

# FACTORS INFLUENCING THE PERFORMANCE OF COOPERATIVES IN MALAYSIA : A TENTATIVE FRAMEWORK

**Sushila Devi Rajaratnam, Nurizah Noordin, Mohd Shahron Anuar bin Said,  
Rafedah Juhan & Farahaini Mohd Hanif  
(Co-operative College of Malaysia)**

## ABSTRACT

*This paper attempts to identify a tentative framework on the factors which may influence the performance of cooperatives in Malaysia, based on a review of the existing literature. The paper begins with a description of the current status of cooperatives in Malaysia. The literature has highlighted the need for cooperative performance measurement to encompass both financial and nonfinancial dimensions of performance. Next, the specific financial and nonfinancial performance measures commonly used in prior studies are explained. This is followed by a discussion on the factors influencing the performance or success of cooperatives. Finally, based on the literature reviewed, the paper proposes a tentative framework on the factors influencing the financial and non financial performance of cooperatives in Malaysia. Three main factors are proposed as influencing the financial and non financial performance of cooperatives and these are referred to as the structural, managerial and membership dimensions.*



## INTRODUCTION

Cooperatives were formally introduced in Malaysia in 1922 by the British colonial government primarily to encourage savings and to combat indebtedness among farmers and government servants. After independence in 1957, the Malaysian Government continued to acknowledge cooperatives as an important instrument to eradicate poverty and enhance the socio-economic standard of living of the people. The early cooperatives were basically thrift and loan or credit societies and these became the foundation of the cooperative movement in Malaysia. Over the years, with the supportive policies of the Malaysian Government, cooperatives diversified from just undertaking credit into non-traditional business activities specifically finance, banking, plantation, consumerism, transport, housing, industrial, construction and services.

As socio-economic organisations, cooperatives are involved in business activities and operate in a commercial environment, often in direct competition with the private sector. Therefore, they need to be successful business organisations to be able to fulfil their social and economic obligations to members (Inder Kaur, 2006). In fact, prior literature (Laidlaw, 1987; Stettner (1977; cited in Wells, 1981) has aptly acknowledged that cooperatives can achieve their social objectives only if they succeed in terms of their business performance.

The cooperative movement in Malaysia currently contributes 1.4 percent to the country's Gross Domestic Product (GDP) and it is the Government's intention that this contribution be increased to 4 percent in 2013 (Suruhanjaya Koperasi Malaysia, 2009). To ensure that this percentage is achieved, it is imperative for cooperatives to perform successfully. There are a number of studies which have assessed the performance of cooperatives. Generally, the literature acknowledges that the measurement of cooperative performance needs to be multidimensional. However, there is no consensus on a common measure or method of assessing performance. Moreover, the successful performance of cooperatives would depend on a number of key contributing factors. There have been some studies which have investigated the factors which influence the performance of cooperatives. However, these studies are limited in that they have mainly focused on certain types of cooperatives, specifically cooperatives involved in credit and agricultural activities. There is therefore a need to identify the important factors which would influence the successful performance of cooperatives undertaking various economic activities.

The aim of this paper is to suggest a tentative framework for future research on the factors which may affect the performance of cooperatives in the Malaysian context, based on the review of literature. Firstly, the paper discusses the multidimensional aspect of measuring performance of cooperatives, specifically the financial and

non financial dimensions. Next, some of the important factors influencing the performance of cooperatives are presented. Finally, a tentative framework for future research on the factors which may influence the performance of cooperatives in Malaysia is suggested.

## **Status of Cooperatives in Malaysia**

Table 1 shows that as at 31 December 2008 there were 6,084 cooperatives in Malaysia with a total membership of 6.51 million individuals, paid up capital worth RM8.42 billion and total assets amounting to RM55.73 billion (Malaysia Cooperative Societies Commission, 2008). The 6.51 million individual members represented 23 percent of the country's population of 27.73 million in 2008 (Ministry of Finance, 2008). In terms of function, consumer cooperatives constituted the majority (54 percent) of the 6,084 cooperatives. However, cooperatives engaged in banking and credit / finance, which represented only 9 percent of the cooperatives, had 73 percent of the paid up capital and 89 percent of the total assets of the movement. One reason for this situation is that a large majority (61 percent) of the consumer cooperatives exist in schools and as such have a meagre 0.2 percent of the paid up capital and total assets, respectively, of the cooperative movement in the country.

As indicated in Table 1, the 6,084 cooperatives are involved in various functions specifically, banking, finance or credit, plantation, housing, industrial activities, consumerism, construction, transport and services. The Department of Cooperative Development (replaced by the Malaysia Cooperative Societies Commission or MCSC since 2008) which is responsible for the supervision of cooperatives in the country classifies them into nine functions based on their business activities. The cooperatives had a total turnover of RM7.75 billion, which accounted for only 1.4 percent of the country's GDP of RM533.91 billion in 2008 (Ministry of Finance, 2008). This figure indicates that despite 23 percent of the population being cooperative members, the contribution of the cooperative movement to the country's economy is insignificant. In addition, the profits generated by the cooperatives in 2008 amounted to 25 percent of the turnover for that year.

