



## REVIEW ARTICLE

# FINANCIAL PERFORMANCE EVALUATION OF MULTI-PURPOSE COOPERATIVES IN IFUGAO: A BASIS FOR POLICY RECOMMENDATIONS

<sup>1</sup>, \*Jenelyn I. Chungyas and <sup>2</sup>Ma. Socorro P. Calara

<sup>1</sup>IFSU- Lagawe Campus, Philippines

<sup>2</sup>UST Graduate School, Philippines

### ARTICLE INFO

#### Article History:

Received 19<sup>th</sup> February, 2018  
Received in revised form  
20<sup>th</sup> March, 2018  
Accepted 26<sup>th</sup> April, 2018  
Published online 30<sup>th</sup> May, 2018

#### Keywords:

Financial Performance,  
Financial ratios,  
Financial statements,  
Operating efficiency,  
Profitability

### ABSTRACT

Cooperation seeks to harness the limited resources of people of small means and opportunities for the fulfillment of economic and social needs. Having recognized the great impact of cooperatives on the lives of the people, the government hereby declared the policy of the State to promote the viability and growth of cooperatives as instruments of equity, social justice and economic development as embedded under R.A. 6939, section 1 of the cooperative code of the Philippines. This research aims to examine the financial performance of multi-purpose cooperatives in Ifugao to examine their liquidity, solvency, operating efficiency and overall profitability. Seven multi-purpose cooperatives with duly audited financial statements three years back were included in the study. Using the descriptive research design, the data was computed, tabulated and transformed into a form easy to understand. Selected financial performance measures like profitability analysis, liquidity analysis, solvency ratios and operating efficiency tools was used to measure the financial performance of the cooperatives. The findings will serve as a basis for policy formulation for the cooperative to improve their performance for the benefit of the members.

*Copyright © 2018, Jenelyn Chungyas and Socorro Calara. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.*

## INTRODUCTION

Since early times of human history, primitive man was already involved in cooperative effort which is necessary to accomplish a common purpose such as providing security for a group of people or to collectively undertake a complex project. Cooperation is the best alternative way of solving common problems by maximizing the use of men and resources. In the midst of this uncertainty and suffering, co-operatives can provide some hope and clarity of direction for citizens around the world (International Cooperative Alliance, 2012). International organizations also promote cooperatives as a key driver for economic growth and development. In 2012, the International Cooperative Alliance developed its blueprint strategy for cooperatives, the "2020 vision", the plan in the blueprint is for the cooperative form of business by 2020 to be the acknowledged leader for economic, social and environmental sustainability (International Cooperative Alliance, 2013). In the Philippines under Republic Act No. 6939, Section 1, declared the policy of the state to promote the viability and growth of cooperatives as instruments of equity, social justice and economic development. Toward this end, the state should recognize cooperatives as associations organized for the economic and social betterment of the

members, operating business enterprise based on mutual aid, and founded upon international accepted cooperatives principles and practices (CDA, 2008). Critical area in cooperative development is their financial performance. It is the best indicator to define the stability, profitability and competitiveness of the business. Instituting a regular check up of the firm's financial performance is a very good business practice (Jebna and Baharudin, 2013). Macmahon and Davies (1994) stressed the importance of financial reporting and financial analysis to the growth and development of small business enterprises. Financial reporting and financial analysis should be done regularly in order to have a concrete picture of the life of the business. The financial performance provides signal to members whether to withdraw or increase their share capital. It also provides basis on the part of the management on what specific part of the business needs improvement. The government and the general public are also interested in the financial health of the cooperative (Kristanovic and Barbaca, 2016). According to Yuvaragi and Biruk (2013), the financial health of cooperatives can be determined through its financial statements by examining the relationship of the different figures stated therein and make comparisons with relevant information. The results can be a valuable tool for the members, creditors, financial analysts as well as the clients in their decision making process related to the cooperatives under study.

\*Corresponding author: Jenelyn I. Chungyas  
IFSU- Lagawe Campus, Philippines.

