

# FINANCIAL PROGRESS AND SOLVENCY ANALYSIS OF DHARWAD MILK UNION- A UNIT OF KARNATAKA MILK FEDERATION

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## ABSTRACT

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*Indian Dairy Industry is playing a vital role in the progress of economic and social welfare of the rural economy as well as it builds the living standards of the people concerned to it. The NDDB and KMF are in the line of continuous development of dairy sector through the Cooperative system in the state. Hence, the financial viability is playing the significant role and the monetary progress of Milk Unions viz solvency improvement is directly effects the Gross Domestic Product of the country.*

**KEY WORDS:** *Monetary Progress, Economic Performance, Growth Rate, Indices, solvency position, DMU, KMF, Ratios, Compounded Annual Growth Rate (CAGR) and Correlation etc.*

## RESEARCH METHODOLOGY

### Need for the Study

The main purpose of analyzing of financial progress and solvency analysis of Dharwad Milk Union (DMU) is to know in which directions the company is going and also it helps us to suggest the company in which directions it has to go. By comparing the statement it can be known that the progress solvency of the company, assets of the company, shareholdings of the company & stock of the company.

### Objectives

- To study the growth or progress of Dharwad Milk Union.
- To study the solvency position of the Dharwad Milk Union.

### A. FINANCIAL PROGRESS

Financial progress of company refers to any company, whose business generates substantial earnings or positive cash flows, increasing at much faster rates, compared to the overall economy. Company financial progress comes with profitable opportunities for the reinvestment of retained earnings.

## 1. Capital Accounts

**Table No. 01**

**Accounting and Statistical Analysis of Capital Account of Dharwad Milk Union**

Sl. No.	Year	Capital Account	Indices	Growth in %	Ranks
1	2014-15	24,37,48,611.29	100.00	-	5
2	2015-16	27,87,90,814.87	114.37	14.37	2
3	2016-17	42,05,64,338.43	150.85	50.85	1
4	2017-18	45,66,10,725.62	109.57	8.57	3
5	2018-19	42,00,65,110.73	91.99	-8.01	4
	<b>CAGR</b>	<b>11.5%</b>			

Table 01 states that the analysis of progress of capital account of Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the capital account of DMU in the year 2016-17 it is found more and its Ranks 1 and the 2014-15 shows Rank 5. The

Indices is not in a constant position or gradual hike instead it variety within the study period, the highest indices found in the year 2016-17 at 150.85 and lowest is in 2018-19 at 91.99. The Growth Rate of capital account is negative in the year 2018-19 at -8.01 remaining other four years shows positive growth rate, the highest growth shows at 50.85% in 2016-17.

## 2. Reserves and Surplus Accounts

Table No. 02

### Accounting and Statistical Analysis of Reserves and Surplus Account of Dharwad Milk Union

Sl. No.	Year	Reserves & Surplus Account	Indices	Growth in %	Ranks
1	2014-15	1,16,99,398.31	100.00	-	5
2	2015-16	1,52,76,219.47	130.57	30.57	2
3	2016-17	1,67,04,127.55	109.34	9.34	4
4	2017-18	2,23,15,240.49	133.59	33.59	1
5	2018-19	2,44,22,317.42	109.44	9.44	3
	<b>CAGR</b>	<b>15.9%</b>			

Table 02 states that the analysis of progress of reserves and surplus account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the reserve and surplus account of DMU in the year 2017-18 it is found more and it's Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 2<sup>nd</sup> rank, 2018-19 shows 3<sup>rd</sup> rank and 2016-17 shows 4<sup>th</sup> rank. The Indices is not in a constant position or gradual hike instead

it variate within the study period, the highest indices found in the year 2017-18 at 133.59% and lowest is in 2016-17 at 109.34%. The Growth Rate of reserves and surplus account is positive in all the year 2015-16 at 30.57%, in 2016-17 at 9.34%, in 2017-18 at 33.59% and in 2018-19 at 9.44%, as the every year shows positive growth rate there is no negative growth rate found in this account, the highest growth shows at 33.59% in 2017-18.

