Asset-Liability Management: A Comparative Study of Dashen Bank and Commercial Bank of Ethiopia

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Abstract
Assets and liabilities management (ALM) is a dynamic process of planning, organizing, coordinating and controlling the assets and liabilities – their mixes, volumes, maturities, yields and costs in order to achieve a specified net income. Although there have been studies on the asset-liability management of Commercial Banks in the other parts of the world, in Ethiopia specifically on Dashen Bank and Commercial Bank of Ethiopia there is no research has been made so far and to the best of the researcher’s knowledge on this issue. The main objective of the study is to asses and compares the asset-liability management of the Commercial Bank of Ethiopia and Dashen Bank. For the purpose of the study secondary data is drawn from the balance sheets and income statements of the two Commercial Banks. The study is used data from the year 2005 to 2009. The major findings of the study indicate that in terms of asset and liability management Dashen Bank was better than Commercial Bank of Ethiopia, but in terms of liquidity management and cost/ non-interest expenses management Commercial Bank of Ethiopia was better than Dashen Bank. Finally, the study suggested that the Commercial Bank of Ethiopia’s management has to work to use its assets and manage its liabilities. On the other hand Dashen Bank’s management has to work to manage the liquidity and cost / non-interest expenses.

Key words: Asset management, liability management, Liquidity management, cost /non-interest expenses management

1. Background of the Study
There have been various definitions of asset-liability management (ALM). According to Vaidyanathan (1999), asset-liability management basically refers to the process by which an institution manages its balance sheet in order to allow for alternative interest rate and liquidity scenarios. Banks and other financial institutions provide services which expose them to various kinds of risks like credit risk, interest risk, and liquidity risk and asset liability-management is an approach that provides institutions with protection that makes such risk acceptable.
Asset liability management is the management of the overall balance sheet-comprises the strategic planning and implementation and the control process that affects the volume, mix, maturity, interest sensitivity, quality, and liquidity of a bank’s assets and liabilities (Greuning & Bratanovic, 2003). It is the act of planning, acquiring, and directing the flow of funds through a financial organization to generate adequate and stable earnings, maintain adequate liquidity and steadily build capital, while taking reasonable and measured business risks.
In a competitive financial market, Banks ALM provides signal to depositors and investors whether to withdraw or invest funds from and to the Banks respectively. ALM is mainly the management of balance sheet and the objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decision (Cole & Featherstone, 1997)
Asset- liability management is generally an important tool to measure the liquidity position and profitability of the Banks, and maintain the overall soundness and health of Banks through mitigating risk exposures. Therefore, the assessment of ALM and identification of their weakness and strengths using asset liability management indicators makes a contribution to the management, shareholders, the regulator (the government), the public (customer of the bank), the financial sector, and the economy as a whole.
These days Dashen Bank and Commercial Banks of Ethiopia are essential Banks in Ethiopia and give financial service to the customers. Therefore, the aim of this study is to assess the comparative asset-liability management of Dashen Bank and Commercial Bank of Ethiopia respectively.
2. Statement of the Problem
A number of researchers have carried on their studies on the asset-liability management of Commercial Banks either at country level or on a specific Bank level. Among them are Murthy (2003), Zawalinska (1999), Charumathri (2008), Romanyuk (2010) and Giandomenico & Rossano (2008). Although there have been studies on the asset-liability management of Commercial Banks in the other parts of the world, in Ethiopia specifically on Dashen Bank and Commercial Bank of Ethiopia there is no research has been made so far and to the best of the researcher’s knowledge on this issue. Therefore, the researcher is motivated to make the studies on asset-liability management of the Dashen Bank and CBE on the basis of the following research questions.

3. Research Questions
1. How do Dashen Bank and Commercial Bank of Ethiopia manage their assets?
2. How do Dashen Bank and Commercial Bank of Ethiopia manage their liabilities?
3. What looks like the liquidity management of Dashen Bank and CBE?
4. What looks like the cost (non-interest expenses) management of Dashen Bank and CBE?

4. Objectives of the Study
The overall objective of the study was to assess and compares the asset-liability management (ALM) of Dashen Bank and Commercial Bank of Ethiopia.
The Specific Objectives of the study was to assess the asset, liability, liquidity and cost (non-interest expenses) management of Dashen Bank and Commercial Bank of Ethiopia.

