# Performance Measurement Using Balanced Scorecard Concept On Co-Operatives: Implication In Indonesia

Ernita, Firmansyah

**Abstract:** This study aims to apply the concept of balanced scorecards in measurement of co-operatives performance based on vision and mission. So far, the assessment of co-operative performance in Indonesia is not take into account the social hold co-operative, while co-operatives carrying a dual mission. Research conducted in in North Sumatera Province in Indonesia. The sample consisting of one hundred co-operatives that are still active run annual members meeting. Co-operative performance was assessed based on its fourth perspective i.e. membership, financial, internal process and learning & growth. The indicator key of cooperative performance was determined by taking into account the performance assessment on co-operatives, as articulated of State Minister for Co-operatives and SMEs No.129/KEP/M/KUMKM/XI/2002, and the regulations of the State Minister for Co-operatives and SME No.06/Per/M./KUKM/V/2006. Therefore, this research were contributed a method in assessing co-operative performance using Balanced Scorecard concept with the four perspective, namely membership perspective, financial perspective, internal process perspective and learning & growth perspective.

Keywords: Performance measurement, balanced scorecard, co-operatives.

#### 1 Introduction

Co-operative is a form of society economic organization and there is in almost every region in Indonesia. In 2014 the number of co-operatives that are active as many as 147,249 units, spread across 33 provinces (Ministry of Co-operatives and SMEs, 2015). As one legal entity to develop the economy of people, the cooperative has distinctive characteristics, which is different from the other economic enterprise. Co-operative is work by producing product or service that used by its members. Position of the member is very important. Member participation in cooperatives has always been an important issue in the world, because the member is an important part of any co-operative and their active participation in and adherence to the cooperative business is integral to the success of cooperatives (Laursen et al., 2008). In addition, as an organization not for profit, the success of the co-operative is more based on the achievement of the vision and mission of widespread rather than profit only (www.balancescorecard.org). Co-operative performance appraisals according to some experts should also been associated with non-financial aspects (Sinaga, 2004).

Chalomklang (2010) and Sinaga (2004) has proposed the application of the concept of Balanced Scorecard in assessing the co-operatives performance. Based on research by Cid (2004), he concluded that the co-operative that provides high social concern does not become obstructions to achieving high economic competitiveness. So far, there are many problem have been conducted on cooperative business entity in Indonesia. Besides the low level of participation members (Ernita, et al., 2012), another problem is the absence of the assessment system of cooperative performance used to measure benefit cooperatives thoroughly. The government of the Republic of Indonesia never reported co-operative performance and it can be seen in the annual performance report of Ministry of Small Medium Enterprises Co-operatives. and (www.depkop.go.id).

**Table 1:** Recapitulation Data Development of Co-Operatives in Indonesia

Indicators	2013	2014
Number of co-operatives (unit)	203,701	209,488
Active co-operatives (unit)	143,117	147,249
Inactive co-operative (unit)	60,584	62,239
Number of members (person)	35,258,176	36,443,953
Manpower (person)	473,604	567,445
Manager (person)	35,063	36,615
Employees (person)	438,541	530,830
Capitalization (Million IDR)	170,376,863.09	200,662,816.64
Equity (Million IDR)	89,536,290.61	105,800,829.73
Foreign Capital (Million IDR)	80,840,572.48	94,861,986.91
Revenue (Million IDR)	125,584,976.19	189,858,671.87
Balance (Million IDR)	8,118,959.25	14,898,647.12

**Source:** Ministry of Co-operatives and SMEs Indonesia (2012-2013)

Ernita and Firmansyah affiliated Universitas Muslim Nusantara Al Washliyah, Medan 20147, Indonesia

Ernita, Agribusiness Department of Agriculture Faculty of Universitas Muslim Nusantara Al Washliyah, Medan

<sup>•</sup> Email: <u>ernita @umnaw.ac.id;</u> ernitatarigan1968@gmail.com

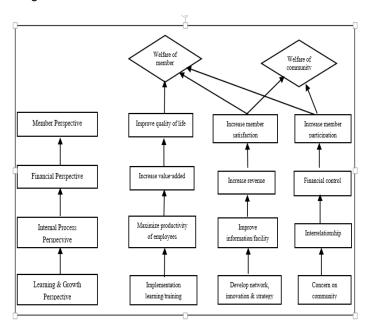
#### 2. METHOD

#### 2.1 Location of Research

The research was conducted on June 2014 on the existing co-operatives in North Sumatera Province Indonesia. Population defined is all the active co-operative organizations that still carrying out the Annual Member Meeting, qualified, and willing to participate in this study. The sample size used was 100 respondent from 100 unit co-operatives, represents the management as a secretary or treasurer or manager of each co-operative. The research instrument used by questionnaire, with Likert scale (1-5).