**Table 1. Profile of the Multi-purpose Cooperatives**

Name of the Cooperative	Date Established	Location	Total Assets as of 2016
Piwong Multi-purpose Cooperative	1991	Hingyon, Ifugao	257,125,033.08
Hojap Multi-purpose Cooperative	1998	Asipulo, Ifugao	42,017,147.72
Ifugao Global Entrepreneurs Multi-purpose Cooperative	1993	Lagawe, Ifugao	91,955,717.15
Kalanguya Cultural Community Multi-purpose Coop.	1976	Kiangan, Ifugao	153,688,567.38
Lagawe Multi-purpose Development Cooperative	1984	Lagawe, Ifugao	677,473,076.68
Lamut Grassroots Savings and Development Coop.	1980	Lamut, Ifugao	530,648,182.73
Tam-an Banaue Multi-purpose Cooperative	1991	Banaue, Ifugao	1,007,689,430.26

A lot of studies on the overall performance and on financial performance of cooperatives was conducted (Masicat, 2014; Chander and Chandel, 2010; Jebna and Baharudin, 2013; Lakew *et al.*, 2014; Quiloy, 2012; Masuku *et al.*, 2016; Opat, 2014; Ganga, 2015; Muthyalu, 2013; Umarani, 2015; etc.). However, studies on the financial performance of cooperatives at regional level were not undertaken so far. In view of realizing this gap, the researcher is motivated to undertake this research to analyze the financial performance of multi-purpose cooperatives in Ifugao. The main goal of this research is to analyze the financial performance of the multi-purpose cooperatives from its past performances to its current financial position so as to make predictions about the future financial statements of the cooperative. This study will also help the management of the multi-purpose cooperative under investigation to suggest ways and means to improve its efficiency and services to the members. Moreover, the study will be serving as a reference material for both academics and practitioners. This study is founded on the theory of the firm which states that firms, even people's organization like the cooperatives exist and make decisions to maximize profits. These firms interact with the market to determine pricing and demand and then allocate resources to be able to increase profit. This includes how firms may be able to combine labour and capital so as to lower the average cost of output, either from increasing, decreasing, or constant return to scale for one product line or from economies of scope for more than one product line. This usually involves financial measures as net revenues, asset utilization, profitability ratios and solvency ratios. The Generic performance improvement diagram is another basis for this study, G.S. Day (1984) has developed a working diagram that serves as a guide for the improvement of business performance which may come from different ways and approaches. For example, improvement of performance may either be in terms of sales volume to be generated or the level of profit to be expected. The general objective of the study is to analyze the financial performance of multi-purpose cooperatives in Ifugao. Specifically, the study sought to examine the liquidity, solvency, profitability and operating efficiency of the multi-purpose cooperatives and study and analyze the overall profitability of the multi-purpose cooperatives. For this research, the descriptive research design is employed. This involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984). Two methods were used to analyze the financial performance of the multi-purpose cooperatives in Ifugao: 1) Descriptive analysis which transforms raw data into a form that will make them easy to understand and interpret; re-arranging, ordering and manipulating data to generate descriptive information (Zikmund, 2003) and 2) quantitative analysis using selected financial performance measures like Profitability analysis, liquidity analysis, solvency ratios and operating efficiency measures. This study was conducted in Ifugao located in a mountainous region characterized by rugged terrain, river

valleys and massive forest. The subject of the study is the seven multi-purpose cooperatives located in five different municipalities. Table below shows that most of the cooperatives have been in operation for more than two decades. This research was designed using secondary data. Data and information have been extracted from annual reports of these seven (seven) multi-purpose cooperatives 3 years back specifically their audited financial statements. A letter was sent to each of the seven Cooperatives to ask permission to obtain a copy of their annual reports and audited financial statements from year 2014 to 2016. The data collected was classified, tabulated and analyzed as per objective of the study.

## RESULTS AND DISCUSSION

### Liquidity Analysis of the Multipurpose Cooperatives

To measure the liquidity of the multi-purpose cooperatives, the study used current ratio and quick/acid test ratio. Both measures will show if the cooperatives can able to pay its obligation when they become due. According to Sathya and Umarani (2015), the industry standard for current ratio is 2:1 and 1:1 for the quick or acid test ratio. IGEMCO's current ratio is above the standard of 2 which only shows that this cooperative is very much capable in paying its obligation when it becomes due. The other cooperatives, although their current ratio is below the industry norm, they are still considered financially liquid or solvent because their quick/acid test ratio is above the industry norm of 1:1.