5. Methodology of the Study
To accomplish the aforementioned research objectives, the researcher used secondary data from audited financial statements of Dashen Bank and Commercial Bank of Ethiopia. The audited financial statements of Dashen Bank and CBE covering the period 2005-2009 is used for calculating key financial ratios in order to assess the asset-liability management. In view of identifying the gap in the asset-liability management of Dashen Bank and CBE, the researcher applied a comparative evaluation of Dashen Bank and CBE financial ratios using statistical package for social science (SPSS) software version 16. Two sample T-test was used to test the overall asset-liability management of these banks in terms of the four asset liability management indicators. Paired sample T-test analysis was used to test the hypothesis for the significant difference between the asset-liability management indicator ratios of Dashen Bank and CBE. The interpretation of the results is done at 95 percent level of confidence.

5.1. Data Analysis
Quantitative methods of descriptive data analysis were used to analyze the data obtained from documents. This study was focused on the financial ratio analysis and presented the trend and comparative approaches. The collected data was analyzed quantitatively by using, tables, mean and percentages.

6. Results and Analysis
There are many useful financial ratios can be applied to evaluate bank’s ALM. The order below was followed for the analysis of the data.

6.1 Asset Management
Asset Management provides institutional, high-net-worth and individual investor clients with high quality global investment management in equities, fixed income, real assets, private equity and cash liquidity. Asset management ratios are the key to analyzing how effectively and efficiency a Bank is managing its assets to produce revenue.

A. Return on Assets Ratio (ROA)
ROA ratio gives an idea as to how efficient management is at using its assets to generate earnings. This ratio is computed as: \[
\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}.\]
As it can be seen from the table 4.1 from the year 2005 to 2008 the ROA ratio of Dashen Bank is greater than the ROA ratio of CBE. This implies Dashen Bank was earning more money on less investment than CBE. And also the average ROA ratio (2.746 percent) of Dashen Bank exceeded the average ROA ratio (2.376 percent) of Commercial Bank of Ethiopia. This further shows that there is a gap between Dashen Bank and CBE. Thus, Dashen bank has the greater capacity to sustain the utilization or employment of assets to generate net income than CBE.

B. Asset Yield/Asset Utilization Ratio (AUR)

Asset Utilization Ratio (AUR) indicates how efficiently a Bank uses its resources and, in turn, the effectiveness of the bank’s managers. It is calculated as: \[ \text{AUR} = \frac{\text{Total operating income}}{\text{Total Asset}} \]

As shown in the table, in all fiscal years the asset utilization ratio of Dashen Bank exceeded the asset utilization ratio of CBE. In addition, the average AUR of DB (6.12 percent) exceeded the average AUR of CBE (4.43 percent). This indicates Dashen Bank has better asset employment practice to generate operating income than commercial bank of Ethiopia.

C. Earning Assets Ratio (EAR)

EAR consists of earning assets (interest-bearing investments, loans and advances) divided by total assets. It will reveal the extent to which bank's assets are put into productive use (Selvavinayagam, 1995). The ratio is computed as: \[ \text{EAR} = \frac{\text{Earning Assets}}{\text{Total Assets}} \]

From this table the trends in EAR of Dashen Bank decreased from the year 2006 to 2009 (from 68.37 percent to 44.98 percent). This implies Dashen Bank is reduced the investment in assets and this could be lead to lose revenue, hurt profitability and free cash flows. In contrary, EAR of CBE increased from year to year (from 53.16 percent in the year 2005 to 76.58 percent in the year 2009). Except in the year 2005, earning assets ratio of CBE exceeded earning assets ratio of Dashen Bank. In addition, the average EAR of CBE (68.58 percent) exceeded the average EAR of Dashen Bank (59.64 percent) which indicates CBE has better practices to put its assets into productive use than Dashen Bank.

6.2 Liability Management

Liability management decisions affect profitability by determining interest expense on borrowed funds; noninterest expense associated with check handling costs, personnel costs, and fixed assets; and noninterest income from fees and deposit service charges.

