Financial Statement Analysis

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When analysing a company’s financial statements, we are concerned about three things:

1. **Liquidity** – This is the amount of cash or assets that can be quickly turned into cash, such as the bank balance.
2. **Profitability** – This is essentially the state of making a profit for a company.
3. **Solvency** – This is the ability of a company to meet its long-term debts and financial obligations.

Mostly, banks are interested in how liquid a company is since that can help determine whether or not the company will be able to pay back loans.

Stockholders are interested in the profitability and solvency to determine if they should invest in the company. Long-term creditors may also look at these two characteristics to determine whether the company will survive for a long time.

## Comparative Analysis

It is not enough to analyse a single financial statement. To be able to understand how a company is doing, we need to compare its current financial statements with other financial statements. We can do this in three ways:

1. **Intracompany Basis** – We compare the financial statements of the current year with those of previous years.
2. **Industry Averages** – We compare the financial statements with the industry averages published by financial ratings organizations.
3. **Intercompany Basis** – We compare the financial statements of the company with those of one or more competing companies.

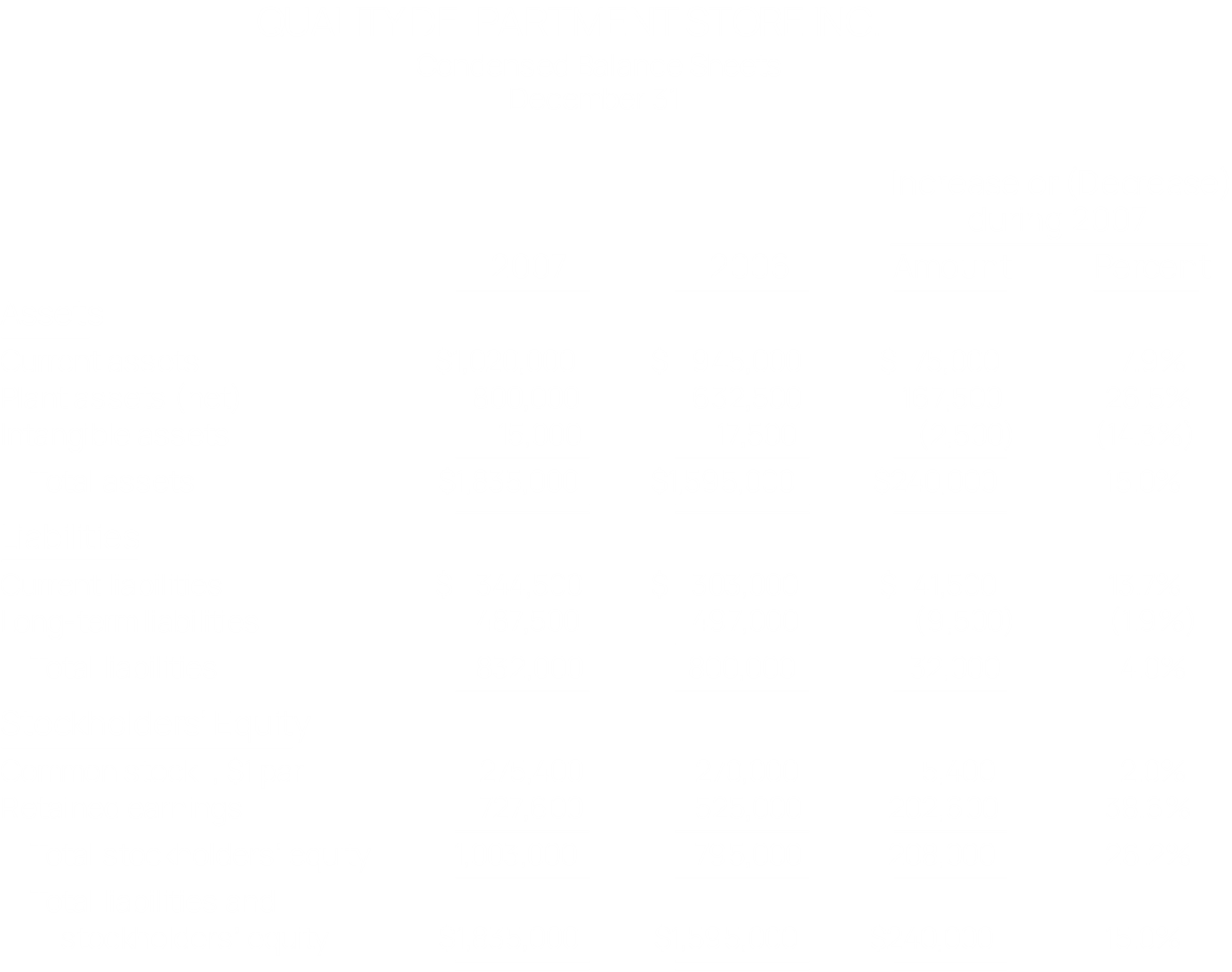
## Tools of Analysis

To perform comparative analysis, we have three tools available to us:

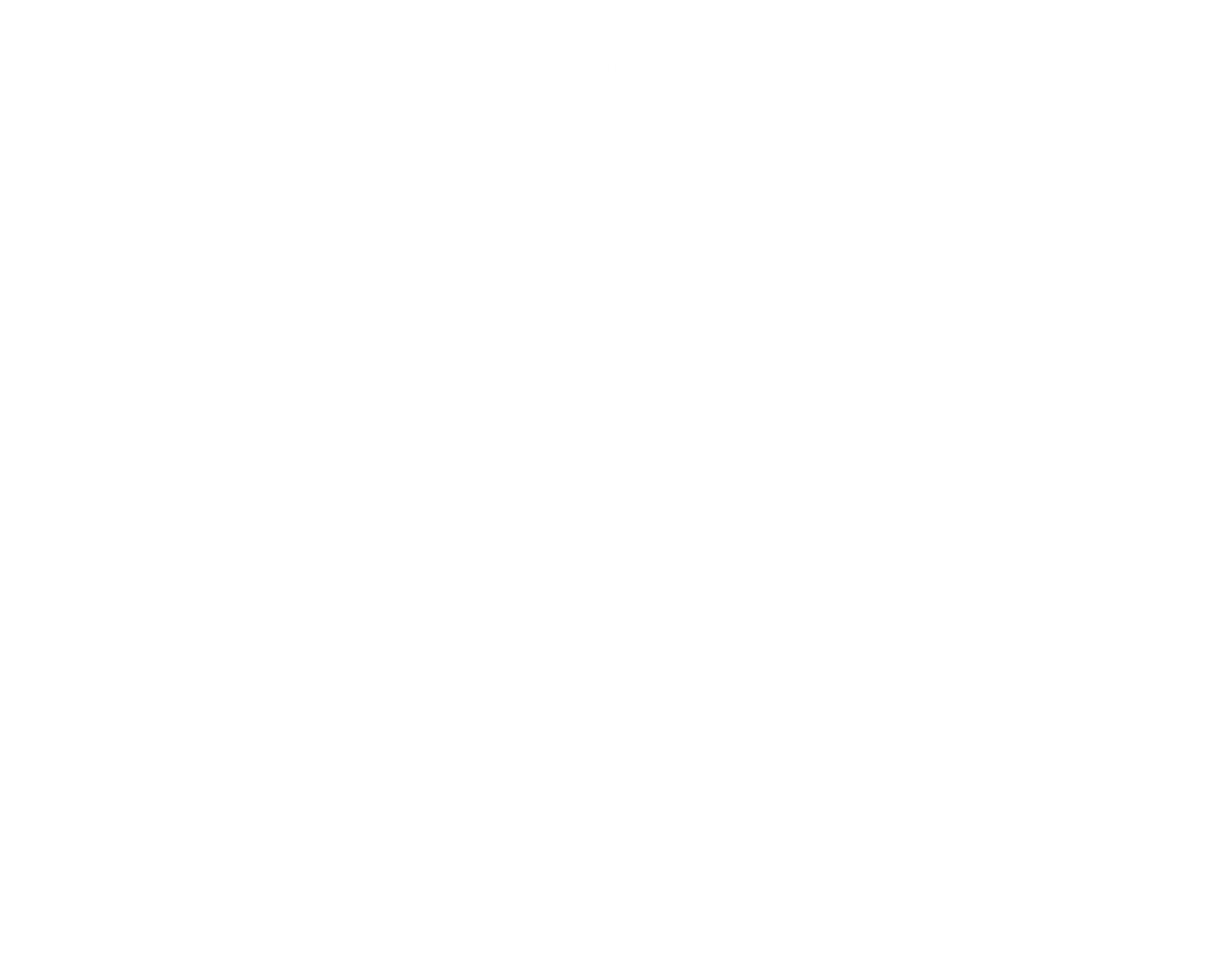
1. Horizontal Analysis
2. Vertical Analysis
3. Ratio Analysis

### Horizontal Analysis

We can apply **horizontal analysis** on a particular financial statement to determine the changes over several years. For example, consider the horizontal analysis performed on a balance sheet given below:

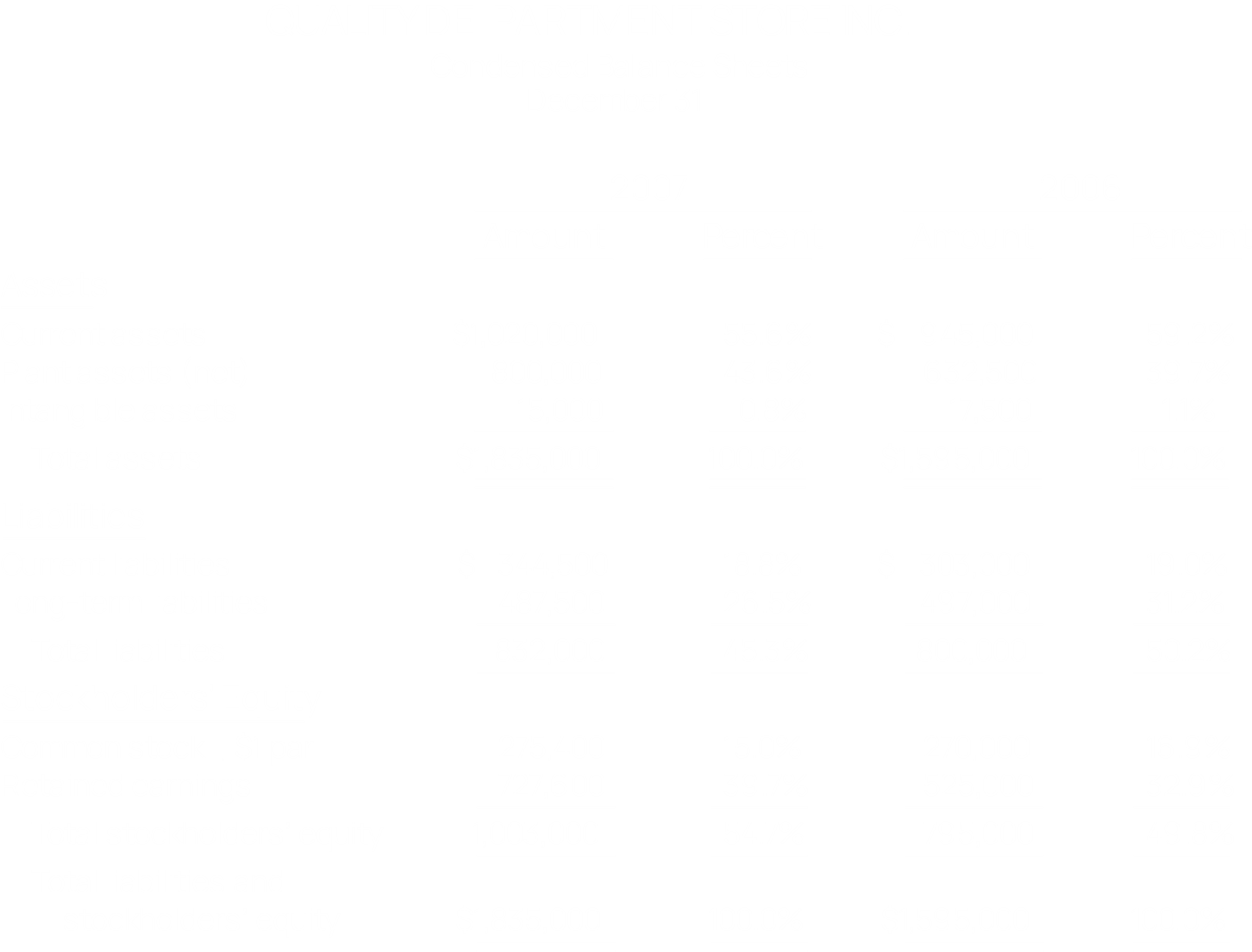


Similarly, we can perform horizontal analysis on income statements.

