# Essentials for Ratio Analysis

Ratio analysis is the calculation and comparison of ratios which are derived from the information in a company’s financial statements. Financial ratios are usually expressed in percentages or times or rupees.

## Ratios Required for Banks/DFIs

1. Net Profit Margin  
2. Gross Spread Ratio  
3. Spread Ratio  
4. Non Interest Income to Total Income Ratio  
5. Return on Assets (ROA)  
6. Du Pont Return on Assets Ratio  
7. Return on Equity (ROE)  
8. Debt Ratio  
9. Debt / Equity Ratio  
10. Times Interest Earned Ratio  
11. Advances / Deposits Ratio  
12. Operating Cash Flow Ratio  
13. Dividend per Share  
14. Earning per Share  
15. Price/Earning Ratio

## Ratios Required for Other Companies

1. Current Ratio  
2. Acid Test Ratio  
3. Working Capital  
4. Times Interest Earned  
5. Debt Ratio  
6. Debt / Equity Ratio  
7. Net Profit Margin  
8. Gross Profit Margin  
9. Return on Assets (ROA)  
10. Operating Income Margin  
11. Return on Equity  
12. Assets Turnover Ratio  
13. Operating Cash Flow Ratio  
14. Dividend per Share  
15. Earning per Share
Ratios Required for Insurance Companies

1) Debt Ratio
2) Debt / Equity Ratio
3) Return on Assets(ROA)
4) Return on Equity
5) Operating Cash Flow Ratio
6) Dividend per Share
7) Earning per Share
8) Net Claims to Net Premiums Ratio
9) Expenditures (Management expenses) to Total Net Income Ratio
10) Net premiums to Gross Premiums Ratio
11) Underwriting expenses to Net Premiums Ratio
12) Outstanding Claims to Net Claims Ratio
13) Net Investment Income to Total Investments Ratio
14) Growth in Net Premiums Ratio
15) Net premiums to Total Income/Revenue Ratio

Presentation of Ratio Analysis

Ratio analysis is a very important part of your internship report and should be presented properly.

Five Steps for Presenting Ratio Analysis

For the presentation of ratio analysis students are required to follow these five steps described below for each ratio.

Step 1-Ratio Title and Formula
Write the ratio title (definition and description is not required) and formula.
For example:
Current ratio = Current assets/current liabilities

Step 2-Calculation (with numerator and denominator)
Show the table as given below:

<table>
<thead>
<tr>
<th>Year 20X1</th>
<th>Year 20X2</th>
<th>Year 20X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show the amounts in numerator and denominator and then the final result. i.e.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>=XXX/YYY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>= ZZ Times</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

♦ Mention the unit of the respective ratio with its result such as current ratio is calculated in “Times” so write “Times” with current ratio’s result.
♦ Also round off the result up to two decimal places. E.g. if answer is 2.4659 times then it should be written as 2.46 times.
♦ Years should be presented in ascending order from left to right.
Step 3-Working
After the calculation table show how you have calculated the amounts given in numerator and denominator (for those items that require calculations).

NOTE:
If any amount is clearly provided in the financial statements then there is no need to show the working for those amounts. For example if total assets amount is provided in the financial statements no working for calculating total assets is required.

Step 4-Graphical representation
Plot the calculated ratio results on graph. Use only Column chart for graphical representation.
Show graphical representation like this:

![Current Ratio Graph](image)

NOTE:
You are not required to show Trend Analysis separately. Instead plot the graphs of each ratio according to the given specimen. In this way while showing the graphs and interpreting the ratios, you will also be performing Trend Analysis.

Step 5-Interpretation
In this section interpret the graph shown above.

Guidelines for Interpretation of Ratios
The following guidelines will help to understand what interpretation means and how it should be done.