More importantly, only two cooperative banks collectively owned 76 percent or three quarters of the total assets as well as accounted for 46 percent of the total turnover of cooperatives in 2008 (MCSC, 2008). Moreover, nearly two thirds or 64 percent of the profits of cooperatives came from these two banking cooperatives. Ironically, both these two cooperatives however accounted for only 12.7 percent of the total membership in cooperatives, and also a mere 3 percent of the country's

population. Hence, one can infer that the performance of the cooperative movement in Malaysia, in terms of total assets, turnover and profits, is currently dominated by the two banking cooperatives and the profits generated by the movement are not being enjoyed by the majority of the members. For the cooperative movement in the country to effectively contribute towards enhancing the socio-economic status of the people as well as contribute more significantly towards the country's GDP, it is imperative that the cooperative movement in the country, as a whole, performs successfully.

**Table 1**  
**Status of Cooperatives by Function as at 31 December 2008**

Function	No. of Cooperatives	Membership (individuals)	Capital (RM)	Assets (RM)	Turnover (RM)	Profit/Loss (RM)
Banking	2	828,484	2,199,709,013	42,208,732,138	3,551,004,345	1,254,943,822
Credit/Finance	551	1,962,834	3,969,003,533	7,620,467,830	1,747,350,390	353,658,419
Agriculture	842	248,526	239,016,392	964,366,413	520,805,179	132,336,678
Housing	88	89,102	131,592,122	540,551,689	103,492,753	38,860,369
Industrial	75	11,997	6,953,639	49,874,089	42,628,043	41,824
Consumer - adult	1,283	658,029	237,702,053	988,115,272	803,752,797	42,954,235
- school	2,043	2,022,091	17,529,109	149,894,519	160,819,115	23,170,906
Construction	108	62,111	15,248,402	57,049,368	23,366,543	417,739
Transport	336	116,918	47,338,371	182,006,579	391,607,704	14,343,117
Services	756	509,556	1,553,903,547	2,969,662,339	405,033,640	81,592,599
<b>Total</b>	<b>6,084</b>	<b>6,509,648</b>	<b>8,417,996,182</b>	<b>55,730,720,236</b>	<b>7,749,860,509</b>	<b>1,942,319,708</b>

(Source : Malaysia Cooperative Societies Commission, 2008)

## LITERATURE REVIEW

### Measuring Performance of Cooperatives

For cooperatives to contribute positively and significantly to the socio-economic development of Malaysia, they would have to perform successfully. Success of a cooperative has been defined as the "fulfilment of declared objectives" (Lluch, Gomis and Jimenez, 2006, p.51). To evaluate how well cooperatives have been managed and whether they have been able to achieve their objectives, measurement of cooperative performance is crucial. Only by measuring performance on a regular basis can impending problems and areas for improvement be identified and remedial actions taken before the performance of the cooperative is adversely affected. Hence, performance measurement involves the design, implementation and use of quantifiable indicators to judge achievement or success.

As is widely acknowledged, the objective of a cooperative is to maximise the benefits to its members and ensure that their needs are met (Pratt, 1998). However, because cooperatives operate in a competitive commercial environment, they must be able to survive as business entities in order to provide any form of social benefits to members. Hence, traditional financial measures such as profitability, efficiency, liquidity and leverage used to assess the performance of conventional businesses are also relevant for cooperatives (Chesnick, 2005; Hind, 1998). Profitability ratios measure the operating capabilities of the cooperative business. While cooperatives are generally considered “not for profit” enterprises, they do need to generate enough profit to compensate for their members’ investment. Therefore, trends in profitability ratios indicate whether a cooperative is able to survive or headed for failure. Efficiency ratios examine how well the cooperative business uses its assets to generate sales or revenue while liquidity ratios indicate the short term stability of the business that is, how well the cooperative can meet its current obligations. Meanwhile, leverage ratios provide insight into the use of debt to finance the business activities of the cooperative as well as focus on the long term stability of the cooperative.

On the other hand, as member based organisations, it is imperative to measure the social performance of cooperatives. In other words, measurement of cooperative performance must also consider the benefits provided to members and society in general (Inder Kaur, 2006; Hind, 1998). The literature (Boyer, Creech and Paas, 2008; Chen, Chen and Peng, 2008; Lluch, Gomis and Jimenez, 2006; Parsley, 1992; Ward and Mckillop, 2005) has highlighted that in addition to the financial measures of cooperative performance, non-financial measures should also be given due importance. In fact, some of this literature (Hind, 1998; Hussain, Gunasekaran and Islam, 2002) even suggests that non financial performance measurement may be more important than financial performance where cooperatives are concerned due to their social obligations to members.

## **Financial Measures of Cooperative Performance**

Financial measures evaluate the financial and operational performance of cooperatives and a significant number of prior studies have used ratios to evaluate such performance. Ratios are objective measures of performance which are easy to understand and can be calculated from the financial statements of cooperatives. In addition, ratios assess performance from multiple perspectives, such as in terms of profitability, liquidity, leverage and efficiency of the cooperative. Importantly too, ratios can be used to evaluate performance of cooperatives involved in various sectors of the economy.

Unlike many of the prior studies which used ratios, cooperative performance has also been measured subjectively in a study by Kyriakopoulos et al. (2004). In this study, respondents were asked to evaluate their perception on the performance of the business of their cooperative relative to their largest competitors. Performance was measured by a 5-point multi-item scale combining three indicators, profit margin, growth and market share. This subjective measure was used to overcome the difficulty of respondents in reporting absolute performance. However, using only self-reported perceptual statements to measure performance can lead to biasness and Kyriakopoulos et al. (2004) acknowledged that combining self-reported measures with accounting-based measures or ratios would provide a more robust picture of performance.