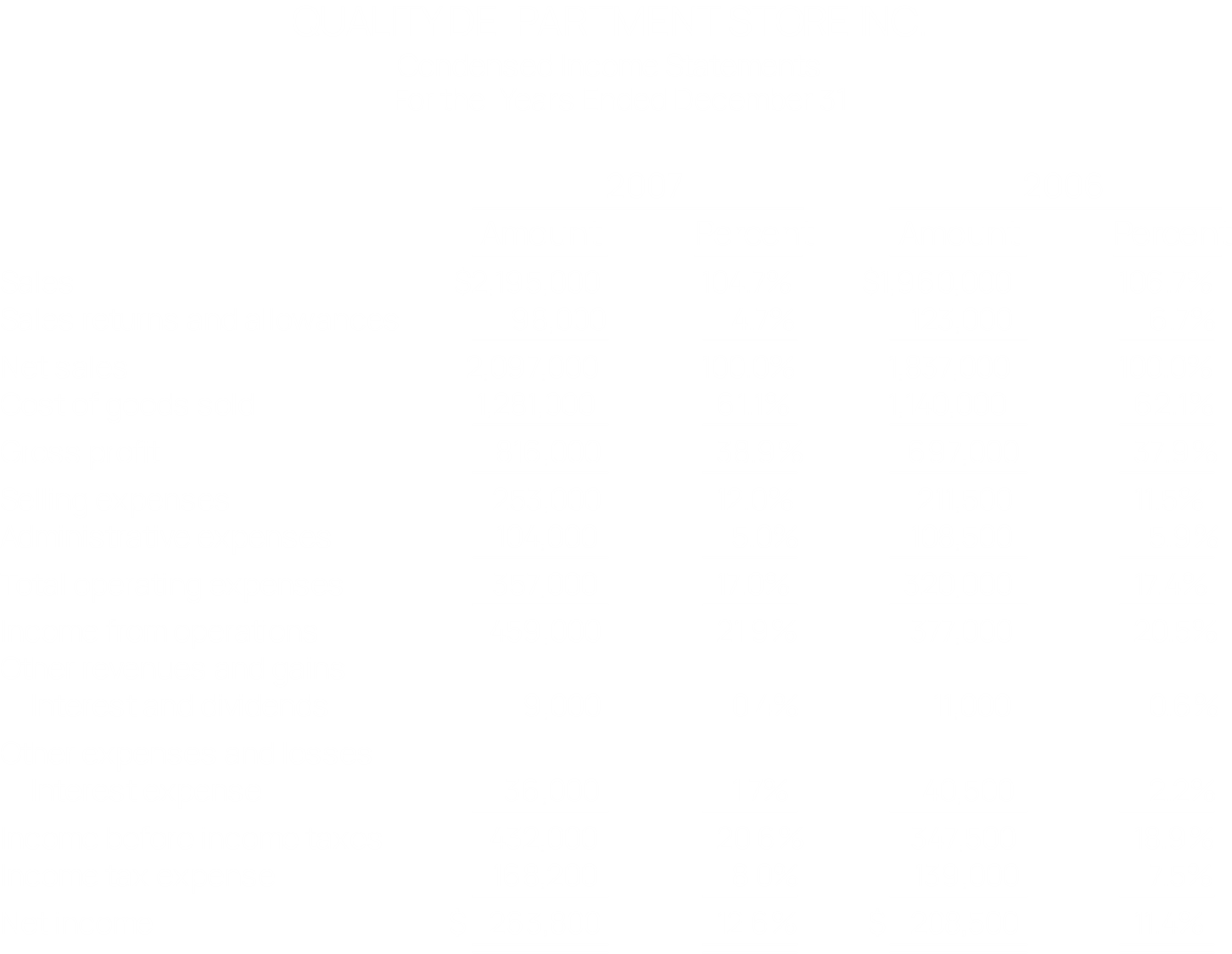


### Vertical Analysis

**Vertical Analysis** allows us to visualize the contribution of an item to the total for its category. For example, we can perform vertical analysis on a balance sheet:



We can also perform vertical analysis on an income statement. Notice that we take **net sales** as the base amount here.



### Ratio Analysis

**Ratio Analysis** involves calculating several ratios using equations. There are several types of ratios:

1. Liquidity Ratios
2. Profitability Ratios
3. Solvency Ratios

Note that the values used in the list of ratios below are purely for illustrative purposes.

**Liquidity Ratios** measure the short-term ability of a company to pay its maturing obligations while also meeting unexpected needs to cash.

Here, for the average, we are using the previous year’s and the current year’s net receivables amount.

Here, the cost of goods sold is

**Profitability Ratios** measure the income or operating success of a company for a given period of time.

Here, Net Sales is also sometimes called Net Revenue or Net Turnover.

Here, in the numerator, we also sometimes subtract the Preferred Dividend if it is given. The Preferred Dividend is the amount paid to priority stockholders before any payments are made to us commoners. is called the Retained Earnings.

**Solvency Ratios** measure the ability of a company to survive over a long period of time.

If we wish to perform ratio analysis for **multiple years**, we can use tables.

Current Ratio

|  |  |  |
| --- | --- | --- |
| Formula | 2010 | 2011 |
|  |  |  |
|  |  |  |

In summary,

|  |  |  |
| --- | --- | --- |
| **Ratio** | **Formula** | **Purpose** |
| Liquidity Ratios | | |
| Current Ratio |  | Measures short-term debt-paying ability. |
| Acid-Test (Quick) Ratio |  | Measures immediate short-term liquidity. |
| Receivables Turnover |  | Measures liquidity of receivables. |
| Inventory Turnover |  | Measures liquidity of inventory. |
| Profitability Ratios | | |
| Profit Margin |  | Measures net income generated by each dollar of sales. |
| Asset Turnover |  | Measures how efficiently assets are used to generate sales. |
| Return on Assets |  | Measures overall profitability of assets. |
| Return on Common Stockholders’ Equity |  | Measures profitability of owners’ investment. |
| Payout Ratio |  | Measures percentage of earnings distributed in the form of cash dividends. |
| Solvency Ratios | | |
| Debt to Total Assets Ratio |  | Measures the percentage of total assets provided by creditors. |