## 2.2 Operational Defenition

Operational defenition in research considering the map of strategic interaction and interdependence of perspective Balanced Scorecard Concept according Mutasowifin (2002) and the guidelines assessment of co-operative award, which is still used today is Decree of Minister Co-operatives, Small and Medium No.129/KEP/M/ KUMKM/XI/2002, and Regulation of the Minister No.06/Per/M.KUKM/V/2006.



**Figure 1.** The Map of Strategic Interaction and Interdependence of Perspective Balanced Scorecard Concept on Co-operative

Furthermore, objectives strategic, key and driving performance on each perspective of balanced scorecard shown at Table 2. In Table 3, we can see the scale criteria of performance measurement on co-operatives by using balanced scorecard concept in every perspective. Next, the co-operative performance thoroughly appraisal was determination according to a scale the average below in Table 4.

**Table 2.** Dimention, indicator and target on each perspective Balanced scorecard on cooperative

Dimension	Indicator	Target		
Profit	Gross income and balance ratio	1-15%		
Business relation and	Members business and co-operative business ratio	45-100%		
transaction	Member transaction and overall transaction ratio	45-90%		
Existence of members	Number of retain members and actual number ratio	0-10%		
EXISTRICE OF HIGHINGIS	Number of members registered and actual number ratio	20-100%		
Balance realization	Realized balance with planned ratio	40-100%		
Ossital sastisisation	Main saving already paid by should be paid ratio	40-100%		
Capital participation	Compulsory saving already paid by should be paid ratio	40-100%		
	Timely AMM	Timing		
Decision-making participation	Presence of members in AMM	Quorum		
•	The ratification and implementation of PREBC	Realization		
	Equity earnings	3-21%		
	RoA	1-10%		
Assessment of value-added	ATO	1-3.5x		
	Current ratio	125-250%		
	Liability in long term	40-80%		
	Liability and capital ratio	70-200%		
	Realization of PRBC	40-100%		
Increase revenue	Realization of PEBC	100-130%		
Financial Audit	Internal	Supervisor board		
Financial Audit	External	Public accountant		
Employee productivity	Motivation and discipline of working	Level		
Employee satisfaction	Decent salary and allowances	Eligibility		
Media Information and Facilities	Media information	Availability		
wedia illioilliation and i aciities	Existence of office	Status of ownership		
Interrelationship	Leadership	Involvement subordinate		
Interrelationship	Unity and communication	Level		
Implementation of learning/	Learning/training program for members and committee	Implementation		
training/ counselling program	Guidance/counselling	Implementation		
Availability of funds	Special funds and education funding	Availability		
Business networking	Vertically and Horizontally	3-5 unit		
Innovation	Benefits perceived members	Benefits		
	Ability absorb employment	At least five		
Concern on community	Payment of taxes & levies	At least 25 %		
•	Social funds	Availability		

**Table 4:** The scale of co-operative performance based on BSC

Average Scale	Criteria
$4.0 \text{ s} / \text{d} \le 5.0$	Very high
3.0 s / d <4.0	High
2.0 s / d <3.0	Moderate
1.0 s / d <2,0	Low
<1.0	Very low

## 3. RESULTS AND DISCUSSION

From Table 5, we can see a summary the results of the analysis descriptive of assessment of co-operative performance using the concept of balanced scorecard in North Sumatera, Indonesia.

Table 5. Summary analysis descriptive of variable

Variables	N	Mean	Criteria
Co-operative Performance	100	3.8430	Moderate
Membership Perspective	100	3.8918	Moderate
Financial Perspective	100	3.6710	Moderate
Internal Process Perspective	100	4.0533	High
Learning & Growth Perspective	100	3.7560	Moderate

Table 5 has shown that average of co-operative performance using the concept of balanced scorecard was in 3.8430, and included in moderate criteria. Partially, perspective of membership, financial, and learning & growth are moderate criteria respectively, while perspective of internal process is high criteria. Furthermore, from Table 6, we can see the result of reliability and validity test on instrument in initial study. The main objective of this stage is to ensure that all items that used in instrument have can be understood by

respondents or not yet. At this stage as many as 30 respondents involved derived from 30 co-operatives. Value of Cronbach alpha for co-operative performance using Balanced Scorecard,  $\alpha=0.799,$  where membership perspective  $\alpha=0.732,$  financial perspective  $\alpha=0.818,$  internal process perspective  $\alpha=0.675,$  and learning & growth perspective  $\alpha=0.720.$  This means that instrument used to measure all perspective is reliable, because having value the coefficients cronbach' alpha greater than 0.6. From validity test, it can be seen that all the items of an instrument used expressed valid for measuring co-operative performance.