### Leverage Analysis of the Multipurpose Cooperatives

To analyze the solvency of the Multipurpose cooperatives, the Debt to total asset ratio (DTA) and Debt to Equity ratio (DTE) were used. These solvency ratios examine the soundness of the long term financial position of the cooperatives. The debt to asset ratio (DTA) and debt to equity ratio (DTE) is used to define the total amount of debt related to assets. The higher the ratio, the higher is the financial risk to the lenders. The standard for debt to asset ratio is <0.5:1 (Ganga, 2015). Table 2 shows that most of the cooperatives have a debt to asset ratio above .5. This shows that more than 50% of the funds of the multipurpose cooperatives were financed through borrowings. This figure is not good, since this put the cooperatives at a high financial risk. Aside from Debt to asset ratio, the debt to equity ratio is the most recurrent measure to examine the indebtedness of the multipurpose cooperatives. This specifies the percentage of funds coming from borrowings. Table below shows that all of the multipurpose cooperatives had debt to equity ratio higher than 1 from year 2014 to 2016. Since all of the multipurpose cooperatives had a debt to equity ratio higher than 1, it shows that more of the funds came from external sources or from credit. This then suggest that these cooperatives must lower their Debt to equity ratio by fully

**Table 1. Liquidity analysis of the Multi-purpose cooperatives**

Names of the Cooperative	Year	Current ratio: CA/CL	Quick/Acid test ratio:
		Standard: 2:1	CA+ Rec./CI Standard: 1:1
Piwong Multi-purpose Cooperative (PMPC)	2014	1.64	1.52
	2015	1.62	1.52
	2016	1.58	1.51
Ifugao Global Entrepreneurs Multi-purpose Cooperative (IGEMCO)	2014	4.88	4.87
	2015	2.85	2.85
	2016	2.49	2.49
Kalanguya Cultural Community Multi-purpose Cooperative (KCMDC)	2014	1.47	1.37
	2015	1.44	1.40
	2016	1.48	1.44
Hojap Multi-purpose Cooperative (HMPC)	2014	1.59	1.42
	2015	2.05	1.86
	2016	1.79	1.61
Lagawe Multi-purpose Development Cooperative (LMDC)	2014	1.59	1.59
	2015	1.64	1.64
	2016	1.65	1.65
Lamut Grassroots Savings and Development Cooperative (LAGSADECO)	2014	1.34	1.24
	2015	1.37	1.27
	2016	1.58	1.50
Tam-an Banaue Multi-purpose Cooperative (TAM-AN BMPC)	2014	1.75	1.72
	2015	1.39	1.37
	2016	1.08	.90

Source: Audited financial report of the multi-purpose cooperatives 2014-2016

**Table 2. Analysis of leverage ratio of the Multi-purpose cooperatives**

Names of the Cooperative	Year	Debt to total Assets	Debt to Equity
		(DTA)Standard <0.5:1	(DTE) ratio
Piwong Multi-purpose Cooperative (PMPC)	2014	0.65	1.88
	2015	0.65	1.85
	2016	0.58	1.36
Ifugao Global Entrepreneurs Multi-purpose Cooperative (IGEMCO)	2014	0.77	3.27
	2015	0.79	3.78
	2016	0.79	2.98
Kalanguya Cultural Community Multi-purpose Cooperative (KCMDC)	2014	0.63	1.71
	2015	0.65	1.82
	2016	0.63	1.70
Hojap Multi-purpose Cooperative (HMPC)	2014	0.60	1.52
	2015	0.59	1.59
	2016	0.68	2.12
Lagawe Multi-purpose Development Cooperative (LMDC)	2014	0.64	1.77
	2015	0.62	1.61
	2016	0.61	1.59
Lamut Grassroots Savings and Development Cooperative (LAGSADECO)	2014	0.64	1.78
	2015	0.63	1.67
	2016	0.64	1.77
Tam-an Banaue Multi-purpose Cooperative (TAM-AN BMPC)	2014	0.41	0.69
	2015	0.65	1.88
	2016	0.77	3.41