A. Debt-Equity Ratio (DER)

This ratio indicates how much the company is leveraged (in debt) by comparing what is owed to what is owned. It is calculated as: \[ \text{DER} = \frac{\text{Liability or Debt}}{\text{Equity}} \]
Table 4.4 Debt-Equity Ratio (DER) (times)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>13.07</td>
<td>10.78</td>
<td>10.08</td>
<td>9.71</td>
<td>9.71</td>
<td>10.67</td>
</tr>
<tr>
<td>CBE</td>
<td>22.21</td>
<td>22.80</td>
<td>9.30</td>
<td>10.06</td>
<td>10.79</td>
<td>15.032</td>
</tr>
</tbody>
</table>

Source: researcher's own computation from the financial statement

Table 4.4 illustrates except the year 2007 the DER of Dashen bank was less than CBE. In addition, the average DER of Dashen Bank was less than the average debt to equity ratio of CBE. This implies that CBE was highly dependent on the fund generated from creditors or it is highly leveraged when it compares to Dashen Bank.

B. Debt to Total Assets Ratio (DTAR)

It helps you see how much of your assets are financed using debt financing. The lower the debt to asset ratio, the better, as banks with high amounts of debt introduce more risk. This is calculated as: $\text{DTAR} = \frac{\text{Total debt}}{\text{Total asset}}$.

Table 4.5 Debt to Total Assets Ratio (DTAR) (%)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>92.89</td>
<td>91.51</td>
<td>90.98</td>
<td>90.66</td>
<td>90.66</td>
<td>91.34</td>
</tr>
<tr>
<td>CBE</td>
<td>95.69</td>
<td>95.80</td>
<td>90.29</td>
<td>90.96</td>
<td>91.52</td>
<td>92.852</td>
</tr>
</tbody>
</table>

Source: researcher's own computation from the financial statement

As it is shown in the Table 4.5 above, except in the year 2007 the debt to total asset ratio of DB was less than the debt to total asset ratio of Commercial Bank of Ethiopia. In addition to this, the average debt to total asset ratio of CBE exceeded the debt to total asset ratio of Dashen Bank. This implies that from the CBE’s total assets in average, 92.85 percent of the assets were financed by the fund generated from the creditors this was greater than Dashen bank 91.34 percent.

C. Equity Multiplier (EMR)

The equity multiplier ratio is used to measure a bank’s total assets against stockholder’s equity, providing a way for investors to examine the level to which a bank uses debt to finance its assets. It is calculated as: $\text{EMR} = \frac{\text{Total Assets}}{\text{Total Stockholders' Equity}}$.

Table 4.6 Equity Multiplier Ratio (EMR) (times)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>14.07</td>
<td>11.78</td>
<td>11.08</td>
<td>10.71</td>
<td>10.71</td>
<td>11.67</td>
</tr>
<tr>
<td>CBE</td>
<td>23.21</td>
<td>23.80</td>
<td>10.30</td>
<td>11.06</td>
<td>11.79</td>
<td>16.032</td>
</tr>
</tbody>
</table>

Source: researcher's own computation from the financial statement

In the above table EMR of Dashen Bank has shown continuous decline starting from 2005 to 2009. Even though CBE’s EMR has fluctuated trend, it was decreased from 23.21 times in the year 2005 to 11.79 times in the year 2009. Except in the year 2007 the EMR of CBE exceeded the equity multiplier ratio of Dashen bank. In addition to this, the average EMR of CBE (16.03 times) exceeded Dashen bank (11.67 times). Which indicates the contribution of creditors in financing assets of Dashen Bank was less than CBE.

6.3 Liquidity Management

Liquidity analysis quantifies the ability of the banks to meet debts as they fall due. This ability depends not only on the extent of conversion of assets without loss but also on the bank's ability to raise loans in the market to meet debts, that is the broader aspects of asset and liability management (Selvavinyagam, 1995).

A. Liquid Asset to Deposit Ratio (LADR)

It indicates the percentage of deposits and short term funds that are available to meet the sudden withdrawals. This figure is determined as follows: $\text{LADR} = \frac{\text{Liquid Asset}}{\text{Customer Deposit}}$. 

