

# RATING METHODOLOGY

## Pharmaceutical Industry

### Alpha Credit Rating Limited

A rating is an evaluation of a company's ability and willingness to pay its liabilities in full and on time. A corporate rating is an opinion about a company's current financial strength as well as an evaluation of how that financial position may change in the future. AlphaRating provides opinions on creditworthiness by conducting detailed, rigorous studies of companies and their operating environments taking into consideration a large number of factors. This paper aims to give an insight on AlphaRating's Methodology for assessing pharmaceutical companies, summarizing the relevant factors of the Corporate Rating Analysis.

#### Fundamentals of the Analysis

The rating analysis provides an evaluation of how a company balances its business strategy and its financial policies, given the risks inherent in the business environment. A company's ability to meet its financial liabilities is evaluated in terms of its cash generation ability and the quality, diversity and sustainability of its earnings relative to the structure of its liabilities.

This methodology incorporates a series of quantitative and qualitative factors. We will consider three main areas;

- A. Business risk analysis
- B. Financial Analysis
- C. Ownership, Management & Corporate Governance
- D. Banking relation Risk

Among these four areas, financial risk is primarily (but not totally) measured by quantitative factors and the other areas are primarily assessed by qualitative considerations. More specifically, while financial risk analysis will consider qualitative factors like a company's choice of accounting standards and the quality of its reporting practices, business risk will also consider quantitative factors like market share and industry-specific metrics. The main elements of ACRL's corporate rating methodology are given below. This methodology is adjusted to specific sectors in accordance with the specific characteristics of the sector.

#### Qualitative Analysis

Our corporate rating methodology is far more comprehensive than just evaluation of financial statements. Financial analysis is obviously very important but does not constitute the only basis of the company's creditworthiness.

The understanding of the "Company Profile" constitutes the main stage of qualitative analysis. The company profile is derived from the information provided by the company and all publicly

available information. The analyst will aim to determine management's business model or business strategy by looking at the structure, organization, and sales coverage and the range of its operations. National statistics are used to make the sector survey and the peer group comparison. At this stage, the analyst will evaluate the company's position relative to the industry/sector it operates in.

Shareholder structure is a very important qualitative criterion as it can meaningfully impact the rating of the company. Associated with the shareholder structure, the market reputation of the shareholders, in which industries they are operating and whether the shareholders with controlling power have the ability and will to support the company are factors taken into consideration.

Medicines play a big role in ensuring the wellbeing of people by curing diseases and alleviating anxiety. The pharmaceutical industry has become one of the largest industries in the world today. And in Bangladesh too, it has been playing a major role in the economy, despite many crises. This sector provides 97% of the total medicinal requirement of the local market. The industry also exports medicines to global markets, including Europe. The pharmaceutical sector captured almost 23 per cent in the weekly turnover while Orion Infusions made its way to the top of the chart on the Dhaka Stock Exchange (DSE).

Two organizations regulate drugs and pharmacies in Bangladesh. The Directorate General of Drug Administration (DGDA) is the national drug regulatory authority which is under the Ministry of Health and Family Welfare. DGDA regulates all activities related to import and export of raw materials, packaging materials, production, sale, pricing, licensing, registration of all kinds of medicine including those of Ayurvedic, Unani, herbal and homeopathic systems. The Pharmacy Council of Bangladesh (PCB) was established under the Pharmacy Ordinance Act in 1976 to control the pharmacy practice in Bangladesh.

#### **A. Business/Industry Risk**

Bangladesh is aiming to develop 30 world-class drug makers in the next decade in order to establish a strong foothold in the global pharmaceutical markets. As a least developed country (LDC), the country is exempted from obligations to implement patents and data protection for pharmaceutical products until 2033. But as it is highly likely that the country will graduate from the LDC group by 2026, the window of opportunity for Bangladesh is thus only about 4 years. Which may stop the development of the pharmaceutical industry in Bangladesh because if Bangladesh loses the benefits of the TRIPS agreement, pharmaceutical companies will have to enact new patent laws. As a result, manufacturing of many types of generic medicine is likely to cease. If domestic manufacturers want to maintain production of these medicines, they may have to pay royalties on patents. As a result, the overall price of medicine in Bangladesh may increase. Otherwise companies will face patent violations and exports will be severely hampered.

One of the biggest issues in Bangladesh's pharmaceutical industry is that the country's pharmaceutical companies are not paying much attention to research. As a result, there is a lack of innovation in the domestic pharmaceutical sector.