## 3. Loans Accounts

Table No. 03

### Accounting and Statistical Analysis of Loans Account of Dharwad Milk Union

Sl. No.	Year	Loans Account	Indices	Growth in %	Ranks
1	2014-15	16,05,15,105.00	100.00	-	5
2	2015-16	9,54,81,682.00	59.48	-41	4
3	2016-17	9,93,48,562.00	104.04	4.04	2
4	2017-18	19,98,98,678.00	201.20	101.2	1
5	2018-19	19,88,90,472.98	99.49	-0.51	3
	<b>CAGR</b>	<b>4.4%</b>			

Table 03 states that the analysis of progress of loans account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the loans account of DMU in the year 2017-18 it is found more and its Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 4<sup>th</sup> rank, 2018-19 shows

3<sup>rd</sup> rank and 2016-17 shows 2<sup>nd</sup> rank. The Indices is not in a constant position or gradual hike instead it vitiate within the study period, the highest indices found in the year 2017-18 at 201.20% and lowest is in 2015-16 at 59.48%. The Growth Rate of loan account is positive in the year 2016-17 at 4.04% and in 2017-18 at 101.2% and remaining two years shows negative in the year 2015-16 at -41% and in the year 2018-19 at -0.51%, the highest growth shows at 101.2% in 2017-18.

## 4. Current Liability Accounts

Table No. 04

### Accounting and Statistical Analysis of Current Liability Account of Dharwad Milk Union

Sl. No.	Year	Current Liability Account	Indices	Growth in %	Ranks
1	2014-15	23,32,67,955.71	100.00	-	5
2	2015-16	30,82,47,390.81	132.14	32.14	2
3	2016-17	29,75,61,151.69	96.53	-3.47	3
4	2017-18	59,06,94,603.16	198.51	98.51	1
5	2018-19	44,30,48,970.42	75.00	-25	4
	<b>CAGR</b>	<b>13.74%</b>			

Table 04 states that the analysis of progress of current liability account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the current liability account of DMU in the year 2017-18 it is found more and its Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 2<sup>nd</sup> rank,

2018-19 shows 4<sup>th</sup> rank and 2016-17 shows 3<sup>rd</sup> rank. The Indices is not in a constant position or gradual hike instead it vitiate within the study period, the highest indices found in the year 2017-18 at 198.51% and lowest is in 2018-19 at 75.00%. The Growth Rate of current liability account is positive in all the year 2015-16 at 32.14%, in 2017-18 at 98.51% and remaining two years shows negative in the year

2016-17 at -3.47% and in the year 2018-19 at -25%, the highest growth shows 98.51% in the year 2017-18.

## 5. Fixed Assets Accounts

**Table No. 05**

### Accounting and Statistical Analysis of Fixed Assets Account of Dharwad Milk Union

Sl. No.	Year	Fixed Assets Account	Indices	Growth in %	Ranks
1	2014-15	14,95,38,466.93	100	-	5
2	2015-16	18,48,02,778.58	123.58	23.58	3
3	2016-17	27,10,49,614.77	146.66	46.66	2
4	2017-18	49,85,33,329.39	183.98	83.92	1
5	2018-19	51,67,68,684.98	103.65	3.65	4
	<b>CAGR</b>	<b>28.1%</b>			

Table 05 states that the analysis of progress of fixed assets account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the fixed assets account of DMU in the year 2017-18 it is found more and it's Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 3<sup>rd</sup> rank, 2018-19 shows 4<sup>th</sup> rank and 2016-17 shows 2<sup>nd</sup> rank. The Indices is not in a constant position or gradual hike instead it variate within the study period, the highest indices found in the year 2017-18 at 183.92% and lowest is in 2018-19 at 103.65%. The Growth Rate of fixed assets account is positive in all the year 2015-16 at 23.58%, in 2016-17 at 46.66%, in 2017-18 at 83.92% and in 2018-19 at 3.65%, as the every year shows positive growth rate there is no negative growth rate found in this account, the highest growth shows at 83.92% in 2017-18.