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Table 4.7 Liquid Asset to Deposit Ratio (LADR) (%)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>36.04</td>
<td>31.12</td>
<td>34.38</td>
<td>47.40</td>
<td>59.33</td>
<td>40.854</td>
</tr>
<tr>
<td>CBE</td>
<td>68.87</td>
<td>74.97</td>
<td>78.06</td>
<td>47.40</td>
<td>35.91</td>
<td>61.042</td>
</tr>
</tbody>
</table>

Source: researcher's own computation from the financial statement

As illustrated in the table, except the years of 2008 and 2009 LADR of CBE exceeded LADR of Dashen bank. The table also shows the average LADR of CBE (61.04 percent) greater than the average liquidity ratio of Dashen bank (40.85 percent). It indicates CBE has sufficient liquidity position to meet the sudden withdrawals when it compares to Dashen Bank.

B. Liquid Assets to Total Assets Ratio (LATAR)

This ratio measures the percentage of total assets that are invested in liquid assets. Liquid assets often pay no interest or have a lower yield because there is very little risk. Only enough funds to meet liquidity needs should be maintained in liquid assets (World Council of Credit Unions, 2002). This figure is determined as follows: \( \text{LATAR} = \frac{\text{Total cash resources}}{\text{assets}}. \)

Table 4.8 Liquid Assets Ratio (LATAR) (%)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>29.85</td>
<td>25.27</td>
<td>27.66</td>
<td>37.25</td>
<td>48.31</td>
<td>33.668</td>
</tr>
<tr>
<td>CBE</td>
<td>52.67</td>
<td>59.16</td>
<td>59.05</td>
<td>35.38</td>
<td>26.29</td>
<td>46.51</td>
</tr>
</tbody>
</table>

Source: researcher's own computation from the financial statement

As indicated in the table, the trends in LATAR of Dashen Bank has increased from year to year except the year 2006 which was decreased to 25.27%, and the trends in LATAR of CBE decreased except the year 2006 which was increased to 59.16%, the average LATAR of CBE (46.51%) exceeded the average liquid assets to total assets ratio of Dashen bank (33.67%). This indicates Commercial Bank of Ethiopia had high level of liquid assets and the Bank is met withdrawals by its customers when it compares to Dashen Bank.

C. Loan to Deposit Ratio (LDR)

The loan to deposit ratio is used to calculate a bank's ability to cover withdrawals made by its customers. The ratio is calculated as: \( \text{LDR} = \frac{\text{Total Loans}}{\text{Total Deposit}}. \)

Table 4.9 Loan to Deposit Ratio (LDR) (%)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>78.79</td>
<td>85.70</td>
<td>82.04</td>
<td>71.23</td>
<td>56.18</td>
<td>74.788</td>
</tr>
<tr>
<td>CBE</td>
<td>37.67</td>
<td>32.86</td>
<td>29.68</td>
<td>46.07</td>
<td>48.07</td>
<td>38.87</td>
</tr>
</tbody>
</table>

Source: researcher's own computation from the financial statement

As it can be seen from table 4.9 above, even though the loan to deposit ratio of Dashen Bank decreased in the years 2008 and 2009 and increased in CBE in these years, the loan to deposit ratio of CBE is less than Dashen Bank in all fiscal years. In addition, the average loan to deposit ratio of CBE (38.87%) was less than Dashen bank (74.79%) which indicates on average CBE has granted 38.87% of its deposits as a loan to its customers.

D. Loans to Assets Ratio (LAR)

This ratio measures the percentage of total assets that are invested in the loan portfolio. This figure is determined as follows: \( \text{LAR} = \frac{\text{Total Loans}}{\text{Total Assets}}. \)

Table 4.10 Loans to Assets Ratio (LAR) (%)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>65.26</td>
<td>69.60</td>
<td>66.02</td>
<td>55.97</td>
<td>45.74</td>
<td>60.518</td>
</tr>
<tr>
<td>CBE</td>
<td>28.81</td>
<td>25.93</td>
<td>22.46</td>
<td>34.39</td>
<td>35.19</td>
<td>29.356</td>
</tr>
</tbody>
</table>

Source: researcher's own computation from the financial statement
The table reported above clearly shows, the loan to asset ratio of CBE was less than the loan to asset ratio of Dashen Bank in all fiscal years. In addition the average LAR of the CBE (29.36 percent) was less than the average LAR of Dashen bank (60.52 percent). It indicates the CBE has good liquidity position when it compares to Dashen Bank.