It is worth noting that the commonly used group of ratios for measuring cooperative performance are profitability ratios (Bruynis et al., 2001; Girardin & Bazen, 1998; Inder Kaur, 2006; Kyriakopoulos, Meulenbergh and Nilsson, 2004; Mishra, Tegegne and Sandretto, 2004; Trechter, 1996), efficiency ratios (Chen, Chen and Peng, 2008; Guzman and Arcas, 2008; Ward and Mckillop, 2005; Worthington, 1998), liquidity ratios (Chesnick, 2005; 2006; Inder Kaur, 2006; Rotan, 2004) and leverage ratios (Chesnick, 2005; 2006; Rotan, 2004).

Generally, profitability ratios used in prior studies on cooperative performance are net margin, also referred to as net profit margin (Bruynis et al., 2001; Chesnick, 2006; Kyriakopoulos et al., 2004; Mishra et al., 2004; Trechter, 1996), gross profit margin (Chesnick, 2005; 2006; Rotan, 2004), return on total assets and return on member equity (Chesnick, 2005; 2006; Inder Kaur, 2006; Rotan, 2004). The difference between the return on assets and return on member equity illustrates the effect of leverage. The review of the related literature indicates that compared to gross profit margin; net profit margin is used more often as an indicator of operational performance in prior studies. The gross profit margin generally measures the pricing strategy of the cooperative as it looks at margins generated after the cost of goods sold is subtracted from income. Chesnick (2005; 2006) argues that looking at gross profit margin trends does not indicate efficiency in the use of assets and other inputs. The gain in efficiency will be shown in the net profit margin which considers both operating and financing (interest) costs (Peterson, 1994). Hence, net profit margin would be a better indicator of operational profitability than gross profit margin.

Operational efficiency has usually been measured in terms of fixed asset turnover and total asset turnover (Chesnick, 2005; 2006; Guzman and Arcas, 2008; Rotan, 2004). Unlike total asset turnover, fixed asset turnover focuses specifically on how well the cooperative business uses its fixed or long term assets to generate sales or income. Fixed asset turnover would thus be a good indicator of efficiency for cooperatives with substantial investment in fixed assets such as land, buildings,

vehicles or machinery than for cooperatives which do not invest in such assets. In addition, total asset turnover which consists of both fixed and current assets may be a less accurate measure of operational efficiency because cooperatives would have different combinations of fixed and current assets depending on the type of business activities undertaken. For example credit cooperatives would need a relatively lower level of fixed assets to generate revenue as compared to cooperatives involved in production, manufacturing activities, transport and construction.

The commonly used indicators for liquidity are the current and quick (or acid test) ratios (Chesnick, 2005; 2006; Inder, 2005). The quick ratio is similar to the current ratio except that it excludes inventory which is the least liquid current asset and provides a more accurate or stringent test of liquidity, particularly in cooperatives which have a substantial amount of inventory. Finally, leverage ratios that have been used to measure cooperative performance are the debt to assets ratio, long term debt to equity ratio and the times-interest-earned ratio (Chesnick, 2005; 2006). All three leverage ratios are important as they illustrate outside ownership in the cooperative's assets, and the risk inherent in such ownership. As member-based organisations, cooperatives must effectively manage the use of debt, particularly long term debt so as to ensure the long term survival of the cooperative is not threatened.

## **Non Financial Measures of Cooperative Performance**

Non financial performance measures are defined as measures which provide performance information in non-monetary terms (Verbeeten, 2005). If one adheres to this definition, some of the non financial measures identified in the literature are member satisfaction (Amini and Ramezani, 2008; Bruynis, et al., 2001; Lluch et al., 2006), growth in membership (Carr, Kariyawasam and Casil, 2008; Theuvsen and Franz, 2008) and longevity (Bruynis et al., 2001; Lluch et al., 2006), also referred to as continued survival of the cooperative in Carr et al. (2008). Longevity was defined as cooperatives which had survived for more than three years (Bruynis et al., 2001) or at least for ten years (Lluch et al., 2006).

Member satisfaction with the services of the cooperative has been recognised as an important measure of cooperative success since cooperatives are basically formed to fulfil members' objectives through the provision of services. However, this measure of performance is subjective as it depends on the perceptions of members and is therefore harder to quantify. The usual methodology used to obtain perceptions is a survey. However, to ensure meaningful information is obtained, the survey method may need to be complemented with other appropriate methodology such as focus group discussions. In contrast, growth in membership and longevity are objective

indicators of non financial performance which can be obtained from the records of cooperatives. Generally, it can be said that cooperatives which are successful would be more likely to have growth in their membership as well as survive for a longer period of time.

## **Performance of Cooperatives in Malaysia**

Inder Kaur (2006) evaluated the performance of large and small cooperatives in Malaysia by using a sample of 40 cooperatives. Cooperative performance was measured from two perspectives: financial performance of the cooperative as a business entity and the provision of benefits to members. Financial indicators were used to measure both perspectives. The performance of the cooperative as a business entity was measured in terms of profitability and liquidity while member benefits was measured by analysing the proportion of the cooperative's profits used to provide benefits to members in terms of dividend, social benefits and patronage rebate or patronage refund. As this study only used information that is available in the financial statements of cooperatives, non financial indicators of performance were not used to measure member benefits.

