The Credit Analysis

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The Credit Analysis

Overview

Learning Objectives.

- Review the key components of fundamental analysis of a borrower's creditworthiness.
  - Income statement.
  - Balance sheet.
  - Cash Flow statement.
  - Financial ratios.

Purpose of Credit Analysis

The purpose of the credit analysis is to identify the risks to which a bank may be exposed over the life of a project financed by the bank, and to evaluate if the transaction is structured in a way that makes those risks acceptable by the parties involved.

Know your client

Banks need to develop a good understanding of the clients and his business.

- In the past banks relied primarily on their personal knowledge of the clients to grant loans and depended only on the collateral as a primary source of repayment in case the client defaulted on his obligations.
- In the present world and economic environment such personal knowledge gained through experience and proximity is not always practical or possible.
- Financial statements have evolved as a primary tool to assist lending officers in evaluating the lending risks and assess the companies performance.

Know your client (continued)

Credit Analysts need to:

- Develop a good understanding of the borrower.
- Obtain and verify the information provided by the borrower (business plan).
- Identify the risks.
- Suggest a strategy for risk mitigation.
- Help borrower define his borrowing needs and repayment capacity.

Financial Documents

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Documents to be reviewed.

- Income statement.
- Balance sheet.
- Key financial ratios.
- Cash flow statement.
- Financial projections.

The Income Statement

The income statement gives an important perspective of the health of a business.

- It reports the selling activities of a company over a certain period of time.
- It shows the profit of the company

The income statement (continued)

Borrower should provide three years of actual results, showing that:

- He has generated sufficient operating income.
- Sales growth are consistent with market share and market size assumptions.
- The operating margins are consistent over time.

Sample income statement

Sales

(Cost of goods sold)

= Gross profit

(Operating expenses)

(Other expenses)

= Net profit before taxes

(Income taxes)

= Net profit after taxes

The balance sheet

The balance sheet is the snapshot of the borrower's financial condition at a specific point in time.

- It presents:
  - What the company has today (Assets).
  - How much does the company owe today (Liabilities).
  - What is the company worth today (Net worth/Equity).

The balance sheet (continued)

The borrower should provide three years of historical balance sheets in order for the bank:

- To generate, analyze and compare the ratios.
- To identify the trends.

Sample balance sheet

Assets

- Current assets:
  - Cash, short term investments,
  - Receivables, inventory.

Sample balance sheet (continued)

Assets

- Fixed assets:
  - Furniture and fixtures.
  - Buildings, land.
  - Less depreciation.
- Other assets.

Sample balance sheet (continued)

Liabilities

- Current liabilities:
  - Accounts payable.
  - Current portion of long term debt.
  - Accrued liabilities.
  - Other.

Sample balance sheet (continued)

Liabilities

- Long term liabilities:
  - Long term debts.
  - Other.

Sample balance sheet (continued)

Owner’s equity (Net worth)

- Paid up capital.
- Retained earnings.

Total assets = Total liabilities + Owner’s equity

Financial ratios

Ratios are used to better understand trends in the borrower's financial condition and operations. They reflect how the balance sheet and income statement intersect.

Financial ratios (continued)

There are four kind of ratios:

- Liquidity.
- Efficiency.
- Profitability.
- Leverage.

Ratio analysis

Liquidity ratios (balance sheet).

- Current ratio. A broad measure of liquidity which indicates the amount of current assets available to repay the current liabilities. Ratio should be above 1
  - Current assets/current liabilities.

Ratio analysis (continued)

Liquidity ratios

- Quick ratio. A more severe measure of liquidity indicating the current liquid assets available to repay the current liabilities. Only the very liquid assets are taken into consideration.
  - Cash + marketable securities + net receivables/current liabilities.

Ratio analysis (continued)

Efficiency ratios (Balance sheet).

- Receivables Days on Hand. It indicates the management's ability to collect its accounts receivable and is critical to the company's cash flow.
  - Net accounts receivable/Net sales X 360.

Ratio analysis (continued)

Efficiency ratios.

- Payables Days on Hand. It indicates the management paying habits and the financing provided by the suppliers. An increase may indicate short term answer to cash flow problems.
  - Accounts payable/Cost of goods sold X 360.

Ratio analysis (continued)

Efficiency ratios

- Return on assets. This ratio measure the return on investment represented by the assets of the company.
  - Net profit after taxes/Total assets (Use net profit before taxes to eliminate the effect of taxes).

Ratio analysis (continued)

Efficiency ratios.

- Return on equity. This ratio measures the return on owner’s equity (Net worth).
  - Net profit/Net worth.

Ratio analysis (continued)

Profitability ratios (Income statement).

- Operating profit margin. This ratio represents the % of profit retained from each sales dollar.
  - Operating profit/net sales X 100.

Ratio analysis (continued)

Profitability ratios.

- Net profit margin. This ratio represents the ability to generate profit from each sales dollar.
  - Net profit/Net sales X 100.

Ratio analysis (continued)

Leverage ratios (Balance sheet).

- Debt to assets. It indicates the degree to which assets are funded by external creditors. The lower the ratio, the greater is the ability of the company to repay loans in the event of a liquidation.
  - Total liabilities/Total assets.

Ratio analysis (continued)

Leverage ratios.

- Debt to equity. It indicates how many dollars of outside financing there are for each dollar of owner's equity. A high ratio indicates a high risk.
  - Total liabilities/Net worth.

Ratio analysis (continued)

Interest coverage.

- Indicates the degree to which earnings can decline without affecting the company's ability to meet annual interest costs.
  - Net profit before tax + Interest expenses/Interest expenses.

Ratio analysis (continued)

Debt coverage.

- Indicates the degree to which earnings can decline without affecting the company's ability to meet current long term debt.
  - Net profit + Depreciation/Current maturities of LT debt.

Ratio analysis (continued)

Debt service coverage.

- Measures how many Dollars of Cash Flow is available to repay each dollar of principal and interest.
  - Cash Flow from operations/Principal + Interest, or
  - EBITDA/Principal + Interest.

Cash Flow analysis

The Cash Flow statement is the report of flow of funds in and out of the company:

- It allows the bank to determine the ability of the client to repay his debt.
- It shows the potential need for working capital financing.
- It reflects the changes in the balance sheet.

Cash Flow analysis (continued)

Cash Flow sources and uses:

- Cash Flow from operations.
  - Inflows:
    - Cash from goods or services.
    - Cash income from investments.
  - Outflows:
    - Cash payments to acquire goods or services.
    - Cash payments for expenses.
    - Cash payments to lenders.

Cash Flow analysis (continued)

- Cash Flow from financing activities.
  - Inflows:
    - Cash proceeds from new equity.
    - Cash proceeds from new debt.
  - Outflows:
    - Cash payments of dividends.
    - Cash payments to creditors.

Cash Flow analysis (continued)

- Cash Flow from investment activities.
  - Cash inflows:
    - Cash receipts from sale of investments.
    - Cash receipts from sale of assets.
  - Cash outflows:
    - Cash disbursements to buy investments.
    - Cash disbursements to acquire assets.

Cash Flow analysis (continued)

To prepare a Cash Flow statement the credit analyst need:

- Actual and projected Balance Sheets.
- Actual and projected Income statements.

Cash Flow analysis (continued)

There are two ways to present a Cash Flow statement, the direct and the indirect method.

- The methods differ only in the manner in which the operating C/F is presented.
- The bottom line is the same in both methods.

Cash Flow analysis (continued)

Review Cash Flow documents.

- Construction steps.
- Sensitivity analysis.
- Best case/Worse case.
- Exercise.