What does interpretation of ratios mean?
Interpretation means explanation of the ratios results. It does not mean definition of ratios rather it should enable the readers to understand what the calculated ratio indicates and what the trend for that particular ratio is. It should cover the following steps:

Step 1) Result understanding: i.e. what does the answer derived from ratio calculation indicates? You have to critically analyze the result of calculated ratio by explaining the
relationship of numerator with that of a denominator. I.e. if the result of current ratio for a year is 2.1 times then what is meant by this 2.1 times. For supporting your interpretation results you will not use the values provided in the Balance Sheet of the current assets and current liabilities.

**Step 2) Trend Analysis:** i.e. what are the variations in a company’s ratio results i.e. the trend for the same company and the reasons for that change in trend?

**Step 3) Comparisons:** i.e. the company's performance (better/ poor/ same) for the three consecutive years along with reasons.

**Step 4) Bench mark (if applicable):** i.e. the comparison of ratio with the benchmark/rule of thumb/standard of that ratio in that particular industry (as these standards vary according to the type of industry selected for analysis e.g. Manufacturing, Banking, FMCG companies, etc). Also give reasoning of deviation from that standard.

**NOTE**

You will have to interpret the calculated ratios in the way described above **step wise**.

**Important Points to be Considered**

- You have to follow the same format for all the ratios that you will calculate. Remember, without formulas, working, graphs and interpretations your analysis will **NOT** be accepted.

- You must provide audited scanned copies of all the financial statements used for financial analysis. However, if you have downloaded the financial statements from organization’s website then URL or web link should be provided. In this case, scanned copies will not be required. Without providing the scanned copies or URL of the organization’s website, your work will **NOT** be accepted /evaluated. Scanned copies should be provided in the following format:

  - Resolution: 200 dpi
  - File type: JPEG
  - Size: 300-400 kb

- It is **COMPULSORY** for the students to calculate the ratios according to their organization’s sector only. E.g. a student who has done internship in a bank is required to calculate the ratios mentioned above (Ratios Required for Banks/DFIs) only. Ratios calculated other than those mentioned above will **NOT** be considered. You are required to calculate/analyze **all ratios** mentioned above. Skipping any of ratios mentioned above is **NOT** allowed.

- Ratio analysis should be conducted on audited annual reports of the company where you have done internship. However, if both consolidated as well as unconsolidated financial statements are available then make sure that you have to conduct ratio analysis on **Unconsolidated/Standalone Financial Statements**.
**Note**: Students should know the difference between unconsolidated and consolidated financial statements. Consolidated statements comprise the accounts of whole group (more than one business units) of an organization. While, on the other hand, unconsolidated statements represent the accounts of single business unit (normally a holding company).

- All those students who will provide scanned copies of financial statements in the annexure part of their report are required to ensure that the scanned financial statements should be **signed by the approved authority and should have company stamp/seal**. Otherwise scanned copies will **NOT** be considered and ratio analysis conducted on such financial statements will **NOT** be accepted.

- All these ratios have been taught to you under the subject of Financial Management (MGT201), Corporate Finance (Fin622), Financial Statement Analysis (FIN621) and Investment Analysis & Portfolio Management (FIN630). So consult handouts and reference books of these courses to get help about ratios and their formulas.

**Non Availability of Financial Statements for Ratio Analysis**

All those students who are facing difficulty in conducting ratio analysis due to non availability of the organization’s financial statements are required to discuss this issue with their Course Instructor via email at: Fini619@vu.edu.pk. They will be given guidance about how to resolve this issue as ratio analysis is a very important part of internship report and skipping this part will **NOT** be accepted at all.

Also note that ratio analysis done on any other organization (other than the one where you have done internship) will be accepted **ONLY if it is approved by your Course Instructor** via email at: Fini619@vu.edu.pk. That is why students are required to seek Course Instructor’s guidance if they do not have access to the audited annual financial statements/annual reports of the organization where they have done internship. Ratio Analysis done on another organization without getting Course Instructor approval will **NOT** be accepted.