Source: Audited financial report of the multi-purpose cooperatives 2014-2016

### Analysis of the Profitability ratio of the multi-purpose cooperatives

The profitability ratios are used to assess the ability of the cooperative to earn income for the benefit of the members. It is very much important to measure the earnings of the cooperative because this will direct the next step the management would take. These ratios provide a reliable indicator in measuring the financial performance of the cooperatives. Results of these ratios is primary helpful to the management and the stakeholders. The overall profitability of the cooperative is computed through the net profit as percentage of total income earned by the business. From the table below, it shows that five of the multipurpose cooperatives are performing better than the other two cooperatives from 2014 to 2016. LMDC had a net profit margin of 0.55, 0.61 and 0.57 for the years 2014, 2015 and 2016 respectively; KCMDC had a net profit margin of 0.42, 0.49 and 0.52; PMPC had earned a net profit margin of 0.47, 0.50, 0.43; Hojap MPC garnered 0.30, 0.40, 0.28; and LAGSADECO had 0.37, 0.42,

and 0.43 net profit margin from 2014 to 2016. The performance of these five multipurpose cooperatives for the 3 consecutive years is very satisfactory. The performance of the two multi-purpose cooperatives is satisfactory, as shown in table 3, TAM-AN BMPC and IGEMCO had a net profit margin below 10%. Thus, there is a need for these two cooperatives to improve their profitability by minimizing their operating and administrative expenditures. The return on assets measures the net income produced by total assets during a period. It measures how efficient a business can manage its assets to produce profits. From the table below, most of the computed ROA of the cooperatives are below 10%, this means that the cooperatives are earning less than 0.01 for every peso of assets invested. The return on equity measures how efficient a firm can use the money invested by the members to generate profits. As shown from the table above: KCMDC, Piwong MPC, Hojap MPC, Lagawe MDC and LAGSADECO generated a return on their equity of above 15%, it shows that these multi-purpose cooperatives earned 0.15 for every peso invested by the members.

**Table 3. Profitability ratio analysis of the Multi-purpose cooperatives**

Names of the Cooperative	Year	Overall profitability	ROA	ROE	ROCE
Piwong Multi-purpose Cooperative (PMPC)	2014	0.47	0.06	0.27	0.13
	2015	0.50	0.07	0.28	0.14
	2016	0.43	0.06	0.22	0.13
Ifugao Global Entrepreneurs Multi-purpose Cooperative (IGEMCO)	2014	0.07	0.003	0.036	0.004
	2015	0.05	0.0028	0.032	0.004
	2016	0.05	0.0029	0.022	0.004
Kalanguya Cultural Community Multi-purpose Cooperative (KCMDC)	2014	0.42	0.05	0.19	0.14
	2015	0.49	0.05	0.18	0.14
	2016	0.52	0.06	0.20	0.14
Hojap Multi-purpose Cooperative (HMPC)	2014	0.30	0.05	0.18	0.11
	2015	0.40	0.04	0.26	0.06
	2016	0.28	0.02	0.15	0.04
Lagawe Multi-purpose Dev. Coop. (LMDC)	2014	0.55	0.08	0.28	0.21
	2015	0.61	0.09	0.31	0.24
	2016	0.57	0.07	0.39	0.17
Lamut Grassroots Savings and Dev. Coop. (LAGSADECO)	2014	0.37	0.05	0.16	0.14
	2015	0.42	0.05	0.15	0.13
	2016	0.43	0.04	0.14	0.12
Tam-an Banaue Multi-purpose Cooperative (TAM-AN BMPC)	2014	0.08	0.012	0.02	0.02
	2015	0.09	0.013	0.04	0.04
	2016	0.08	0.012	0.05	0.05

