Analysis of Receivable Customer Management at the Republic of Indonesia Civil Servants Cooperative
The work of Bhakti Palu

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Abstract
This research is to examine and analyze the effectiveness of managing and controlling customer Receivables at the Karya Bhakti Palu Indonesian Republic Employee Cooperative for the 2014-2018 period, using arrears ratios and collection ratios, accounts receivable turnover ratios, and the average age of accounts receivable to overcome bad debts and to increase the financial effectiveness of cooperatives, the arrears ratio in 2014 – 2018 KPRI Karya Bhakti Palu can minimize the number of outstanding receivables. This can be proven by the value of the arrears ratio from 2014-2018. There were <50% of the outstanding receivables from the total outstanding receivables in the same period. Judging from the billing ratio, in 2014, it was 92%. In 2015 it was 89%. In 2016 it was 86%. In 2017, it was 88%. In 2018 it was 91%. KPRI Karya Bhakti Palu has a pretty good collection achievement because it has a percentage from 2014-2018, almost reaching 100%. Even though in 2017, there was a decline in billing value. However, it still achieves a pretty good percentage value when viewed from the effectiveness criteria for the collection ratio, which is >50% of the total receivables outstanding in the same period. Receivables turnover ratio from this ratio during 2014-2018 Koperasi Pegawai Republik Indonesia Karya Bhakti Palu has a pretty good RTO value. This can be seen from the smaller percentage of accounts receivable turnover. Because the effectiveness criterion for the receivables turnover ratio is that the greater the average receivables, the better the performance of the cooperative, whereas if the average receivables are equal to zero (0), it means that the joint no longer has receivables, or in other words, all receivables have been collected, through several ratios, namely, the arrears ratio, billing ratio, accounts receivable turnover ratio and control of receivables is running effectively.

Keywords: Analysis; effectiveness; Receivable Management

PRELIMINARY

Competition in the economic sector in the current era of globalization is increasing, as is the case with economic actors, especially cooperatives (1). Cooperatives must be more resilient in dealing with changes and competition that occur within the environment of cooperatives and other business entities such as State Owned Enterprises (BUMN) and Privately Owned Enterprises (BUMS) (2). Cooperatives are a form of legal entity that exists in Indonesia (3). Cooperatives as business entities must always be directed and encouraged to play a fundamental role in increasing their members’ income and welfare to overcome economic and social inequality. They can act as a forum for people’s economic activities (4).

Receivables require effective and efficient management so that the amount of funds invested in receivables is by the ability level of the cooperative so as not to disrupt cash flow (5). Receivables management policies include making the following decisions: Credit standards, credit requirements, and receivable collection or collection policies (6).
The Karya Bhakti Palu Employees Cooperative of the Republic of Indonesia operates six businesses, namely savings and loan business, Waseda, photocopying, credit vouchers, postal agents, our food house, and LPG base. In my research this time, I took the case of the savings and loan business because I saw from the data that there was a yearly decline in the management of customer receivables.

At present, the Republic of Indonesia Employee Cooperative Karya Bhakti Palu uses reserves for losses on receivables from the previous accounting period, and this is considered less effective and efficient because if there is a loss on receivables that exceeds the reserve, the cooperative will experience financial disruption due to reduced capital for the next period caused to cover a shortfall in the reserve receivables of the previous period. So that using a loss reserve system is considered less effective and efficient in managing and controlling cooperative receivables. Cooperative financial effectiveness.

**METHOD**

This research is a descriptive analysis research that reports the results of the research by the facts based on the Accounts Receivable Report at the Republic of Indonesia Civil Servant Cooperative Karya Bhakti Palu. This study will also carry out a quantitative analysis by comparing the accounts receivable ratio, which is a measure of financial performance at the Republic of Indonesia employee cooperative Karya Bhakti Palu, which is then discussed with a qualitative analysis concerning the problems that cause the quantitative measure (receivables turnover ratio) to occur.