Apart from this, one of the major threats in the pharmaceutical industry of Bangladesh is counterfeit and substandard medicines. Although there are strict standards on the quality of

medicines exported abroad, there is a large supply of counterfeit medicines in the domestic market. As a result, quality producers are losing huge dividends every year.

In addition, most of the raw materials used in the manufacture of medicines have to be imported from outside the country which if produced in the country, the pharmaceutical industry will be able to be more self-sufficient, and manufacturing costs can be further reduced.

Other challenges of pharmaceutical companies in Bangladesh:

- Volatility of exchange rate
- Shortage of skilled and qualified manpower
- Adverse Drug Effects
- Product Diversification and Parallel Trade

#### **B. Financial Risk Analysis**

AlphaRating's analysts will review the company's financials by reviewing the last three years' Audit Reports. Financial Risk Analysis is segmented into four sub sectors: profitability, cash flow generation/debt servicing capacity, Capital Structure & Funding Policies and Liquidity and Financial Flexibility.

##### **Profitability**

A company needs to generate sufficient income to survive and grow. Even if the company has no financial debt, it is expected to generate profits from its operations to meet its expenditures, build equity and maintain a strong financial structure against adverse developments. AlphaRating's profitability analysis evaluates the quality, sources and stability of earnings of previous years as well as the projections on future years provided by management and stressed by ACRL.

Firms which have compiled satisfactory profit records have more flexibility to refund or retire outstanding debts through capital market operations, rather than being dependent on matching internally generated cash flows to debt maturities.

Leading ratios used in the profitability analysis are:

- Revenue
- Gross Profit Margin
- Operating Profit Margin
- Net profit Margin
- Return on Average Assets
- Return on Equity

Businesses generate revenues and profits from the sale of their services and products. To increase revenues, businesses can raise the prices on their current sales offerings, provide premium services for an add-on price or add new higher-priced products or services. Businesses can also generate more sales revenue by increasing the amount of the goods or services they sell. Companies often achieve this volume increase by increasing or improving the marketing efforts that encourage higher demand or decreasing prices.

Profit margins are commonly used profitability ratios to gauge the degree to which a company or a business activity makes money. It represents what percentage of sales has turned into profits. Simply put, the percentage figure indicates how many cents of profit the business has generated for each sale. There are three levels of profit or profit margins: gross profit, operating profit, and net profit. These are reflected on a company's income statement in the following sequence: A company takes in sales revenue, then pays direct costs of the product of service. What's left is gross margin. Then it pays indirect costs like company headquarters, advertising, and R&D. What's left is operating margin. Then it pays interest on debt and adds or subtracts any unusual charges or inflows unrelated to the company's main business with pre-tax margin left over. Then it pays taxes, leaving the net margin, also known as net income, which is the very bottom line.

Being a key ratio of profitability and one of the most closely followed numbers in finance, net profit margin (generally expressed as a percentage) measures net income generated by 1 BDT of sales. The higher this ratio is, the better company performs in terms of profitability. Net profit margins will vary from firm to firm due to the different causes, such as, for example, competitive forces within an industry, economic conditions and operating characteristics. This ratio may also vary for different industries. Net profit margin can be used for the comparison of the same industry companies' profitability and to compare a company's profitability to its past performance. Company's net profit margin increase over some period means that it has become more effective at converting revenue into actual profit.

Another indicator of firm's profitability is gross profit margin, measuring the amount of its gross profit per 1 sales BDT. The difference between this ratio and the net profit margin is that gross profit margin excludes costs of goods sold from the calculation. Although the ratio may vary between industries, higher ratios are preferable.

The operating income margin is a measure of operating income of an enterprise, generated by 1 BDT of sales. The higher this ratio is, the better. All the necessary information for the calculation can also be obtained from the income statement.

It must be recognized that for tax or other reasons the reporting of maximum levels of earnings may not always be a principal corporate objective. However, analysts should seek to understand as fully as possible the basis for and magnitude of any purported earnings reduction actions. In other words, statements by company officials that reported earnings have been "managed" should not be merely accepted at face value.

Return on assets is a ratio, indicating how well company is able to utilize its assets. During the calculation the amount of profit is compared to the amount of assets used for this profit generation. Obviously, the higher ratios are preferable for a firm. The increasing trend of this ratio would show that the company's asset use for the profit generation is reasonable, and it increases the amount of profit, generated by 1 BDT of its assets value. Companies rated investment grade on national scale should be able to generate ratios on the order of 5%-7% on average over a business cycle.