For the first time, in 2008, the MCSC produced a listing of the 100 most successful cooperatives in Malaysia. The listing was developed based on the criteria used by the International Cooperative Alliance (ICA) to identify the Global 300 and Developing 300 list of cooperatives and mutuals. In the Malaysian context, the success of a cooperative was determined based on two major factors identified by the MCSC, the financial factor and the non financial factor (*Suruhanjaya Koperasi Malaysia*, 2008). The financial factor was assigned a weight of 70 percent while the non financial factor was assigned a weight of 30 percent. The financial factor focused on seven financial ratios related to liquidity, profitability and efficiency. The selection of the seven ratios and their weights were determined by the MCSC. Table 2 shows the seven financial ratios with their respective weights. All cooperatives excluding school cooperatives were evaluated on the seven financial ratios and those which achieved a total score of at least 30 percent for the seven ratios were then selected to be evaluated on the five non financial criteria.

**Table 2**

<b>Ratio</b>	<b>Weight (%)</b>
Current Ratio	15
Gearing Ratio	15
Gross Profit	10
Net Profit	10
Return On Assets (ROA)	10
Return On Equity (ROE) / Earnings Per Share	5
Net Tangible Assets (NTA)	5
<b>Total</b>	<b>70</b>

(Source : Malaysia Cooperative Societies Commission, 2008)

The cooperatives were evaluated on the five non financial criteria by the MCSC officers in the various states and only cooperatives which scored at least 15 percent on the non financial factor were considered successful. Table 3 shows the non financial factor which focused on five criteria, good governance, service to members, social and environmental responsibility, diversification of activities (the more the better), and whether objectives of the cooperative were achieved. Finally, cooperatives which had a total score of at least 50 percent for both the financial and non financial factors were considered successful and were then ranked in descending order based on their turnover. The 100 cooperatives which had the highest turnover were ranked and listed in a directory called *Indeks 100 Koperasi Terbaik Malaysia*.

**Table 3**

<b>Criteria</b>	<b>Weight (%)</b>
1. Good Governance	
1.1 AGM compliance for current year	
1.2 Audit compliance for current year	
1.3 Views of the Registrar General tabled	
1.4 Audit fees	
1.5 Contribution to trust funds	
1.6 Compliance on subsidiary formation	
1.7 Compliance on investment	
1.8 Misconduct by Board Members	
2. Service to Members	7
3. Social and Environmental Responsibility	5
4. Diversification of Activities	5
5. Objectives of Cooperative Met	3
<b>Total</b>	<b>30</b>

(Source : Malaysia Cooperative Societies Commission, 2008)

## **Factors Influencing Performance of Cooperatives**

For cooperatives to perform successfully and achieve their objectives, they would have to be influenced by certain factors or dimensions. There is some literature on the factors influencing the performance of cooperatives and these are referred to as success factors. Most of this literature however, has focused on cooperatives in selected sectors, in particular, agricultural cooperatives, credit cooperatives and credit unions. Credit unions are unique cooperative financial institutions that provide banking facilities to the financially excluded (Ward and McKillop, 2005). Prior studies in the context of agricultural cooperatives have mainly been undertaken in the United States, with some in Europe, Canada and Iran. The existing literature has highlighted some important factors which have influenced or contributed to the successful performance of cooperatives.

With regard to the structural aspect or dimension of the cooperative organisation, Kyriakopoulos et al. (2004) investigated the influence of ownership, control and the cost/pricing policies, on the perceived financial performance of Dutch agricultural cooperatives. Control was defined as the one-member one-vote principle and exclusive member voting rights, while ownership was defined as exclusive member and collective ownership of the cooperative. These two variables are part of the cooperative principles which guide how cooperatives should operate. Cost/pricing policies referred to prices offered to members for products marketed, supplies sold and services provided which aimed at not making profits but offering benefits to them. Interestingly, the results of this study indicated that only ownership enhanced performance of the cooperatives, while control and cost/pricing policies did not. In other words, this study showed there was limited or partial support for the relationship between the structural features of cooperatives and their financial performance.

The impact of entrepreneurial firm culture, another key structural feature, on the financial performance of agricultural cooperatives was also investigated (Kyriakopoulos et al., 2004). This study found that cooperatives which adopted entrepreneurial firm culture significantly and positively influenced performance. Entrepreneurial firm culture was defined in terms of four key attributes: risk-taking attitude, innovative leadership style, flexible organisational bonding and proactive strategic emphasis. Kyriakopoulos et al. (2004) suggested that the quality of management and staff, innovative and growth-oriented values and attitude typically present in entrepreneurial cultures, are more important than the structural features of cooperatives. Hence, just like any other business organisations, cooperatives must create the right or conducive environment to promote the development of an entrepreneurial firm culture.

Moreover, another key characteristic of the cooperative organisational structure, size, was found to have a significant positive influence on the financial performance of credit unions (Ward and Mckillop, 2005). Size was gauged in terms of total assets of the cooperatives studied and, as a control, the total number of members at the year end. The finding showed that larger credit unions had lower costs to income percentages and experienced economies of scale compared to smaller credit unions. Hence, larger credit unions were found to be more successful than the smaller ones, consistent with the findings of other prior studies.