According to Tersiana (2018), the research method is a set of rules, activities, and procedures carried out by actors of a discipline (7). A study requires an appropriate way to obtain results that can be accounted for. The method used in this research is *Ex Post Facto*. *Ex Post Facto* is a study conducted to examine events and then look back to determine the factors that can lead to these events (8).

**RESULTS AND DISCUSSION**

**Analysis of accounts receivable management with the Ex Post Facto method**

This ratio is used to determine the number of past due receivables from several loans made from uncollected receivables. The criterion for the effectiveness of the arrears ratio is <50% of the total outstanding receivables in the same period.

\[
\text{Arrear ratio} = \frac{\text{outstanding accounts receivable balance}}{\text{total receivables}} \times 100\%
\]

**Table 1. The Republic of Indonesia Employee Cooperative Karya Bhakti Palu**

Data on overdue receivables and total receivables for 2014-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of Outstanding Receivables</th>
<th>Total Receivables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>29,389,663.58</td>
<td>1,277,811,460.00</td>
</tr>
<tr>
<td>2015</td>
<td>27,748,594.58</td>
<td>792,816,988.00</td>
</tr>
<tr>
<td>2016</td>
<td>18,120,238.03</td>
<td>489,736,163.00</td>
</tr>
<tr>
<td>2017</td>
<td>15,023,826.68</td>
<td>375,595,667.00</td>
</tr>
</tbody>
</table>
Based on table 1, namely data on the number of overdue receivables and total receivables in the last five years, the amount of the arrears ratio can be calculated as follows:

In 2014 the value of the arrears ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{29.389.663,58}{1.277.811.460,00} \times 100% = 0.023 \text{ or } 2.3\%
\]

The results of the calculation of the 2014 arrears ratio show that the percentage of arrears on the receivables of the Republic of Indonesia Employee Cooperative Karya Bhakti Palu is 2.3%.

In 2015 the value of the arrears ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{27.748.594,58}{792.816.988,00} \times 100% = 0.035 \text{ or } 3.5\%
\]

From the results of the calculation of the 2015 arrears ratio, it shows that the percentage of arrears on the receivables of the Republic of Indonesia Employee Cooperative Karya Bhakti Palu is 3.5%.

In 2016 the value of the arrears ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{18.120.238,03}{489.736.163,00} \times 100% = 0.037 \text{ or } 3.7\%
\]

From the results of the calculation of the 2016 arrears ratio, it shows that the percentage of arrears in the receivables of the Republic of Indonesia Employee Cooperative Karya Bhakti Palu is 3.7%.

In 2017 the value of the arrears ratio can be calculated as follows

\[
\text{Arrear ratio} = \frac{15.023.826,68}{375.595.667,00} \times 100% = 0.04 \text{ or } 4\%
\]

The results of the calculation of the 2017 arrears ratio show that the percentage of arrears in the receivables of the Republic of Indonesia Employee Cooperative Karya Bhakti Palu is 4%.

In 2018 the value of the arrears ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{11.722.628,12}{418.665.290,00} \times 100% = 0.028 \text{ or } 2.8\%
\]

The results of the calculation of the 2018 arrears ratio show that the percentage of arrears in the receivables of the Republic of Indonesia Employee Cooperative Karya Bhakti Palu is 2.8%.
Table 2. Cooperative Employees of the Republic of Indonesia Karya Bhakti Palu
The results of the calculation of the 2014-2018 arrears ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of Outstanding Receivables</th>
<th>Total Receivables</th>
<th>Arrear Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>29,389,663.58</td>
<td>1,277,811,460.00</td>
<td>2.3%</td>
</tr>
<tr>
<td>2015</td>
<td>27,748,594.58</td>
<td>792,816,988.00</td>
<td>3.5%</td>
</tr>
<tr>
<td>2016</td>
<td>18,120,238.03</td>
<td>489,736,163.00</td>
<td>3.7%</td>
</tr>
<tr>
<td>2017</td>
<td>15,023,826.68</td>
<td>375,595,667.00</td>
<td>4%</td>
</tr>
<tr>
<td>2018</td>
<td>11,722,628.12</td>
<td>418,665,290.00</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