**Table 6.** Recapitulation results of reliability and validity test of an instrument in initial research

	Perspective of Co-operatives Performance using BSC, $\alpha = 0.852$										
Membership, α = 0.720 Financial, α = 0.818		8	Internal Process, α = 0.687			Learning & Growth, α = 0.703					
Item	Corrected Item Total Correlation	Status	Item	Corrected Item Total Correlation	Status	Item	Corrected Item Total Correlatio n	Status	Item	Corrected Item Total Correlation	Status
BSM1	.391	Valid	BSF1	.701	Valid	BSI1	.375	Valid	BSL1	.052	Valid
BSM2	.543	Valid	BSF2	.402	Valid	BSI2	.448	Valid	BSL2	.490	Valid
BSM3	.274	Valid	BSF3	.581	Valid	BSI3	.465	Valid	BSL3	.197	Valid
BSM4	.246	Valid	BSF4	.576	Valid	BSI4	.405	Valid	BSL4	.269	Valid
BSM5	.564	Valid	BSF5	.105	Valid	BSI5	.606	Valid	BSL5	.439	Valid
BSM6	.467	Valid	BSF6	.526	Valid	BSI6	.322	Valid	BSL6	.085	Valid
BSM7	.115	Valid	BSF7	.436	Valid				BSL7	.563	Valid
BSM8	.224	Valid	BSF8	.761	Valid				BSL8	.349	Valid
BSM9	.567	Valid	BSF9	.618	Valid				BSL9	.452	Valid
BSM10	.380	Valid	BSF10	.331	Valid				BSL10	.688	Valid
BSM11	.481	Valid							BSL11	.303	Valid

# 4. CONCLUSION

This research has found a way to assess co-operative performance using the concept of Balanced Scorecard, where the size of each perspective has been formed in accordance with characteristics of co-operative according to its dual benefits. Performance of co-operative assessments should be carried out thoroughly accordance with the characteristics of the co-operative. While performance of co-operative assessment using the four perspectives in the concept of Balanced Scorecard in this research, have found performance of co-operative is the moderate. Balanced Scorecard measures performance of co-operative of financial and non-financial aspects, and have shown better results and comprehensive, making use this concept is highly recommended because it will establish a good image for the development of co-operatives in the future.

# 5. CONTRIBUTION OF RESEARCH

This research contributes in a practical and theoretical, that is:

 In practical terms, especially to the government through the Ministry of Co-operatives, Small and Medium Enterprises in Indonesia, this research has contributed in assessing the overall performance in accordance characteristic of co-operative using concept of Balanced Scorecard of the four perspectives. The results showed that performance of co-operative is moderate, means it is contrast with conventional assessment during this, which shows performance of co-operative is low

- because it only looked at from a financial perspective alone.
- Methodologically, this research contributes a method to measure performance of co-operative using the concept of Balanced Scorecard where the measure is applied to each perspective, it has been modified in accordance with the common good and common functions, the membership perspective, financial perspective, internal process perspective, and learning & growth perspective.

## 6. LIMITATIONS OF RESEARCH

In this research, assessment performance of co-operative only consider the scale of the average of the four perspectives Balanced Scorecard. However, if it will be used as a guide in assessing performance of co-operative, then main size, and size of driving force on each perspective should be given weight and value, so that assessment becomes more precise and accurate. The research was conducted in North Sumatra Province, which is one of 33 provinces. If we want to conclude general assessment performance of co-operative in Indonesia, it is necessary to do some more research with involvement of all these provinces.

## ACKNOWLEDGEMENTS.

The authors wish to thanks to Higher Education (DIKTI) of Republic Indonesia as the main sponsor in this research by a grant of PROGRAM HIBAH BERSAING 2014/2015.