Source: Audited financial report of the multi-purpose cooperatives 2014-2016

**Table 4. Operating efficiency analysis of the Multi-purpose cooperatives**

Names of the Cooperative	Year	Working Capital turnover ratio
Piwong Multi-purpose Cooperative (PMPC)	2014	.48
	2015	.45
	2016	.44
Ifugao Global Entrepreneurs Multi-purpose Cooperative (IGEMCO)	2014	.12
	2015	.10
	2016	.10
Kalanguya Cultural Community Multi-purpose Cooperative (KCMDC)	2014	.50
	2015	.40
	2016	.44
Hojap Multi-purpose Cooperative (HMPC)	2014	.64
	2015	.44
	2016	.29
Lagawe Multi-purpose Dev. Coop. (LMDC)	2014	.46
	2015	.44
	2016	.38
Lamut Grassroots Savings and Dev. Coop. (LAGSADECO)	2014	.70
	2015	.55
	2016	.36
Tam-an Banaue Multi-purpose Cooperative (TAM-AN BMPC)	2014	1.14
	2015	.69
	2016	1.25

Source: Audited financial report of the multi-purpose cooperatives 2014-2016

LMDC had the highest ROE in 2016 which is 39% which means that LMDC is generating 0.39 for every peso of the shareholder's equity. Return on Capital employed (ROCE) is a useful metric to compare how efficiently the business utilized their capital. A high ROCE indicates that the cooperative is efficiently utilizing its capital, while a low ROCE shows that the business is not employing its capital effectively. On the Table above, IGEMCO, Hojap MPC and TAM-AN BMPC had a low return of capital employed (ROCE) for the past 3 consecutive years, this indicates that these cooperatives did not use their capital but resorted to external sources to fund the operation of their business.

This situation is unhealthy since this takes the cooperative at a high financial risk. LMDC is said to be efficient in deploying its capital as shown by its ROCE of 0.21, 0.24 and 0.17 from 2014 to 2016. KCMDC, Piwong MPC and LAGSADECO has a fair ROCE of 10% to 14% for the last 3 years. It shows that the use of their capital is minimal and had borrowed much for the sustenance of the business.

**Analysis of the Operating efficiency of the multi-purpose cooperatives:** The operating efficiency ratio shows how well a business uses its assets and liabilities to generate income. This is a good metric to measure a business' short-term or current performance. The working capital turnover ratio indicates how efficient is the capital being utilized during the period. A high working turnover ratio is better. From the table above, it shows TAM-AN BMPC has the highest working capital turnover of 1.14 which means that for every peso invested in working capital, it has contributed 1.14 pesos to the total sales and that is good enough. The other cooperatives also had better working capital turn over except IGEMCO that had 0.12, 0.10 and 0.10. IGEMCO is not very efficient in utilizing its working capital.

### Conclusion

From the analysis made on the financial performance of the seven multipurpose cooperatives, the study concluded that all of the cooperatives have borrowings but capable of paying

their short term debt when it become due. Although the computed current ratio is below 2, it is still considered good since the cooperative had current assets to pay off its debt when it become due.

1. On profitability – Five of the cooperatives have earned a high return on their investments because they have efficiently utilized their assets, equity and capital to produce income for the cooperatives. The other two cooperatives on the other hand need to exert more effort to increase net income.
2. Leverage – All of the cooperatives had high borrowings, this indicates that they are all facing a high financial risk.
3. Operating efficiency – Most of the cooperatives was efficiently utilizing their working capital. Only one had a low working capital turnover ratio which indicates that working capital is not efficiently deployed during those years.

### Recommendation

The study came up with the following recommendations as a result of the analysis made on the financial performance of the cooperatives.

1. On Liquidity – All cooperatives needs to increase their liquidity ratio to meet the industry standard of 2 to become financially solvent. The following is helpful:
  - a) Decrease overhead cost, a lower overhead cost has a direct impact on the profitability of the business, this will increase net income. A high net income means more money to pay off credit.
  - b) Accelerate collection of accounts receivable. Bill clients promptly to receive prompt payments.
  - c) Monitor the money that goes out of the business especially if cash is for non-business purposes.
  - d) Review sales and profitability, assess product price and service fees. As cost increases, there a need maybe to increase prices and fees also.
2. On leverage - Since all of the multipurpose cooperatives had a debt to equity ratio higher than 1, it shows that more of the funds came from external sources or from credit. This then suggest that these cooperatives must lower their Debt to equity ratio by fully utilizing first their equity before resorting to credit or increase their capital by selling additional share capital and unproductive assets.
3. Profitability – Since two of the multi-purpose cooperative had a low Net profit margin, there is a need for these cooperatives to increase NPM by minimizing operating and administrative expenses and improve their working efficiency as well as effectively utilized their assets and equity to generate enough profit. This is whole management action, strategies and policies need to be reviewed to be able to have a better profit margin.
4. Since these cooperative have played their part in local economic development, further researchers may be conducted to help these cooperative attain a better performance for the benefits of the members and the community like financial planning and control of cooperatives; and applications of financial practices to find solutions to financial problems found in the cooperative operations.