While Ward and Mckillop (2005) measured size in terms of total assets and identified it as a (independent) variable which influenced cooperative performance, Trechter (1996) measured size in terms of the number of members and identified it as one of the four performance measures (dependent variable) used in their study. As number of members can be a form of non-monetary performance, it was considered as non financial performance indicator. The other three performance measures were profitability, patronage refund levels and equity redemption and were referred to as financial performance indicators.

The impact of diversifying the activities of agricultural cooperatives on their financial and non financial performance was investigated by Trechter (1996). Diversification is an important element and is closely related to the structure of cooperatives. Trechter's (1996) study showed that diversifying the activities of agricultural cooperatives was not statistically associated with profitability, increase in patronage refunds or increase in equity redemption. In contrast, diversification was positively associated with membership size, with diversified cooperatives enjoying larger memberships. Hence, Trechter (1996) concluded that diversification had a neutral to modestly positive impact on cooperative performance. Interestingly, while Trechter's (1996) study used diversification as an independent variable, it was defined as a non financial measure of cooperative performance for identifying the 100 most successful Malaysian cooperatives (*Suruhanjaya Koperasi Malaysia, 2008*).

In diversifying their activities, or providing various services to members, it is imperative for cooperatives to realise that in addition to being profitable, the activities or services undertaken should fulfil members' needs. In fact, the provision of services to meet members' needs efficiently and effectively has been identified as an important factor that influences the successful performance of cooperatives (Carr et. al., 2008).

A number of studies (Boyer et al., 2008; Bruynis et al., 2001; Carlberg et al., 2006), found cost of operations to be an important variable that contributed towards the successful performance of cooperatives. To ensure that cooperatives carry out

businesses to provide the benefits desired by their members and to sustain their survival, it is imperative that cooperatives manage their cost of operations prudently. In this respect the above cited prior studies found that maintaining accurate financial records and low operating costs were important for the successful performance of cooperatives.

From the review of literature, a number of variables or elements related to the management of cooperatives have influenced the performance of cooperatives. Carlberg, Ward and Holcomb (2006) found that planning is critically important to the success of new generation agricultural cooperatives and this finding is consistent with that of an earlier study (Henehan and Pelsue, Jr., 1986) which found that the adoption of multi-year plans was positively and significantly associated with financially successful agricultural cooperatives, in other words, cooperatives with high sales growth. Their study however did not define the term, multi-year plan and it is assumed that multi-year refers to long term planning or planning for more than one year as planning has to be undertaken on a continuous basis for it to be effective.

Due to the unique feature of cooperative organisations, the management team, specifically the board and managers should possess the necessary competencies such as experience and skills, to manage cooperatives successfully. Prior studies have found a positive relationship between previous management and cooperative experience possessed by the board and managers of cooperatives and cooperative performance (Bruynis et al., 2001; Carlberg, Ward and Holcomb, undated; Carr et. al., 2008; Henehan and Pelsue, Jr., 1986). In addition, having full time (Bruynis et al., 2001) cooperative managers with technical and interpersonal skills (Amini and Ramezani, 2008) have been found to have a positive influence on the performance of cooperatives.

Competency in managing cooperatives is enhanced through training. Not surprisingly then, training has also been found to influence the success of cooperatives. With regard to this factor, prior studies have shown that continued management training for board members and managers (Bruynis et al., 2001), the number of training programmes attended as well as the quality of training programmes offered to managers (Amini and Ramezani, 2008), are important variables that significantly impact on cooperative performance.

As member based organisations, the role of members is of paramount importance to the survival and success of cooperatives. Some existing literature has identified member participation in the administration of cooperatives as a key factor for the successful performance of cooperatives (Amini and Ramezani, 2008; Lluch et al., 2006). Active member participation in cooperatives usually takes place in the form

of attendance at annual general meetings, increasing the contribution to share capital and using the services or buying the products of the cooperative. Furthermore, having a sufficient pool of member capital is another crucial ingredient for the successful performance of cooperatives (Bruynis et al., 2001).

To promote active member participation, it cannot be denied that members need to be educated on cooperative philosophy as well as be aware of their rights and responsibilities towards their cooperatives. Hence, member education is pertinent and has also been identified as an important success factor for cooperatives by Amini and Ramezani (2008).

### **Factors Influencing the Performance of Cooperatives in Malaysia: A Tentative Framework**

The existing literature has highlighted a number of pertinent issues which may have implications on future related research in the context of Malaysian cooperatives.

Firstly, the literature clearly highlights that cooperative performance measurement should be multidimensional, in other words, both the financial and non financial perspectives should be given equal importance. However, based on the significant number of previous studies which have focused on the financial dimension of performance as compared to studies which have used both (financial and non financial) dimensions of performance, the financial dimension appears to have been given more prominence.

Despite the financial dimension being more frequently used to evaluate cooperative performance, there is no widely accepted measure of financial performance as previous studies have used different financial measures or indicators. Nevertheless, the frequently used indicators in prior studies are the accounting ratios of profitability, efficiency, liquidity and leverage. In the case of some previous studies which have used non financial performance measures, there is also no commonly accepted measure. Some of the indicators used to assess non financial performance are member satisfaction, longevity or number of years the cooperative has survived (or age) and growth in membership. Growth in membership and age of the cooperative are objective data while member satisfaction is subjective data based on respondents' perception.