## **REFERENCES**

- [1] Bernardin, H. John and Russel. (1993). Human Resource Management, an Experiential Approach, International Edition: Mc Graw-Hill. Inc. Singapore.
- [2] Buhovac, Adriana Rejc; Slapničar, Sergeja. (2007). The role of balanced, strategic, cascaded and aligned performance measurement in enhancing firm performance", Economic & Business Review, Vol. 9 Issue 1, p47-78. 32p.
- [3] Byars, L. L. and Rue, L. W. (2008). Human Resource Management, 7ed. McGraw Irwin, New York.
- [4] Chalomklang, Chollada. (2010). Enhancement of the efficiency in the management of co-operative business by preparing the strategic plan on control and advices: a case study of Buengsamphan Agricultural Co-operative Ltd, Mezinárodní konference Řízení a modelování finančních rizik Ostrava VŠB-TU Ostrava, Ekonomická fakulta, katedra Financí, pp. 8. – 9.
- [5] Cid, Mikel. (2004). Making the social economy work within the global economy. Ed. Akira Kurimoto and Garry Cronan. Review of International Co-operation, Vol. 97 No.1/2004; 80-92.
- [6] Davis, S. and Albright, T. (2004). An investigation of the effect of balanced scorecard implementation on financial performance. Management Accounting Research, Vol.15(2), pp. 135-153

- [7] Ernita, Firmansyah, and Agus Al Rozi. (2014). Factors affecting the members participation on cooperative in North Sumatera. International Journal of Scientific & Technology Research, Vol.3(10) Octo.2014, pp. 113-117. ISSN 2277-8616.
- [8] Hansen, D. R. and Mowen, M. M. (1996). Cost Management: Accounting and Control. South Western, Cincinatti, OH.
- [9] Helfert, Erich. A. (1996). Techniques of Financial Analysis A Practical Guide to Managing and Measuring Business Performance, 9<sup>th</sup> edition. Publisher: Irwin Professional Publishing.
- [10] Ittner, C. D. (2008). Does measuring intangibles for management purposes improve performance? A review of the evidence. <u>Accounting and Business</u> <u>Research</u>, 38(3):261-272.
- [11] Ittner, C. D. and Larcker, D. F. (1995). Total quality management and the choice of information and reward system. Journal of Accounting Research, 33, pp.1-34.
- [12] Ittner, C. D., Larcker, D. F. and Meyer, M. W. (2003). Subjectivity and the weighing of performance measures: Evidence from a balanced scorecard. The Accounting Review, 78(3), pp.725-758.
- [13] Kaplan, R. S. and D. P. Norton (1996a). The Balanced Scorecard: Translating Strategy into Action, Boston, MA, Harvard Business School Press.
- [14] Kaplan, R. S and D. P. Norton. (1996b). Strategic learning & the balanced scorecard. Strategy & Leadership, 24(5), pp.18-25.
- [15] Kaplan, R. S. and D.P. Norton. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part I. Accounting Horizons, 15(1): 87-104.
- [16] Kaplan, R. S. and D. P. Norton. (2002). The balanced scorecard - Measures that drive performance. Harvard Business Review, January-February: 71-79.
- [17] Kaplan, R. S. and Norton, D. P. (1993). Putting the balanced scorecard to work. Harvard Business Review, September- October, pp.134- 147.
- [18] Kaplan, R. S. and Norton, D. P. (2004). Strategy Maps: Converting Intangible Assets into Tangible Outcome. Harvard Business School Press, Boston.
- [19] Kaplan, R. S. and Norton, D. P. (1992). The balanced scorecard measures that drive performance. Harvard Business Review, 70(1), pp.172-180.

- [20] Kaplan, R. S. and Norton, D. P. (1992). Using balanced scorecard measures that drive performance. Harvard Business Review, 70(1), pp.172-180.
- [21] Kaplan, R. S. and Norton, D. P. (2007). Using the balanced scorecard as a strategic system. July, Harvard Business Review, 85(7-8), pp.150-161.
- [22] Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance. Journal of Operations Management, 21, pp.405- 435.
- [23] Ministry of Co-operatives, Small and Medium Enterprises of Republic Indonesia. (2013), (2014).
- [24] Mutasowifin, A. (2002). Penerapan Balanced scorecard sebagai tolok ukur penilaian pada badan usaha berbentuk koperasi. Jurnal Universitas Paramadina Vol.1 No. 3, p: 245-26
- [25] Poister, Theodore H. (2003). Measuring Performance in Public and Nonprofit Organizations. San Francisco, California: Jossey-Bass.
- [26] Regulation of the Minister Co-operatives and SMEs, No.06/Per/M.KUKM/V/2006.
- [27] Said, A. A., Hassab Elnaby, H. R. and Wier, B. (2003). An empirical investigation of the performance consequences of non- financial measures. Journal of Management Accounting Research, 15, pp.193-223.
- [28] Sinaga, Pariaman. (2005). Relationship between group cohesiveness, achievement motivation, entrepreneurship attitude, members participation, and co-operative performance of high performing and low performing co-operative in Bandung regency. Disertation, De Lasalle University of Manila.

  www.balancescorecard.org