Another part of the profitability ratio analysis is return on equity ratio calculation, which measures the ability of a company to generate profits from the stockholders' investments. Having

calculated the return on equity ratio one can see how much profit is generated by 1 BDT of shareholders' equity. In other words, this is a measurement of how effectively money from stockholders is being used for the profits generation. Considering this, the value of the return on equity ratio is desirable to be high, because that would mean efficient usage of investors' funds.

### **Cash Generation and Debt Servicing Capacity**

Cash Flow Generating Ability and Debt Servicing Capacity are closely related, as cash flow is the principal source of repayment for debt obligations issued by corporations. Cash flow can either be from operating or from non-operating sources. Operating cash flow is also called funds from operations and is typically defined as pretax profits adjusted for items not involving movement of funds, principally depreciation, amortization and other non-cash items, plus interest.

Companies have to balance cash inflows and outflows and also maintain sufficient liquidity to cover operations. Therefore, they have to regularly monitor cash management and take the necessary measures to generate positive cash. A company may fail to meet its financial obligations if it does not have a steady and planned cash flow, even if it is a profitable company.

Leading ratios used in this context are:

- Cash flow from operational activities (CFO)
- CFO/Interest Expenses
- CFO/Total Debt

Annual cash inflows from operating and non-operating activities are compared with annual cash outflows, both on historical and projected bases. This is called the Cash Flow Match, and indicates the extent to which the organization has been reliant on external funds in the past and is likely to be so in the future. Cash outflows considered include capital expenditures, long-term investments, dividends on common and preferred stock, income taxes, interest expense, and working capital changes. This last item may actually be either a use of cash or a source of cash, and is defined as the year-to-year change in current assets minus current liabilities, excluding changes in cash and equivalents and short-term debt. The reason these two items are excluded from consideration in this calculation is that they are products, rather than causes, of operating and non-operating transactions.

A company's historical record of cash flow surpluses or deficits must be judged in terms of the reasons for the performance. Cash surpluses are of little comfort if they resulted from the company spending inadequate amounts on maintaining the competitiveness of its plant and equipment. Cash deficits are of much greater concern if they stem from high dividend pay outs or working capital changes unrelated to the development of the business than from capital investments in a new or expanded production facility.

### **Capital Structure and Funding Policies**

A firm's Capitalization and Financial Policies are often indicative of its risk orientation. The extent to which a firm decides to finance its operations with debt rather than equity will influence the analyst's rating recommendation. However, very low financial leverage isn't necessarily the most appropriate strategy.

Considering that equity financing is usually more expensive than debt financing, a balance between the two forms of financing should be obtained.

Fundamental ratios used in the capital structure and leverage analysis:

- Equity/Total Debt
- PBIT/Interest Expenses
- Net assets

Several ratios are normally computed to enable the analyst to measure debt leverage. The universal standard leverage measure is Total Debt/Equity, which considers all on-balance sheet debt obligations, including such short-term liabilities as bank overdrafts, relative to equity. Under this heading the analyst should assess whether the capital structure and financial practices the company has selected fit with the risks of its business. While on the one hand, very low financial leverage may appeal to a firm's financial creditors, such a strategy is typically not appropriate or realistic. After all, equity financing is usually more expensive than debt financing, and so a balance between the two forms of financing is reasonable. It should be noted that it is not unusual to find company management that have not thought through their financial policies very thoroughly. Rather, they rely on what bankers tell them is appropriate, or what they think rating agencies or lenders expect of them.

The interest coverage ratio is used to determine how easily a company can pay interest on its outstanding debt. The interest coverage ratio may be calculated by dividing a company's earnings before interest and taxes (EBIT) during a given period by the company's interest payments due within the same period. In other words, it measures the margin of safety a company has for paying interest on its debt during a given period. The lower the ratio, the more the company is burdened by debt expense. When a company's interest coverage ratio is only 1.5 or lower, its ability to meet interest expenses may be questionable.

Net assets are virtually the same as shareholders' equity--both reflect the difference between what the company owns and what it owes. Typically, the higher a company's net asset value, the higher the value of the company. Companies with negative net assets are usually in a lot of trouble. Frequently, one solution is to sell off assets in order to generate cash and pay down debt.