## 6. Investments Accounts

Table 06 states that the analysis of progress of investments account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the investment account of DMU in the year 2016-17 it is found more and it's Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 4<sup>th</sup> rank, 2018-19 shows 3<sup>rd</sup> rank and 2017-18 shows 2<sup>nd</sup> rank. The Indices is not in a constant position or gradual hike instead it variate within the study period, the highest indices found in the year 2016-17 at 137.82% and lowest is in 2015-16 at 23.37%. The Growth Rate of investment account is positive in the year 2016-17 at 37.82%, in 2017-18 at 29.58% and in the year 2018-19 at 14.79% remaining one year shows negative in the year 2015-16 at -76.63%, the highest growth shows 37.82% in the year 2016-17.

**Table No. 06**

### Accounting and Statistical Analysis of Investments Account of Dharwad Milk Union

Sl. No.	Year	Investment Account	Indices	Growth in %	Ranks
1	2014-15	7,80,29,400.00	100	-	5
2	2015-16	1,82,36,400.00	23.37	-76.63	4
3	2016-17	12,51,34,214.08	137.82	37.82	1
4	2017-18	3,25,70,945.00	129.58	29.58	2
5	2018-19	3,73,89,851.00	114.79	14.79	3
	<b>CAGR</b>	<b>13.7%</b>			

## 7. Current Assets Accounts

**Table No. 07**

### Accounting and Statistical Analysis of Current Assets Account of Dharwad Milk Union

Sl. No.	Year	Current Assets Account	Indices	Growth in %	Ranks
1	2014-15	42,13,38,984.61	100	-	5
2	2015-16	48,85,33,945.41	115.94	15.94	2
3	2016-17	53,75,05,488.50	110.02	10.02	3
4	2017-18	72,21,40,029.34	134.35	34.35	1
5	2018-19	53,96,66,880.62	74.73	-25.27	4
	<b>CAGR</b>	<b>5.1%</b>			

Table 07 states that the analysis of progress of current asset account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the current assets account of DMU in the year 2017-18 it is found more and it's Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 2<sup>nd</sup> rank, 2018-19 shows 4<sup>th</sup> rank and 2016-17 shows 3<sup>rd</sup> rank. The Indices is not in a constant position or gradual hike instead it

variate within the study period, the highest indices found in the year 2017-18 at 134.35% and lowest is in 2018-19 at 74.73%. The Growth Rate of current asset account is positive in the year 2016-17 at 10.02%, in 2017-18 at 34.35% and in the year 2015-16 at 15.94% remaining one year shows negative in the year 2018-19 at -25.27%, the highest growth shows 34.35% in the year 2017-18.

## 8. Purchase Accounts

Table No. 08

### Accounting and Statistical Analysis of Purchase Account of Dharwad Milk Union

Sl. No.	Year	Purchase Account	Indices	Growth in %	Ranks
1	2014-15	1,75,49,34,212.42	100	-	5
2	2015-16	1,94,13,12,944.55	110.62	10.62	3
3	2016-17	2,22,83,32,930.01	114.78	14.78	1
4	2017-18	2,47,29,10,423.56	110.97	10.97	2
5	2018-19	2,48,85,77,838.61	100.63	0.63	4
	<b>CAGR</b>	<b>7.2%</b>			

Table 08 states that the analysis of progress of purchase account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the purchase account of DMU in the year 2016-17 it is found more and it's Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 3<sup>rd</sup> rank, 2018-19 shows 4<sup>th</sup> rank and 2017-18 shows 2<sup>nd</sup> rank. The Indices is not in a

constant position or gradual hike instead it variate within the study period, the highest indices found in the year 2016-17 at 114.78% and lowest is in 2018-19 at 100.63%. The Growth Rate of purchase account is positive in all the year 2015-16 at 10.62%, in 2016-17 at 14.78%, in 2017-18 at 10.97% and in 2018-19 at 0.63%, as the every year shows positive growth rate there is no negative growth rate found in this account, the highest growth shows at 14.78% in 2016-17.