6.4 Cost (Non-Interest Expenses) Management
Cost management refers to issues related to management of non – interest expenses like staff expenses and administration expenses.

A. Overhead Burden Ratio (OBR)
Overhead burden ratio shows the expense burden (net of other income) on the bank’s net interest income. The lower the ratio the higher is the cost management and productivity. This is calculated as follows: \( \text{OBR} = \frac{\{\text{Non-Interest Expenses} – \text{Other Income}\}}{\text{Net Interest Income}}. \)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>11.82</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2.364</td>
</tr>
<tr>
<td>CBE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: researcher’s own computation from the financial statement.

As shown in the table except in the year 2005, both DB&CBE has uniform overhead burden ratio (0%) from the year 2006 to 2009. On the other hand, average overhead burden ratio of Dashen bank (2.364 %) exceeded the average overhead burden ratio of CBE (0%) this indicates all of the CBE’s costs (non-interest expenses) were covered by other income.

B. Productivity or Cost to Income Ratio (PR)
PR is the most popular ratio to analyze cost management in banking. Low cost to income ratios indicating good cost management and high productivity. This ratio is determined as follows: \( \text{PR} = \frac{\{\text{Non-Interest Expenses}\}}{\{\text{Net Interest Income + Other Income}\}}. \)

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>46.70</td>
<td>38.33</td>
<td>34.18</td>
<td>34.45</td>
<td>36.69</td>
<td>38.07</td>
</tr>
<tr>
<td>CBE</td>
<td>27.95</td>
<td>25.03</td>
<td>38.49</td>
<td>23.38</td>
<td>16.02</td>
<td>26.178</td>
</tr>
</tbody>
</table>

Source: researcher’s own computation from the financial statement.

As shown in the Table Dashen Bank achieved the best productivity ratio at 34.18% in the year 2007, that is, its cost to income ratio was the lowest. It is also clear that CBE achieved the best productivity ratio at 16.02% in the year 2009, that is, its cost to income ratio was the lowest. In general, the average productivity (or cost / income) ratio of CBE (26.178%) was less than the average productivity (or cost / income) ratio of Dashen bank. This indicates that the CBE generate operating income by minimum cost than Dashen bank.

6.5 Hypothesis Testing Using T – Test
The four hypotheses that were developed and tested under this study are:

\( H_{a1} \): There is no significance difference in the asset management between DB and CBE.
\( H_{a2} \): There is no significance difference in the liability management between DB and CBE.
\( H_{a3} \): There is no significance difference in the liquidity management between DB and CBE.
\( H_{a4} \): There is no significance difference in the non-interest expenses management between DB and CBE.
6.5.1 Test of Asset Management

Table 4.13 Paired Samples T-test for Asset Management of CBE&DB.

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA\textsubscript{CBE}-ROA\textsubscript{DB}</td>
<td>-.36714</td>
<td>.65507</td>
<td>-1.18051</td>
<td>.44623</td>
<td>-1.253</td>
<td>4</td>
</tr>
<tr>
<td>AUR\textsubscript{CBE}-AUR\textsubscript{DB}</td>
<td>-1.696</td>
<td>.8442</td>
<td>-2.74422</td>
<td>-.64778</td>
<td>-4.492</td>
<td>4</td>
</tr>
<tr>
<td>EAR\textsubscript{CBE}-EAR\textsubscript{DB}</td>
<td>9.14198</td>
<td>16.42199</td>
<td>-11.24861</td>
<td>29.53257</td>
<td>1.245</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: researcher’s own computation  \( \alpha = 0.05 \)

From three of the asset management measures (ROA and EAR) of CBE the two tailed sig-t is greater than \( \alpha \). In this regarded Ho is accepted. In contrary, the AUR of Commercial Bank of Ethiopia the two tailed sig-t is less than \( \alpha \). In this regarded Ho is rejected. Therefore, there is no significant gap in asset management performance between CBE and Dashen Bank with regarding to the two asset management measures. But, in the AUR there is significant gap between CBE and Dashen Bank in terms of utilization of assets to generate operating income.