The review of literature indicates that research studies on cooperative performance measurement in the context of Malaysian cooperatives are rare. One study (Inder Kaur, 2006) only focused on the financial perspective by using accounting ratios to compare financial performance among a sample of twenty large and twenty small cooperatives in Malaysia.

Furthermore, past studies on factors influencing the performance of cooperatives have mainly been undertaken in the West, specifically in the United States, Canada and Europe. Moreover, these studies have focused on agricultural cooperatives, credit cooperatives and credit unions. Limited studies have been carried out in the Asian context or have been undertaken among cooperatives involved in other economic activities.

Some of the main variables which have been identified in prior studies as positively influencing the performance of cooperatives are: size of the cooperatives, entrepreneurial firm culture, maintaining low costs of operation, diversification of activities, provision of services to meet members' needs, long term planning, experienced board members and managers, full time cooperative managers with technical and interpersonal skills, management training for board members and managers, member participation and member education.

Based on the literature review, the variables which influence cooperative performance can be conceptualised along three major dimensions or factors which are the: structural dimension, managerial dimension and membership dimension. The structural dimension consists of the variables which explain the physical and organisational characteristics of cooperatives. The managerial dimension comprises of variables which relates to the management of the cooperative, while the membership dimension focuses on member related issues. Meanwhile, cooperative performance is conceptualised along two major dimensions, financial and non financial performance. Financial performance is assessed in terms of profitability, liquidity, efficiency and leverage ratios while the non financial performance indicators are member satisfaction, longevity and growth in membership.

Hence, a tentative framework for future research on the factors influencing the performance of cooperatives in Malaysia is presented in **Figure 1**.

**Figure 1: Factors Influencing Performance of Co-operatives in Malaysia:  
A Tentative Framework**

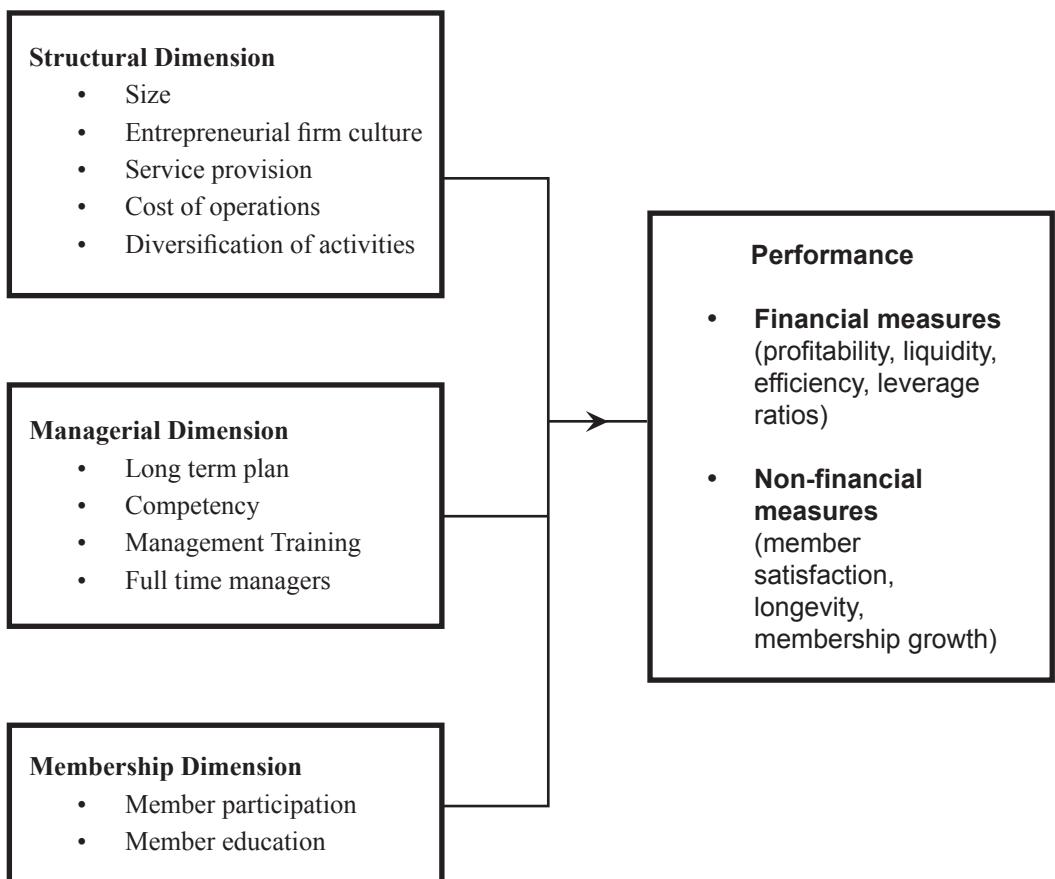


Figure 1 shows the three major dimensions or factors which will influence the performance of cooperatives. Based on the literature, the three independent factors included in the framework are the structural, managerial and membership dimensions. The variables that constitute the structural dimension are: size of the cooperative, entrepreneurial firm culture, provision of services to fulfil member needs, prudent management of the cost of operations and diversification of activities. The variables in the managerial dimension are: having a long term plan for the cooperative, competency, management training and employing full time cooperative managers. The membership dimension is measured in terms of member participation and member education.

