Qualitative and quantitative analysis of creditworthiness of the companies

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Abstract

Credit analysis is a comprehensive analysis of the overall performance of the client and the specific project to be financed with the loan, in order to assess the credit risk, i.e. to assess the creditworthiness of the loan applicant.
The credit analysis is part of the credit process, in which the bank should conduct a comprehensive analysis of the operation of the enterprise and the justification of the project to be financed by the loan.

In addition, the processing of the loan application involves numerous qualitative and quantitative aspects. The first relate to the previous work of the borrower, his legal status, management, loan security, competition, etc.

The quantitative analysis includes analysis of the financial statements of the company, as well as analysis of certain financial indicators.

The ultimate objective of the credit analysis for the bank is to assess the credit risk, i.e. the creditworthiness of the loan applicant. In order to carry out the qualitative analysis, banks have at their disposal several methods, such as CAMPARI, PEST, SWOT, etc.

Key words: analysis, credit risk, enterprises, loan, indicator

1. Introduction

Lending is an ongoing concern of a bank, as it is the main operation which allows banks to place their resources and it is also the most profitable activity of banks. Through lending, banks contribute, on one hand, to the creation of resources for companies who need to finance investment projects and, on the other hand, they support fund holders to invest in order to obtain profit. [1]

In order to achieve high rate of profitability, banks must assume some risks. In the recent years, especially after the global financial crisis, focus was set on adapting the business models in order to allow financial institutions to develop an effective risk assessment framework, without endangering profitability. Therefore, performance and risk in lending activities become key components of the market mechanism.

Credit risk is one of the main risks faced by a bank and it is generated by the lending activity to clients (individual or corporate). Investors are compensated for assuming credit risk by way of interest payments from the borrower or issuer of a debt obligation. Credit risk is closely linked to the potential return of an investment, meaning that the rate of interest that investors will demand for lending their capital is proportional to the perceived credit risk.

Developing and applying credit risk management techniques has been a concern for many years, and it has evolved from traditional techniques such as exposure assessment, to limiting excessive concentration on the debtor, business sector or industry level, to new management techniques, such as transactions with swaps and options, adapted to this type of risk.

2. Credit analysis

The credit analysis is a procedure that assesses the creditworthiness of the client, the borrower. A creditworthiness refers to the possibility for the borrower to receive funds, i.e. credit, to use and return it, according to precisely and strictly determined conditions. [2]

From this definition of credit analysis and creditworthiness, we can see the need for conducting a quality and objective credit analysis, which will create a realistic picture of the creditworthiness of the borrower, and thus it will be possible for the bank to avoid all loans that could be problematic.

The credit analysis of a client who is a legal entity includes an analysis of information on past business success, the current market position, the human resources available, the industry in which it operates, the financial statements, the justification of the project (to be credited), and data for the credit history of the borrower. This is in the direction of assessing how much the borrower is prepared, and how financially capable for responding to the obligations that will arise from the approval of the requested loan amount.

An incomplete and superficial analysis of the creditworthiness of the borrower exposes the bank to a higher credit risk than the one that the bank has envisaged with its credit policy.

Credit analysis involves analyzing more information and data. Given that some of them have a quantitative character, and the other qualitative, credit analysis can be seen from two aspects, such as:

• Qualitative analysis - includes an analysis of information related to the sector in which the company operates, the position held on the market, the management, the manner of securing the loan, and so on.

• Quantitative analysis - includes an analysis of the data obtained from the financial statements of the company.

3. Qualitative analysis

With the qualitative analysis we get a cleaner image of the company from the aspect of its historical development, the core business of the company, the state of the market in which it exists, the state in the branch as well as it’s buyers and suppliers.

The advantage of this analysis is that it provides an opportunity with the qualitative factors to discover the potential risks of the company in the future.