6.5.2 Test of Liability Management

Table 4.14 Paired Samples T-test for Liability Management of CBE&DB.

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DER\textsubscript{CBE}-DER\textsubscript{DB}</td>
<td>4.36032</td>
<td>5.80895</td>
<td>-2.85245</td>
<td>11.57309</td>
<td>1.678</td>
<td>4</td>
</tr>
<tr>
<td>DTAR\textsubscript{CBE}-DTAR\textsubscript{DB}</td>
<td>1.50888</td>
<td>2.00838</td>
<td>-.98485</td>
<td>4.00261</td>
<td>1.680</td>
<td>4</td>
</tr>
<tr>
<td>EM\textsubscript{CBE}-EM\textsubscript{DB}</td>
<td>4.36036</td>
<td>5.80892</td>
<td>-2.85237</td>
<td>11.57309</td>
<td>1.678</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: researcher’s own computation  \( \alpha = 0.05 \)

As shown in the above table 4.14, in all three liability management performance measures (DER, DTAR, and EMR) of CBE the two tailed sig-t is greater than \( \alpha \). In this regarded Ho is accepted. Therefore, there is no significant gap in the liability management performance between CBE and Dashen Bank. The lower mean values of DER, DTAR, and EMR of the CBE could be one reason for the insignificant mean differences between the liability management practices of the Banks with regard to these ratios.
6.5.3 Test of Liquidity Management

Table 4.15 Paired Samples T-test for Liquidity Management of CBE&DB.

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LADR&lt;sub&gt;CBE&lt;/sub&gt;-LADR&lt;sub&gt;DB&lt;/sub&gt;</td>
<td>20.1876</td>
<td>29.30596</td>
<td>-16.20056</td>
<td>56.57576</td>
<td>1.540</td>
<td>.198</td>
</tr>
<tr>
<td>LATAR&lt;sub&gt;CBE&lt;/sub&gt;-LATAR&lt;sub&gt;DB&lt;/sub&gt;</td>
<td>12.8398</td>
<td>24.07186</td>
<td>-17.04936</td>
<td>42.72896</td>
<td>1.193</td>
<td>.299</td>
</tr>
<tr>
<td>LDR&lt;sub&gt;CBE&lt;/sub&gt;-LDR&lt;sub&gt;DB&lt;/sub&gt;</td>
<td>-35.9144</td>
<td>19.19006</td>
<td>-12.08676</td>
<td>-59.74196</td>
<td>-4.185</td>
<td>.014</td>
</tr>
<tr>
<td>LAR&lt;sub&gt;CBE&lt;/sub&gt;-LAR&lt;sub&gt;DB&lt;/sub&gt;</td>
<td>-31.1622</td>
<td>14.61698</td>
<td>-13.01282</td>
<td>-49.31158</td>
<td>-4.767</td>
<td>.009</td>
</tr>
</tbody>
</table>

Source: researcher’s own computation  \( \alpha=0.05 \)

As shown in the above table 4.15, from all four of the liquidity management performance measures the two ratios (LADR and LATAR) of CBE the two tailed sig-t is greater than \( \alpha \). With regarded to this Ho is accepted. The lower mean value of the ratios could be one reason for the insignificance difference between the two Banks. On the other hand the two liquidity management measures (LDR and LAR) of CBE the two tailed sig-t is less than \( \alpha \). With regarded to this Ho is rejected. The higher mean values of LDR and LAR of the CBE further suggest that the CBE has higher level of liquidity management practice than Dashen Bank. This could be the reason for the significant mean differences between liquidity management performances of the banks with regard to these two ratios.

6.5.4 Test of Cost/Non-Interest Expenses Management

Table 4.16 Paired Samples T-test for Cost /Non-Interest Expenses Management of CBE & DB.