## 9. Sales Accounts

Table No. 09

### Accounting and Statistical Analysis of Sales Account of Dharwad Milk Union

Sl. No.	Year	Sales Account	Indices	Growth in %	Ranks
1	2014-15	2,12,72,31,176.83	100	-	5
2	2015-16	2,41,49,02,714.38	113.52	13.52	2
3	2016-17	2,92,31,91,875.34	121.04	21.04	1
4	2017-18	2,95,92,76,028.27	101.23	1.23	4
5	2018-19	3,34,13,31,109.27	112.91	12.91	3
	<b>CAGR</b>	<b>9.5%</b>			

Table 09 states that the analysis of progress of sales account of the Dharwad Milk Union for the year 2014-15 to 2018-19, during the 5 years of study it is revealed that the Indices, growth and Ranks analysis. The study explains that the sales account of DMU in the year 2016-17 it is found more and its Ranks 1 and the 2014-15 shows Rank 5, the remaining year that is 2015-16 shows 2<sup>nd</sup> rank, 2018-19 shows 3<sup>rd</sup> rank and 2017-18 shows 4<sup>th</sup> rank. The Indices is not in a

constant position or gradual hike instead it variates within the study period, the highest indices found in the year 2016-17 at 121.04% and lowest is in 2017-18 at 101.23%. The Growth Rate of fixed assets account is positive in all the year 2015-16 at 13.52%, in 2016-17 at 21.04%, in 2017-18 at 1.23% and in 2018-19 at 12.91%, as every year shows positive growth rate there is no negative growth rate found in this account, the highest growth shows at 21.04% in 2016-17.

## B. SOLVENCY ANALYSIS

### 1. Debt Equity Ratio

Table No. 10

### Debt Equity Ratio of Dharwad Milk Union for the year 2014-15 to 2018-19

Sl. No.	Year	Debt	Equity	Ratio
1	2014-15	160515105.00	152152700	1.055
2	2015-16	95481682.00	159158900	0.599
3	2016-17	99348562.00	166309100	0.597
4	2017-18	199898678.00	174116200	1.148
5	2018-19	198890472.98	182672200	1.089
<b>Total</b>				<b>4.488</b>
<b>Mean</b>				<b>0.898</b>
<b>Range</b>				<b>0.551</b>
<b>CAGR</b>				<b>0.636398</b>

Table 10 states that the analysis of solvency ratios of Dharwad Milk Union from the year 2014-15 to 2018-19 the study tells that the debt-equity ratios are falls within the standard ratio that is 2:1, in the year 2014-15 the debt equity ratio is 1.055%, 2015-16 is 0.599%, 2016-17 is 0.597, 2017-18 is 1.148%, 2018-19 is 1.089%, the highest debt-equity ratio is found in the year 2017-18 and the lowest debt-equity ratio found in the year 2016-17. Therefore, the debt-equity

ratios are in fluctuates in nature. Whereas Mean is 0.898%, Range is 0.551%, and the compounded annual growth rate is 0.636398. The reason for fluctuation in ratios is that company is utilizing its own investment instead of taking more loans from outsiders.

### 2. Fixed Assets Ratio

The table 11 of analysis of solvency ratio of Dharwad Milk Union from the year 2014-15 to 2018-19 the study tells that the fixed assets ratios are having fluctuating trend, that is

in the year 2014-15 it shows 0.613%, in 2015-16 it shows 0.663%, in 2016-17 it shows 0.644%, in 2017-18 it shows 1.092%, in 2018-19 it shows 1.23%. in the year 2018-19 it shows higher fixed assets ratio and it shows less in the year

2014-15 which is 0.613%. Here we found that the fixed assets ratio is more, company is using debts to finance a portion of fixed assets. And the compound annual growth rate is 14.94469.