### **Liquidity and Financial Flexibility**

Financial flexibility principally incorporates the concepts of liquidity and access to alternate financial sources. While conventional liquidity ratios are used to measure working capital management, the impact of working capital on earnings is measured with the analysis of the operational cycle. The operational cycle analysis considers factors like the nature of the sector in which the company operates, the size, production capacity, sales, supply and procurement terms of the corporation. It is expected that working capital management addresses the requirements of cash-flows, receivables, inventories and short-term liabilities. Potential constraints on financial flexibility, such as legal claims or potential environmental liabilities, would also be considered in this section.

Leading ratios used in this context are:

- Current Ratio

- Quick Assets Ratio
- Cash Ratio
- Accounts Receivable Turnover
- Payables Turnover
- Inventory Turnover
- Cash conversion cycle

The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables. To calculate the ratio, analysts compare a company's current assets to its current liabilities. Current assets listed on a company's balance sheet include cash, accounts receivable, inventory and other assets that are expected to be liquidated or turned into cash in less than one year. Current liabilities include accounts payable, wages, taxes payable, and the current portion of long-term debt. A company with a current ratio less than one does not, in many cases, have the capital on hand to meet its short-term obligations if they were all due at once, while a current ratio greater than one indicates the company has the financial resources to remain solvent in the short-term. However, because the current ratio at any one time is just a snapshot, it is usually not a complete representation of a company's liquidity or solvency.

The quick ratio is an indicator of a company's short-term liquidity position and measures a company's ability to meet its short-term obligations with its most liquid assets. Since it indicates the company's ability to instantly use its near-cash assets (that is, assets that can be converted quickly to cash) to pay down its current liabilities, it is also called the acid test ratio. An acid test is a quick test designed to produce instant results—hence, the name. A result of 1 is considered to be the normal quick ratio, as it indicates that the company is fully equipped with exactly enough assets to be instantly liquidated to pay off its current liabilities. A company that has a quick ratio of less than 1 may not be able to fully pay off its current liabilities in the short term, while a company having a quick ratio higher than 1 can instantly get rid of its current liabilities.

The cash ratio is a measurement of a company's liquidity, specifically the ratio of a company's total cash and cash equivalents to its current liabilities. The metric calculates a company's ability to repay its short-term debt with cash or near-cash resources. This information is useful to creditors when they decide how much money, if any, they would be willing to loan a company.

The cash conversion cycle (CCC) is a metric that expresses the time (measured in days) it takes for a company to convert its investments in inventory and other resources into cash flows from sales. Also called the Net Operating Cycle or simply Cash Cycle, CCC attempts to measure how long each net input is tied up in the production and sales process before it gets converted into cash received. This metric takes into account how much time the company needs to sell its inventory, how much time it takes to collect receivables, and how much time it has to pay its bills without incurring penalties. CCC is one of several quantitative measures that helps evaluate the efficiency of a company's operations and management. A trend of decreasing or steady CCC values over multiple periods is a good sign, while rising ones should lead to more investigation and analysis based on other factors.

### **C. Ownership, Management & Corporate Governance**

## **Management**

Management is one of the key elements of the rating methodology since it is management that decides what businesses to be in, what strategies should be pursued, and how these activities should be financed. The essential goal is to evaluate what role or contribution management had on the success or failure of past performance.

AlphaRating expects to see management operate under a set of rules and targets, and be able to present realistic budgets and cash flow projections for future years. The company's ability to reasonably attain these targets is critical in terms of our evaluation of the predictability of the company's future performance.

The quality of a company's accounting and financial reporting practices, including timeliness and transparency, reflect the management's attitude towards risk and towards fair dealing with key constituencies and creditors. The apparent independence and credibility of the firm's external auditor is also a factor that is taken into consideration.

## **Corporate Governance**

Although compliance with corporate governance principles are mainly focused on public corporations, non-public corporations are also expected to observe corporate governance standards to some extent. Additional governance issues that are of particular relevance include the composition of the Executive Board, its independence and functioning, transparency in terms of information disclosure and the priority management attributes to corporate governance. Even if a company does not adhere to advanced corporate governance standards, a fair amount of progress achieved in institution building contributes to the predictability of its performance.

### **D. Bank relationship risk**

Analysis of banking relationship is very important in corporate rating process. The analyst team must collect information about the loan repayment history, reason against the delay in payments, utilization performance of the loan limit, security against the loan, control over the security and related risks. Any loan classification will create problem to the respective entity in further borrowing from the bank.