### REFERENCES

- Chander, R. and Chandel J.K. 2010. Financial viability and performance evaluation of cooperative credit institutions in Haryana (India). *International journal of computing and business research* 1(1)
- Credit Union in Bureworeda, Ethiopia. [www.theinternationaljournal.org/RJEBS](http://www.theinternationaljournal.org/RJEBS), 1(6)72.
- Ganga, M. et.al. 2015. Evaluation of financial performance. *International journal of scientific and research publications*, 5(4)1-7. Retrieved at [www.ijssrp.org](http://www.ijssrp.org)
- Gentzoglani, A 1997. Economic and Financial Performance of Cooperatives and Investor-owned firms: An empirical study. *Strategies and Structures in the Agro-food Industries*, pp. 188-198.
- Jebna, Abdul, K., Baharudin, Ahmad S. 2013. Factors Affecting Small and Medium Enterprises Success: An Exploratory Study. *Jurnal Teknologi (Social Sciences)*, Vol. 64 (3), 69-72
- Krstanovic, N., & Barbaca, B. (2016). Accounting profit as a Determinant of Development of Entrepreneurship. *Economy Transdisciplinary Cognition*, 2(19), 14-20.
- Lakew, T. B., Mutyalu, M. and Azmera, G. 2014. A Study on Financial Performance of Multipurpose Cooperative Unions in Tigray Region, Ethiopia. *International Journal of Community and Cooperative Studies*, 90-97.
- Masicat, J. 2014. Batangas Heay Fabrication Yard Multipurpose Cooperative: Basis for Business Operation. *Asia Pacific Journal of Multi-Disciplinary Research*, 50-62.
- Masuku, T., Masuku, M. and Mutangira, J 2016. Performance of Multi-purpose Cooperatives in the Shiselweni Region of Swasiland. *International Journal of Sustainable Agricultural Research*, 58-71.
- Mathuva, D. M. and Kiweu, J. M. 2016. Cooperative Social and Environmental Disclosure and Financial Performance of Savings and Credit Cooperatives in Kenya. *Advances in Accounting, Incorporating Advances in International Accounting* [www.elsevier.com](http://www.elsevier.com), 197-206.
- Mc Mahon, R.G., & Davies, L.G. (1994). Financial reporting and analysis practices in small enterprises: their association with growth rate and financial performance. *Journal of small business management*. 32(1), 9-17.
- Muthyalu, M. 2013. Analyze the Performance of Multipurpose Cooperatives in Input and Out Agricultural Marketing in Adwa Woreda, Tigray Region, Ethiopia. *African International Journal of Research in Management*, 1-16.
- Opata, P., N.J., N., Ibrahim, M. and Akerele, D. 2014. Performance Evaluation of Women Co-operative Societies in Rural South-East Nigeria. *IOSR Journal of Business and Management*, 16, 15-19.
- Paitandi, S. 2014. Ratios Used to Measure the Financial Performance of the Employees' Credit Cooperative Societies. *International Journal of Scientific Research*. ISSN No. 2277-8179, 3(12), 62-65.
- Sathya, S. and Umarani, R. 2015. A study of financial performance analysis of spinning mills of Coimbatore City. *International journal of scientific research and management* , 3(9), 3543-3548. Retrieved at: [www.ijssrm.org](http://www.ijssrm.org)
- Yuvaragi and Biruk. 2013. Financial performance analysis of GOHE Co-operatives Savings and