The individual methods of credit analysis cover the same issues. In this respect, the qualitative analysis of the loan application can be described by the acronym 5C or 6C (5Cs, 6Cs) derived from the first letters of the areas taken into account in the analysis:

- character, which shows whether the debtor is responsible, honest, and whether there is a serious intention to repay the loan in time.
- capacity; assessment of the financial condition of the borrower and its ability to properly repay the loan.
- capital or cash, i.e. the ability of the borrower to generate enough money to repay the loan.

- collateral, as a real cover for the loan.
- conditions, that is, the macroeconomic or sectoral circumstances that affect the borrower's ability to repay the loan in time.
- control, i.e. assessment whether the changes in the legal regulations can adversely affect the creditworthiness of the borrower and whether the loan application is in accordance with the quality standards established by the regulatory body in the country.

The credit analysis should also include the external factors on which the company does not have control, but which can have a strong impact on the regular repayment of the loan. In fact, this is about analyzing the business environment in which the borrower works. The following should be assessed: the trends in the industry in which the borrower works, the technological trends in the industry, the position of the borrower on the market, the stability of his relations with suppliers and buyers, the business cycle phase, the future movement of interest rates. The analysis of the characteristics of the industry in which the borrower acts and its advantages and weaknesses in relation to competition is of particular importance in the long-term lending. [3]

Here are some recommendations how to get to quality credit analysis:

• Establish a friendly relationship with the client;

• Give an impression to a trusted person and institution;

• Establish a pleasant communication with the client;

• Avoid direct questions, try to get the answers in informal communication with the client and

• After receiving all the necessary information about the type of business, give an impression of expertise in banking.

3.1. Basic guidelines for the analysis of qualitative factors

3.1.1. Ownership structure of the company

The credit officer during his visit to the company should review the borrower's ownership structure in order to determine the possible relationship with other companies. It is also necessary for the creditor to confirm the written statement "statement of connection and credit indebtedness".

The discovery of a possible association with other companies is a signal that they should be also financially analyzed in order to get a complete picture of the borrower.

3.1.2. Historical development of the company

By getting to know the historical development of the company, we not only get to know the company better, but also discover the entrepreneurial capabilities of the client, to what extent the company is flexible and willing to use the market opportunities and to amortize the risk and problems that they are faces.

3.1.3. What is the core business of the company

With this qualitative factor we need to find out what the company is doing. It is therefore important to understand the client's business in order to define all the fields that are relevant to the analysis and assessment of possible risks. In larger companies, it is necessary to find out the organizational structure of the company in order to obtain the necessary business information.

In any quality analysis, the credit officer must greatly know the client's business.

3.1.4. Product, production process and level of technical equipment

The corporate officer should get information what is the object of the business activity, whether it is a merchandise, product, or service.

Regarding this factor, the officer should find out the maximum and optimal production capacity and whether there is a bottleneck in this process. It should also check the underlying assets and their obsolescence, further the costs of maintaining the funds. Very important information is both the level of inventory and how long the client can survive without purchasing a new amount of inventory.

3.2. Determining the client's market

The corporate officer should be well informed about the client's product, competition, and what are the advantages, weaknesses, and product pricing.

First check is defining the client's market both geographically and from the aspect of the clients it covers.

Here is the list of some necessary questions to make a proper determination of the market:

• Who needs the products that the company produces or sells and what is their purpose?

• What is the type of demand, i.e. what is their price elasticity and possible substitution with other products?

• Who buys the products, who are end users, whether the products are for final consumption or for further trade?

• Does the sale of products offer additional services such as transporting products to the consumer etc.?

• What are the competitors of the borrower and how much is their market share?

• On the base on which element the borrower is competitive with other competitors: is it a price, quality or service?

• What is the potential demand for products, is the market overshadowed, what are the distribution channels of the product?

3.3. Buyers and suppliers

3.3.1. Relationship with buyers

Necessary information that bank needs for the companies’ buyers are as follows:

- What is the dynamics of buying, whether they are regular buyers or are ad hoc, can their plan be planned, what is the percentage of chargeability, etc.
- What is the number of buyers? This information is necessary due to the diversification of the risk of collection of receivables.