The table above shows that the cooperative's arrears ratio fluctuates yearly. In 2014 the cooperative's performance improved, where the arrears ratio was 2.3%, the arrears ratio in 2014 was the smallest arrears ratio from the data for the last five years of the cooperative. In 2015 there was an increase in the arrears ratio of 3.5%, meaning that the billing ratio increased by 1.2%. This can be seen from the total receivables in the previous year, which experienced a substantial decrease, namely the total receivables in 2014 Rp. 1,277,811,460.00, while the total receivables in 2015 amounted to Rp. 792,816,988.00. In 2016 the arrears ratio was 3.7%. Again, an increase of 0.2% means that the cooperative's performance is trying to reduce the percentage of arrears ratio again from the previous year. In 2017 the arrears ratio reached its highest point of 4% or an increase of 0.3%. This is due to the large number of outstanding receivables, namely Rp. 15,023,826.68, - with a total receivable of Rp. 375,595,667.00, -. In 2018, the arrears ratio decreased to 2.8% or 1.2% from the previous year. This is because cooperatives can minimize the number of outstanding receivables by increasing the total receivables to Rp. 418,665,290.00, - or an increase of Rp. 43,069,623, -. As for the ratio of arrears in the last five years, the cooperative was established and went very well.

Billing Ratio
This ratio is used to determine the extent to which collection activities are carried out or how much the uncollectible accounts are from the total receivables owned by the cooperative.

The criterion for the effectiveness of the collection ratio is > 50% of the total receivables in the same period.

Formula:

\[
\text{Billing ratio} = \frac{\text{Total uncollectible accounts receivable}}{\text{Total receivables}} \times 100\%
\]

Table 3. Cooperative Employees of the Republic of Indonesia Karya Bhakti Palu
Data on Collected Receivables and Total Receivables for 2014-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Collectible Accounts Receivable</th>
<th>Total Receivables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1,175,586,543.20</td>
<td>1,277,811,460.00</td>
</tr>
<tr>
<td>2015</td>
<td>711,156,836.24</td>
<td>792,816,988.00</td>
</tr>
<tr>
<td>2016</td>
<td>422,642,308.67</td>
<td>489,736,163.00</td>
</tr>
<tr>
<td>2017</td>
<td>330,524,186.96</td>
<td>375,595,667.00</td>
</tr>
<tr>
<td>2018</td>
<td>380,985,413.90</td>
<td>418,665,290.00</td>
</tr>
</tbody>
</table>
Based on table 3, namely data on collectible receivables and total receivables, especially in the last five years, the number of collectible receivables can be calculated as follows:

In 2014 the value of the arrears collection ratio can be calculated as follows:

\[
\text{Billing Ratio} = \frac{1,175,586,543.20}{1,277,811,460.00} \times 100\%
\]
\[
= 0.92 \text{ or } 92\%
\]

From the results of the calculation of the 2014 billing ratio, it shows that the debt collection ratio for the employees of the cooperative of the employees of the Republic of Indonesia Karya Bhakti Palu is 95%.

In 2015 the value of the billing ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{711,156,836.24}{792,816,988.00} \times 100\%
\]
\[
= 0.89 \text{ or } 89\%
\]

From the results of the calculation of the 2015 billing ratio, it shows that the debt collection ratio for the employees of the cooperative of employees of the Republic of Indonesia Karya Bhakti Palu is 94%.

In 2016 the value of the billing ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{422,642,308.67}{489,736,163.00} \times 100\%
\]
\[
= 0.86 \text{ or } 86\%
\]

The results of the calculation of the 2016 collection ratio show that the debt collection ratio for the employees of the cooperative of the Republic of Indonesia, Karya Bhakti Palu is 92%.

