you tell me about the measurement process?		
c.	Can you tell me about the KPIs		
d.	How is coordination/comparison handled across the organisation?		
e.	Are there any challenges in comparison and analysis?		
f.	Have there been any changes in how you do work as a result of following the KPIs?		
3. You and training			
a.	Can you tell me about your training/education prior to coming to X?		
b.	Can you tell me about your training/education at X regarding performance measurement?		