3.3.2. Relationship with suppliers

Necessary information to be obtained for suppliers of the company are as follows:

- How many suppliers does the client cooperate with?
- Is the client dependent on one supplier?
- How easily can new suppliers be found?
- Who pays the transport costs?

4. Quantitative analysis

Quantitative analysis involves primarily an insight into the financial statements of a company such as:

- Balance Sheet;
- Income Statement and
- Cash flow statement.

The income statement and the cash flow statement represent the past economic situation of the business. The balance sheet presents the balance of assets and sources at a given moment.

4.1. Assessment of financial statement's elements

- Assessment of liquid assets

Liquid assets include cash on bank account, cash in hand and deposits with banks. It is important for the corporate officer to check the client's accounts on the day of the analysis and if he has accounts with other banks to request extracts from all accounts. [4]

- Assessment of customer receivables

Trade receivables are a transitional form of working capital that needs to be converted into cash during their collection. The corporate referent in a conversation with the client should disclose which of the claims are actually chargeable, take into account up to 5 major customers and through a conversation with the client, it is necessary to determine what is the method of collection and what are the agreed terms with the buyers.

The indicator for collection of trade receivables can serve as an indicator for the average period of collection of receivables:

Trade receivables X 365 / annual sales

- Assessment of inventory

The corporate referent should check the inventory structure and, through a conversation with the client, should determine whether it is a case of a reputable or non-competitive stock. For example, in the case of a stock for which the season has already passed, they will be sold at a discounted rate for the next period and their cost in the balance sheet will not be realistic at the time of the analysis.

The inventory turnover indicator is a good basis for assessing the stock and their age:

Inventory X 365 / costs of sold products

If the client applies for a working capital loan, it is important:

For manufacturing companies: the period of payment of the loan should be at the same time as the production process, starting with the purchase of raw materials till the sale and refund of the products.

For trade firms: the client should repay the loan by selling the goods and collecting the claims.

- Assessment of obligations towards suppliers

Obligations towards suppliers are a kind of interest-free loan to the client, which should be settled in the current year. It is important to obtain customer information from which suppliers are dependent, what are the terms of payment, whether payment is governed by payment guarantees or letters of credit. This information will give a more realistic picture of the liquidity of the company. [5]

The period of payment of obligations towards suppliers can be checked through the following indicator:

Short-term liabilities to suppliers X 365 / purchase value of goods sold in the year

- Assessment of loans

Only the principal of the loan should be disclosed in the balance sheet, while interest is an expense and is disclosed in the income statement. In the analysis, it is important to enter the terms of the loans used, when they are due and what they are used for. The unconscious use of the loan can jeopardize the liquidity of the company.

While the balance sheet shows a certain state of the assets and the sources of assets on a specific date, the income statement shows the company's success in a certain period that is expressed through profit / loss.

The income statement consists of several sectors, the first sector determines the gross margin - it is a profit that the company realizes through the purchase and sale of goods. Fixed costs (wages, material costs and overheads) are further subtracted from the gross margin and pre-tax profits are obtained.

Further, by adding other revenues, the deduction of other expenses and profit tax net profit after tax is calculated. Profit in the income statement arises from two types of activities: from regular operations or operating profit and profit as a result of the use of fixed assets. It is important to note that only operating profit is a realistic reflection of the company's operations.

4.2. Cross Check of balance sheet and income statement

During the preparation of the balance sheet and the income statement, a check or cross check can be made between them. [6]

First check: the change in equity between the two analyzed periods should correspond to the net profit / loss in the income statement.

Example 1:

The value of the capital in the balance sheet of the company in 2016 is 100.000 euros, the value of the capital in the balance sheet in 2017 is 120.000 euros.

The net profit in the income statement in 20i7 is, and should be, 20.000 euros.

Second check: Total purchases during the year should match the costs of sold products in the income statement. In order to make this check during the analysis, the referent should request information from the client for total purchases during the year.

Example 2:

Total purchases in 2017 amount to 250.000 euros at purchase price (information received through a conversation with the client, and can be confirmed with input invoices).

According to the income statement, the costs of sold products for 2017 were 260.000 euros.