In 2017 the value of the billing ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{330,524,186.96}{375,595,667.00} \times 100\%
\]
\[
= 0.88 \text{ or } 88\%
\]

The results of the calculation of the 2017 arrears ratio show that the debt collection ratio for the Republic of Indonesia Employees Cooperative Karya Bhakti Palu is 88%.

In 2018 the value of the billing ratio can be calculated as follows:

\[
\text{Arrear ratio} = \frac{380,985,413.90}{418,665,290.00} \times 100\%
\]
\[
= 0.91 \text{ or } 91\%
\]

The results of the 2018 billing ratio calculation show that the debt collection ratio for the Republic of Indonesia Employee Cooperative Karya Bhakti Palu is 91%.

**Table 4. The Republic of Indonesia Employee Cooperative Karya Bhakti Palu**

Results of Calculation of Receivables Collection Ratio in 2014-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Collectible Accounts Receivable</th>
<th>Total Receivables</th>
<th>Billing Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1,175,586,543.20</td>
<td>1,277,811,460.00</td>
<td>92%</td>
</tr>
<tr>
<td>2015</td>
<td>711,156,836.24</td>
<td>792,816,988.00</td>
<td>89%</td>
</tr>
<tr>
<td>2016</td>
<td>422,642,308.67</td>
<td>489,736,163.00</td>
<td>86%</td>
</tr>
</tbody>
</table>
The table above shows that the cooperative billing ratio has increased, and the percentage of the billing ratio is stable even in 2017. It has decreased. In 2014 the performance of cooperatives increased, where the collection ratio reached the highest point of 95%. This is because. In 2015 there was a decrease in the collection ratio from 94% in 2016 to 92% or a decrease of 2%. This is due to the number of collectible receivables decreasing to Rp. 450,557,269.96, - and there was a decrease in total receivables of Rp. 375,595,667.00 ,-. In 2017 the collection ratio experienced the lowest percentage of 88%. This is because the number of collectible receivables decreased by Rp. 330,524,186.96. In 2018 the billing ratio increased by 3% from the previous year. In 2018 the collection ratio performance increased by 91%. This is because the number of collectible receivables has increased by Rp. 380,985,413.90 , - with total receivables increased to Rp. 418,665,290.00 . It can be seen from the data processed by the billing ratio of the Republic of Indonesia Employee Cooperative Karya Bhakti Palu shows the ability of cooperatives to carry out debt collection quite effectively

This ratio measures the number of times (on average) accounts receivable that occur in a certain period. The receivables turnover period is when capital is tied up in receivables which depends on the payment terms.

The criterion for the effectiveness of the receivables turnover ratio is that the greater the average receivables, the better the performance of the cooperative. In contrast, if the average receivables are equal to zero (0), the cooperative has no more receivables, or in other words, all receivables have been collected.

Formula:

\[
\text{Receivable Turn Over} = \frac{\text{Lending} - \text{Beginning balance of accounts receivable}}{\text{Average receivables}} + \frac{\text{Ending balance of accounts receivable}}{2}
\]

<table>
<thead>
<tr>
<th>Year</th>
<th>Lending</th>
<th>Beginning balance</th>
<th>Final Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1,221,802,028.10</td>
<td>56,009,431.90</td>
<td>72,835,253.22</td>
</tr>
<tr>
<td>2015</td>
<td>324,483,208.60</td>
<td>51,112,458.40</td>
<td>48,973,616.30</td>
</tr>
<tr>
<td>2016</td>
<td>450,095,313.60</td>
<td>39,640,849.40</td>
<td>30,047,653.36</td>
</tr>
<tr>
<td>2017</td>
<td>351,108,858.85</td>
<td>24,486,808.15</td>
<td>25,957,247.98</td>
</tr>
<tr>
<td>2018</td>
<td>388,617,636.64</td>
<td>30,047,653.36</td>
<td></td>
</tr>
</tbody>
</table>

Based on table 5, namely lender data, initial balance, and ending balance get the average annual receivables as follows:

In 2014 the value of the average ratio of receivables can be calculated as follows:
The results of the 2014 collection ratio calculation show that the debt collection ratio for the employees of the cooperative of the Republic of Indonesia Karya Bhakti Palu is 64,421,342.56.