The three dimensions are the independent factors while the dependent factor is cooperative performance, which has two major dimensions, the financial and

non financial performance dimensions. The financial performance dimension is measured in terms of the four types of accounting ratios, specifically profitability, liquidity, efficiency and leverage, while the non financial performance dimension is measured by the non monetary objective measures of longevity and growth in the number of members as well as the subjective measure of member satisfaction. The variables used to measure the dimensions in the framework are defined in **Appendix 1**.

It is important that prior to empirically testing the framework in Figure 1, its relevance to the local cooperative context must be confirmed, as the variables included in the framework are adopted from previous studies mainly undertaken in the western context. Hence, other factors which may be relevant to cooperatives in Malaysia may need to be included in the framework.

## CONCLUSION

For cooperatives in Malaysia to be successful it is insufficient to only measure their performance. Importantly too, there is a need to identify the key factors that would contribute to their success. To date, the research on this area has concentrated mainly in the West among agricultural and credit cooperatives as well as among credit unions. No related empirical research has been undertaken among cooperatives in Malaysia. The aim of the current paper is to suggest a tentative framework on the factors that would influence the performance of cooperatives undertaking various business activities in Malaysia, based on the review of the related literature. The relevance of this framework to the local research context needs to be verified before it is empirically tested.

Research can then be undertaken to identify the key factors which influence the financial and non financial dimensions of cooperative performance. Besides, future research can use the financial and non financial performance dimensions in this framework to measure performance of cooperatives in Malaysia.

## REFERENCES

- Amini, A. M. and Ramezani, M. (2008). Investigating the success factors of poultry growers' cooperatives in Iran's western provinces. *World applied sciences journal*, 5(1), 81-87.
- Boyer, D., Creech, H. and Paas, L. (2008). Critical success factors and performance measures for start-up social and environmental enterprises. *Unpublished manuscript*. International Institute for Sustainable development.
- Bruynis, C. L., Goldsmith, P., Hahn, D. E. and Taylor, W. J. (2001). Critical success factors for emerging agricultural marketing cooperatives. *Journal of cooperation*, 16, 14-24.
- Carlberg, J. G., Ward, C. E., and Holcomb, R. B. (undated). Success Factors for New Generation Cooperatives. *Unpublished manuscript*. Oklahoma Cooperative Extension Service. Division of Agricultural Sciences and Natural Resources. Oklahoma State University.
- Carlberg, J. G., Ward, C. E. and Holcomb, R. B. (2006). Success factors for new generation cooperatives. *International food and agribusiness management review*, 9 (1), 62-81.
- Carr, Kariyawasam and Casil (2008). A study of the organizational characteristics of successful cooperatives. *Organizational development journal*, 26 (1), 79-87.
- Chen, T., Chen, B. and Peng, S. (2008). Firm operation performance analysis using data envelopment analysis and balanced scorecard: A case study of a credit cooperative bank. *International journal of productivity and performance management*, 57 (7), 523-539.
- Chesnick, D. (2005). Measuring top 100 co-op performance. *Rural cooperatives*. March/April, 28-29, 40.
- Chesnick, D. (2006). Measuring cooperative performance. *Rural cooperatives*. January/February, 28-29.
- Guzman, I. and Arcas, N. (2008). The usefulness of accounting information in the measurement of technical efficiency in agricultural cooperatives. *Annals of public and cooperative economics*, 79(1), 107-131.

Henehan, B. M. and Pelsue Jr., N. H. (1986). The use of discriminant analysis in measuring cooperative growth factors. 178-184.

Hind, A. M. (1998). Assessment of co-operative performance. In W. Hurp (Ed.), *The world of co-operative enterprise* (pp 9-18). Oxford: Plunkett Foundation.

Hussain, M., Gunasekaran, A. and Islam, M. M. (2002). Implications of non-financial performance measures in Finnish banks. *Managerial auditing journal*, 17(8), 452-463.

Inder Kaur. (2006). Performance measurement: An evaluation of cooperative performance in Malaysia. *Malaysian journal of cooperative management*, 2, 1-17.

Kyriakopoulos K., Meulenberg M. and Nilsson J. (2004). The impact of cooperative structure and firm culture on market orientation and performance. *Agribusiness*, 20(4), 379-396.

Laidlaw, A. F. (1987). *Co-operatives in the year 2000*. Moscow: International Co-operative Alliance.

Lluch, D. B. L., Gomis, F. J. C., and Jimenez, F. V. (2006). A management model for the evaluation of cooperative success with special reference to member objective setting and satisfaction. *International journal of cooperative management*, 3 (1).

Malaysia Cooperative Societies Commission. 2008. Official Statistics.

Ministry of Finance. (2008). Economic report. 2008/2009. Kuala Lumpur: *Percetakan Nasional Malaysia Berhad*.

Mishra, Tegegne and Sandretto. (2004). The impact of participation in cooperatives on the success of small farms. *Journal of agribusiness*, 22 (1), 31-48.

Parsely, S. (1992). How to evaluate the performance of a cooperative. *Management Quarterly*, 33(1), 31-35.

Peterson, P. P. (1994). *Financial management and analysis*. USA: McGraw-Hill, Inc.