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBR&lt;sub&gt;CBE&lt;/sub&gt;-OBR&lt;sub&gt;DB&lt;/sub&gt;</td>
<td>-2.36362</td>
<td>5.28521</td>
<td>-8.92608</td>
<td>4.19884</td>
<td>-1.000</td>
<td>.374</td>
</tr>
<tr>
<td>PR&lt;sub&gt;CBE&lt;/sub&gt;-PR&lt;sub&gt;DB&lt;/sub&gt;</td>
<td>-11.8966</td>
<td>9.86524</td>
<td>-24.41596</td>
<td>.35268</td>
<td>-2.697</td>
<td>.054</td>
</tr>
</tbody>
</table>

Source: researcher’s own computation  \( \alpha=0.05 \)

Table 4.16 shows in all the cost/non-interest expenses management measures (OBR and PR) of CBE the two tailed sig-t is greater than \( \alpha \). In this regarded Ho is accepted. Therefore, there is no significant gap in the cost/non-interest expenses management performance between CBE and Dashen Bank. The lower mean values of the ratios could be one reason for the insignificant mean differences between the cost management performance of CBE and Dashen Bank.

7. Conclusions

Based on the analysis of the secondary data, the following conclusions are drawn:

From the three assets management ratios, ROA ratio and AUR the analysis indicates that Dashen Bank had better management of its assets than CBE. But, with regard to earning assets ratio (EAR), the study shows that CBE has better capacity in utilizing its assets in productive use than Dashen Bank. In addition, the two asset management measures (ROA and EAR) of CBE the two tailed sig-t is greater than \( \alpha \). This indicates that there is no significant gap in the asset management performance between CBE and Dashen Bank. On the other hand the AUR of CBE based on the two tailed sig-t is lower than \( \alpha \), and this shows statistically that there is significant gap between the AUR of Dashen Bank and
commercial bank of Ethiopia. This indicates that the performance of Dashen Bank in managing its investment in assets to generate operating income is better than CBE.

With regard to liability management performance, the study indicates that DER, DTAR, and EM ratio of Dashen Bank is better than CBE. But, in all three of the liability management measures (DER, DTAR, and EM ratio) of Commercial Bank of Ethiopia, the two tailed sig-t is greater than α. Therefore, even though the liability management of Dashen Bank is better than CBE, there is no significant gap in the liability management practice between Dashen Bank and commercial Bank of Ethiopia.

The study also indicates that the liquidity management performance measures (LADR, LATAR, LDR and LAR) show that the CBE has better liquidity management practice than Dashen Bank. Furthermore, the LADR and LATAR of Commercial Bank of Ethiopia indicate that the two tailed sig-t is greater than α. Therefore, even if the liquidity management of CBE was better than Dashen Bank, there is no significant gap in the liquidity management practices between CBE and Dashen Bank with regard to these ratios. On the other hand the LDR and LAR of CBE indicate that the two tailed sig-t is less than α, and this shows statistically that there is significant gap in the liquidity management between the CBE and Dashen Bank. From this, it can be concluded that CBE has better liquidity management practice than Dashen Bank.

With regard to cost/non-interest expenses management or management of non-interest expenses, the analysis shows that OBR and PR of Commercial Bank of Ethiopia are better than Dashen Bank. But, in terms of OBR and PR of CBE, the two tailed sig-t is greater than α. Therefore, there is no significant gap in the cost/non-interest expenses management practice between CBE and Dashen Bank.

8. Recommendations
On the basis of the findings and conclusions reached, the following recommendations are forwarded:

1. CBE has lower capacity to generate income by using its assets than Dashen Bank. So, CBE’s management has to further increase the asset management performance (employment/utilization of its assets) so as to generate net profit and operating income.

2. When it compared, Dashen bank had inefficient management/utilization of its assets period. Therefore, Dashen Bank’s management has to work further to increase the management/utilization of its assets by investing in different investment areas.

3. The liability management ratios of CBE are greater than Dashen Bank. This implies that the CBE is more dependent on funds from creditors of the company than Dashen Bank; this may be risky for the overall sustainability of the CBE when compared to Dashen Bank. Therefore, the CBE’s management has to take full advantage of its liability management practice in order to improve the performance of the bank.

4. Dashen bank has lower liquidity management than CBE. Therefore, Dashen bank’s management has to work to maximize the liquidity management practice.

5. Dashen Bank has cost management problem/over head risk when compared with commercial bank of Ethiopia. Therefore, Dashen bank’s management need to take measures that could decrease its PR by managing its non interest expenses.

9. Bibliography


Yesuf, L. (2010). Performance evaluation of the commercial bank of Ethiopia: - pre and post liberalization. Mekelle University, Department of AcFn.