In 2015, the average ratio of receivables can be calculated as follows:

\[
\text{Average receivables} = \frac{51,112,458.40 + 51,533,104.22}{2} = 62,184,178.72
\]

The results of the calculation of the 2015 collection ratio show that the debt collection ratio for the employees of the cooperative of the Republic of Indonesia Karya Bhakti Palu is 62,184,178.72.

In 2016, the average ratio value of accounts receivable can be calculated as follows.

\[
\text{Average receivables} = \frac{39,640,849.40 + 48,973,616.30}{2} = 50,253,360.26
\]

From the results of the calculation of the 2016 collection ratio, it shows that the ratio of receivables collected for the cooperative employees of the Republic of Indonesia Karya Bhakti Palu is 50,253,360.26.

In 2017 the ratio value of the average receivables can be calculated as follows:

\[
\text{Average receivables} = \frac{351,108,858.85 + 30,047,653.36}{2} = 39,510,634.83
\]

From the results of the calculation of the 2014 collection ratio, it shows that the ratio of receivables collected for the cooperative employees of the Republic of Indonesia Karya Bhakti Palu is 39,510,634.83.

In 2018 the average ratio value of accounts receivable can be calculated as follows:

\[
\text{Average receivables} = \frac{30,047,653.36 + 25,957,247.98}{2} = 28,002,450.67
\]

From the results of the calculation of the 2017 collection ratio, it shows that the ratio of receivables collected for the Republic of Indonesia Employee Cooperative Karya Bhakti Palu is 28,002,450.67.
### Table 6. Cooperative Employees of the Republic of Indonesia Karya Bhakti Palu Data on Lending and Average Receivables for 2014-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Lending</th>
<th>Average Receivables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1,221,802,028.60</td>
<td>64,421,342.56</td>
</tr>
<tr>
<td>2015</td>
<td>719,981,734.78</td>
<td>62,184,178.72</td>
</tr>
<tr>
<td>2016</td>
<td>438,203,058.78</td>
<td>50,253,360.25</td>
</tr>
<tr>
<td>2017</td>
<td>326,622,050.70</td>
<td>39,510,634.83</td>
</tr>
<tr>
<td>2018</td>
<td>388,617,636.64</td>
<td>28,002,450.67</td>
</tr>
</tbody>
</table>

In 2014 the value of the Receivable Turnover ratio can be calculated as follows:

\[
\text{Receivable Turn Over} = \frac{1,221,802,028.60}{64,421,342.56} = 18.96 \text{ times}
\]

The 2014 Receivable Turnover calculation results show that the ratio of Receivable Turnover for the receivables of the cooperative employees of the Republic of Indonesia Karya Bhakti Palu is 18.96 times.

In 2015, the value of the Receivable Turnover ratio can be calculated as follows:

\[
\text{Receivable Turn Over} = \frac{324,483,208.60}{62,184,178.72} = 8.72 \text{ times}
\]

The results of the 2015 Receivable Turnover calculation show that the ratio of Receivable Turnover for the receivables of the cooperative employees of the Republic of Indonesia Karya Bhakti Palu is 8.72 times.

In 2016 the value of the Receivable Turnover ratio can be calculated as follows:

\[
\text{Receivable Turn Over} = \frac{438,203,058.78}{50,253,360.25} = 8.72 \text{ times}
\]

The results of the 2016 Receivable Turnover calculation show that the ratio of Receivable Turnover for the receivables of the cooperative employees of the Republic of Indonesia Karya Bhakti Palu is 8.72 times.