Pratt, G. (1998). The need for performance measurement in co-operatives: A practitioner's view. In W. Hurp (Ed.), *The world of co-operative enterprise* (pp1-8). Oxford: Plunkett Foundation.

Rotan, B. L. (2004). How does your local co-op rate? Rural cooperatives. November/December, 29-30.

*Suruhanjaya Koperasi Malaysia.* (2008). *Direktori indeks 100 koperasi terbaik Malaysia.* Kuala Lumpur: *Suruhanjaya Koperasi Malaysia.*

Theuvsen and Franz (2008). The role and success factors of livestock trading cooperatives: Lessons from German Pork Production. Georg-August University. Department of Agricultural Economics and Rural Development. Goettingen, Germany.

Trechter, D. D. (1996). Impact of diversification on agricultural cooperatives in Wisconsin. *Agribusiness*, Jul/Aug, 12(4), 385-394.

Verbeeten, F. H. M. (2005). "New' performance measures: Determinants of their us and their impact on performance. *Unpublished manuscript.* Rotterdam School of Management. Erasmus University, Rotterdam, Netherlands.

Ward, A. and McKillop, D. G. (2005). An investigation into the link between UK credit union characteristics, location and their success. *Annals of public and cooperative economics*, 76 (3), 461-489.

Wells, R. J. G. (1981). An appraisal of agro-based cooperatives in Peninsular Malaysia. *Public administration & development*, 1(2), 165-176.

Worthington, A., C. (1998). Testing the association between production and financial performance: Evidence from a not-for-profit, cooperative setting. *Annals of public and cooperative economics*, 69(1), 67-83.

**Appendix 1****Definition of Variables in the Tentative Framework on Factors Influencing Performance of Co-operatives in Malaysia****Structural Dimension**

- (i) Size : total assets of the cooperative.
- (ii) Entrepreneurial culture : risk taking attitude, proactive and innovative leadership style .
- (iii) Service provision : the type of services provided by the cooperative are based on members' needs.
- (iv) Cost of operations : the cooperative maintains accurate financial records and low operating costs.
- (v) Diversification of activities: number of activities undertaken by the cooperative.

**Managerial Dimension**

- (i) Long term plan : planning by the cooperative for more than one year.
- (ii) Competency : the cooperative has board members and manager(s) with managerial and technical skills and experience.
- (iii) Management training : the type, number and quality of management training programmes attended by board members and manager(s) of the cooperative.
- (iv) Full time managers : the cooperative employs full time manager(s).

**Membership Dimension**

- (i) Member participation : attendance at their cooperative's annual general meeting, using the services or buying the products of their cooperative and increasing their contribution to members' funds.
- (ii) Member education : members' understanding on the cooperative principles as well as on their rights and responsibilities towards their cooperative.

**Financial Performance**

- (i) Profitability : net profit margin, return on total assets and return on member equity.
- (ii) Liquidity : current ratio and quick or acid test ratio.
- (iii) Efficiency : total asset turnover and fixed asset turnover.
- (iv) Leverage : long term debt to equity ratio, debt to asset ratio and times-interest-earned ratio.

**Non Financial Performance**

- (i) Member satisfaction : members' perception on the level or degree of satisfaction with the service(s) of their cooperative.
- (ii) Longevity : the cooperative has survived for at least ten years.
- (iii) Membership growth : yearly increase in the number of members.

## AUTHORS' BACKGROUND

**Sushila Devi Rajaratnam** is the Head of the Research Management and Publication Centre as well as Chief Editor for the Malaysian Journal of Co-operative Management, at the Co-operative College of Malaysia (CCM). She has more than 28 years experience as a trainer with CCM and besides training, has undertaken a number of research studies and written journal articles related to co-operative management. She holds a Ph.D in Management from Multimedia University, Malaysia, Masters in Business Administration and Bachelor in Economics with Honours (Business Administration) from University of Malaya, Malaysia.

**Nurizah Noordin** is the Head of the Accounting and Finance Centre at the Co-operative College of Malaysia (CCM). She holds a Masters in Business Administration (Finance) from Universiti Putra Malaysia, Advanced Diploma and Diploma in Business Studies from Universiti Teknologi MARA. She joined CCM in 1983 and is an experienced trainer in financial management, accounting, auditing and business management. She also provides advisory service to co-operatives in these areas and is a regular writer to the Malaysian Journal of Co-operative Management. In addition she has undertaken a number of research studies related to co-operative management.

**Mohd Shahron Anuar bin Said** has been a trainer with the Accounting and Finance Centre, Co-operative College of Malaysia (CCM) since 2004. He holds a Masters in Business Administration and Bachelor in Accounting from Universiti Kebangsaan Malaysia. Besides being an experienced trainer in accounting, auditing and financial management, he provides advisory service to cooperatives and has been involved in research studies in these areas.

**Rafedah Juhani** joined the Co-operative College of Malaysia (CCM) in 2004 and is an experienced trainer in accounting, auditing and financial management. She holds a Masters in Business Administration from Universiti Malaysia Sabah and Bachelor of Accounting from Universiti Kebangsaan Malaysia.

**Farahaini Mohd Hanif** has been with the Accounting and Finance Centre, Co-operative College of Malaysia (CCM) since 2006 and is a trainer in accounting, auditing and financial management. She holds a Masters in Accounting and Bachelor in Accounting with Honours from Universiti Teknologi MARA.