The value of the stock for 2016 was 50.000 euros, and in 2017 it was 55.000 euros.

Initial stock + total purchases - final stock = costs of sold products

50.000 + 250.000 – 55.000 = 245.000

260.000 – 245.000 = 15.000

In our example, the deviation is 15.000 euros, which can be accepted as an accurate check.

Example 3:

The client for 2017 has earned a profit of 50.000 euros.

Changes in the balance sheet are as follow: the value of the capital in 2016 is 70.000 euros (K1), while in 2017 it is 90.000 euros (K2).

The client has taken part of the profit, net profit, from the business for private investment (purchasing of private apartment).

Check:

K2 - K1 + PRIVATE INVESTMENTS = Net income

90.0 – 70.000 + 30.000 = 50.000

The figure bellow shows the connection between balance sheet and income statement, which should be taken in consideration during the credit analysis of a company

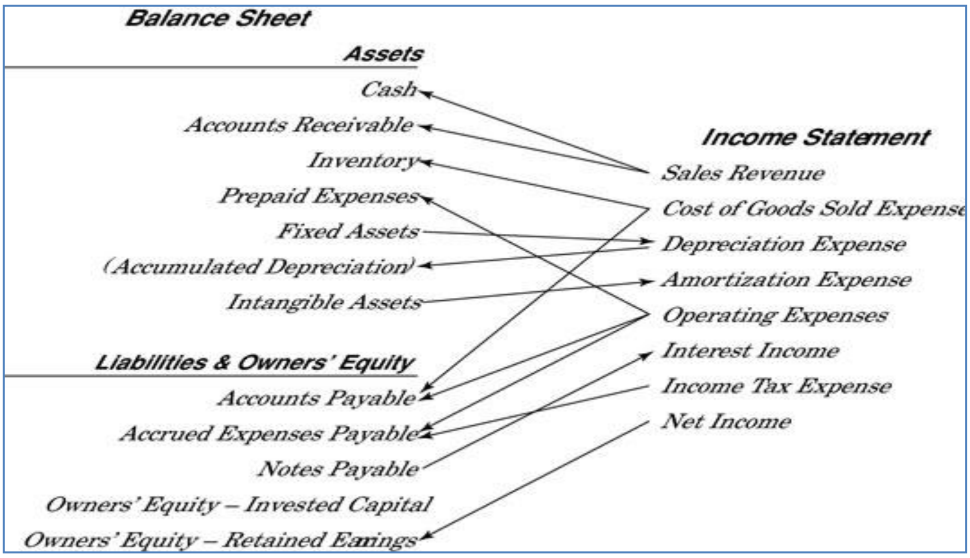

Figure 1 Connections between Balance sheet and Income statement

5. Conclusion

Credit is an integral part of the modern economy and the global financial system. The expansion of credit has been a major contributing factor to global economic development and is often described as the lifeblood of the economy. Access to credit has facilitated GDP expansion through an increase in consumption and the allocation of resources to productive purposes. It has also helped to improve the efficiency and profitability of business by enabling access to funding for things like expansion, capital expenditures, research and development, and staffing

After the financial crisis, two key concerns have been raised regarding banks' activities: "too little, too late" provisioning for loan losses and "too big to fail". The credit risk management subject became not only a compliance exercise for banks, but also a key item considered when establishing the strategy and execution path.

During the conversation with the client, the corporate officer should disclose the purpose of the loan and whether it coincides with the financial structure, current operations and plans of the company for the future. An investment plan should be explained from the client if it is an investment in a business facility or equipment.

The cost of using the loan should be lower than the positive effect of the investment, otherwise funding has no economic logic. Effective credit analysis is essential for investors seeking to determine whether a company has the financial ability to meet its financial obligations. Understanding and applying the five Cs of credit analysis provides investors with a practical and effective framework for assessing the creditworthiness of a corporate issuer. This framework includes an analysis of capacity, collateral, covenants, character, and credit rating. While by no means a guarantee against default, credit analysis involving the five Cs can help to manage default risk.

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