In 2017 the value of the Receivable Turnover ratio can be calculated as follows:

\[
\text{Receivable Turn Over} = \frac{326,622,050.70}{39,510,634.83} = 8.26 \text{ times}
\]
The 2017 Receivable Turnover calculations show that the ratio of Receivable Turnover for the receivables of the cooperative employees of the Republic of Indonesia Karya Bhakti Palu is 8.26 times.

In 2018 the value of the Receivable Turnover ratio can be calculated as follows:

\[ \text{Receivable Turnover} = \frac{388,617,636.64}{28,002,450.67} = 13.87 \text{ times} \]

The results of the 2018 Receivable Turnover calculation show that the ratio of Receivable Turnover for the receivables of the cooperative employees of the Republic of Indonesia Karya Bhakti Palu is 13.87 times.

**Table 7. Cooperative Employees of the Republic of Indonesia Karya Bhakti Palu**

<table>
<thead>
<tr>
<th>Year</th>
<th>Lending</th>
<th>Average Receivables</th>
<th>Rio(times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1,221,802,028.60</td>
<td>64,421,342.56</td>
<td>18.96</td>
</tr>
<tr>
<td>2015</td>
<td>719,981,734.78</td>
<td>62,184,178.72</td>
<td>11.57</td>
</tr>
<tr>
<td>2016</td>
<td>438,203,058.78</td>
<td>50,253,360.25</td>
<td>8.72</td>
</tr>
<tr>
<td>2017</td>
<td>326,622,050.70</td>
<td>39,510,634.83</td>
<td>8.26</td>
</tr>
<tr>
<td>2018</td>
<td>388,617,636.64</td>
<td>28,002,450.67</td>
<td>13.87</td>
</tr>
</tbody>
</table>

The table above shows that the average performance of receivables or Receivable Turn Over (RTO) of the Republic of Indonesia employee cooperative Karya Bhakti Palu has decreased. This is shown in the RTO that occurred in 2014 of 18.96 times. In 2015 there was a substantial decline in RTO, namely 11.57 times or a decrease of 7.39 from the previous year. In the following year, namely 2016, the RTO continued to decrease by 8.72. In 2017 it again decreased to 8.26 times. In 2018 there was a huge increase in RTO, namely 13.87 times or an increase of 5.61. The company's RTO performance reached its highest point in 2014 at 18.96 times. The company's RTO performance reached its highest point in the last five years. RTO performance in 2014 was 18.96 times due to a large amount of lending, which was Rp. 1,221,802,028.60,- followed by high average receivables of IDR 70,932,883.10. - resulting in a very high cooperative RTO level. While in 2015 and 2016, RTO's performance declined from the previous year. This can be seen in the average number of receivables, which continued to decline. This is because the provision of cooperative loans has also decreased, namely from Rp. 719,981,734.78. - in 2015 to Rp. 438,203,058.78. - in 2017 this year, there was a decrease in the lowest RTO from the last five years of management of cooperative receivables. The RTO value was 8.26. This can be seen in the amount of lending in 2017, which was very low, Rp. 326,622,050.70,-. When compared to lending in 2018, which was Rp. 388,617,636.64 .-. This proves that cooperatives are trying to improve the performance of their receivables by increasing their lending. Still, the performance of cooperative RTOs can only be effective if an increase always follows an increase in the number of loans in the average amount of receivables. So that cooperatives have not been able to reduce to a minimum the number of overdue receivables, even though the...
higher the turnover rate of a cooperative's receivables, the better the management of its receivables, and also if the high turnover rate means that the shorter the time bound for capital in receivables.

CONCLUSION
This study concludes that several ratios, namely the arrears ratio, Billing Ratio, and Receivables turnover ratio. From 2014 – 2018 is going well.

SUGGESTION
It is suggested to the Republic of Indonesia Civil Service Cooperative Karya Bhakti Palu to further maximize performance and excellent service for its members because the success of the savings and loan business in cooperatives is also very much determined by how the members manage the cooperative business itself.

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