**Table No. 11****Fixed Assets Ratio of Dharwad Milk Union for the year 2014-15 to 2018-19**

Sl. No.	Year	Fixed Asset	Net Worth	Ratio
1	2014-15	149538466.93	243748611.29	0.613
2	2015-16	184802778.58	278790814.87	0.663
3	2016-17	271049614.77	420564338.43	0.644
4	2017-18	498533329.39	456610725.62	1.092
5	2018-19	516768684.98	420065110.73	1.230
<b>Total</b>				<b>4.242</b>
<b>Mean</b>				<b>0.846</b>
<b>Range</b>				<b>0.617</b>
<b>CAGR</b>				<b>14.94469</b>

**3. Current Asset to Proprietor Fund Ratio****Table No. 12****Current Assets to Proprietor Fund Ratio of Dharwad Milk Union for the year 2014-15 to 2018-19**

Sl. No.	Year	Current Asset	Proprietor Fund	Ratio
1	2014-15	421338984.61	152152700	2.769
2	2015-16	488533945.41	159158900	3.069
3	2016-17	537504488.50	166309100	3.232
4	2017-18	722140029.34	174116200	4.147
5	2018-19	539666880.62	182672200	2.954
<b>Total</b>				<b>16.17</b>
<b>Mean</b>				<b>3.234</b>
<b>Range</b>				<b>1.378</b>
<b>CAGR</b>				<b>1.30188</b>

Table 12 shows the analysis of solvency ratios of Dharwad Milk Union from the year 2014-15 to 2018-19. Here the study tells that the current assets to net worth ratios from the year 2014-15 to 2018-19 are having fluctuating trend. In the year 2014-15 it shows lowest current assets to net worth ratio that is 2.769%, and it shows more in the year 2017-18. And the compound annual growth rate is 1.30188. here we found that the company is having a good current asset to net worth ratio which means a company is capable of paying their short-term liabilities.

**4. Net Profit to Total Asset Ratio**

The table 13 states the analysis of solvency ratios of Dharwad Milk Union from the year 2014-15 to 2018-19. The study tells that the net profit to total asset ratio in the year 2014-15 shows 0.018%, in 2015-16 it shows 0.013%, in 2016-17 it shows 0.019%, in 2017-18 it shows less that is 0.005%, and it shows increase in the year 2018-19. whereas Mean is 0.0017%, compounded annual growth rate is 10.0081. when compared to 5 years of study we found more increase in the year 2018-19 at 0.029%, which means company is using its assets effectively to get maximum profit.

**Table No. 13****Net Profit to Total Asset Ratio of Dharwad Milk Union for the year 2014-15 to 2018-19**

Sl. No.	Year	Net Profit	Total Asset	Ratio
1	2014-15	11375179.54	648906851.54	0.018
2	2015-16	9053236.31	691573123.99	0.013
3	2016-17	16215265.23	833689317.35	0.019
4	2017-18	6040296.95	1253244303.73	0.005
5	2018-19	31820862.47	1093825416.60	0.029
<b>Total</b>				<b>0.084</b>
<b>Mean</b>				<b>0.017</b>
<b>Range</b>				<b>0.024</b>
<b>CAGR</b>				<b>10.0081</b>

## CORRELATION ANALYSIS OF SELECTED VARIABLES OF DHARWAD MILK UNION

The table 14 exhibits the correlation between the selected variables of Dharwad Milk Union. Correlation analysis quantifies the degree to which two variables are related, it

showing the degree of changes with the help of linear relationship by reducing the range of uncertainties in the prediction process.

**Table No. 14**  
**Correlation of Selected Variables of Dharwad Milk Union**

Variables	Debt	Equity	Current Assets	Fixed Assets	Total Assets	Net Profit	Net Worth
Debt	1						
Equity	0.8982	1					
Current Assets	0.6717	0.3971	1				
Fixed Assets	0.9811	0.9487	0.6546	1			
Total Assets	0.9462	0.8157	0.8521	0.9534	1		
Net Profit	0.3161	0.6707	-0.4038	0.4034	0.1192	1	
Net Worth	0.6713	0.7277	0.7106	0.7829	0.8281	0.2188	1

#### REFERENCES

1. Annual Reports of Dharwad Milk Union from 2014-15 to 2018-19.
2. Management Accounting, Himalaya Publishing House. J Madegowda.
3. Management Accounting, Seventh Edition, Ashok Prakashan. G B Baligar.
4. Business Statistics, Thakur Publication Pvt Ltd. Pravesh Kumar Singh & Alka Bajpai.