



## The 5 Cs of credit analysis

*Do what you can, with what you have, where you are.*

Theodore Roosevelt (1858-1919)

In this article we shall look at the second element of the 5 Cs that we started addressing in the last article. This element is Capacity. Capacity measures the borrower's ability to repay a loan by comparing income against running debts (Sharma and Kalra, 2015). The ratio is computed by adding up total monthly debt payments, which are then divided by the borrower's total monthly income. The point is to look for indicators that the borrower might present a risk of default or failure to pay back the loan. Therefore, for the lender any indication of the risk has to be convincingly allayed before the lending transaction can be sealed.

Let's start by looking at an individual borrower. How do we assess the capacity of the individual to repay the credit or loan? We have to be satisfied that the individual has sufficient capacity to repay before we can go ahead and sanction or approve the loan. In the case of an individual we have to assess existing sources of income – e.g., employment, economic activities they are engaged in to generate income, - assets owned which if necessary, could be seized and sold to repay the loan, etc. We can see from this analysis why it is perhaps far easier and quicker to positively assess individuals in formal employment who receive regular salaries and quickly disburse the loans as opposed to those individuals involved in small businesses whose incomes can be quite irregular. As a result, we can see why the former (formally employed) becomes more preferred as a customer than the latter (small business man).

When it comes to assessing a business for credit the process becomes more complex as the analysis takes on a much more rigorous approach. This could be for various reasons e.g., the amount of loan or credit is larger, implying that the risk to the lender increases. In terms of definition, however, capacity in the case of a business is basically the same as in the case of an individual borrower, it is the ability of the enterprise to generate sufficient cash needed to pay financial obligations as they become

due. According to Ramagopal C, 2008, capacity looks at adequacy of resources, to start, maintain and expand operations as a business passes through its life cycle.

To assess capacity, we use two types of financial ratios: liquidity ratios and leverage ratios.

### **Liquidity ratios**

Let's start with liquidity ratios. Liquidity ratios focus on a firm's ability to service its short-term obligations when they fall due. Liquidity is very important to a firm's success because without adequate liquidity the firm would not be able to pay creditors who have supplied goods and services, on the promised due date. A firm's goodwill suffers as a result in the event it defaults. As a matter of fact, dissatisfied suppliers, would normally, refuse to supply further. No one can supply goods and services to a defaulting customer indefinitely. Loss of creditworthiness, can result in legal consequences, and even closure of the firm's business. Maintaining good levels of liquidity is therefore essential to business success (Ramagopal C, 2008).

There are three types of liquidity ratios, namely: current ratio, acid-test or liquid ratio, and cash or absolute liquid ratio.

✓ Current ratio - is computed using the formula:

Current Ratio = Current Assets/Current Liabilities

The ratio measures the extent to which current assets can cover current liabilities. Current assets constitute: cash, bank current account, near cash items such as financial investments that mature within a year, receivables (short-term debtors), inventories/stocks, prepaid expenses such as insurance, rent on business space like offices, retail space, etc. These are items that can be converted into cash within the short-term and therefore be used to pay-off obligations as they fall due. Rule of thumb suggests that a current ratio of 2:1 is sufficient for a firm to cover its current liabilities. However, this may vary from industry to industry. Different industries actually have industry standards for this as well as for other ratios.

✓ Acid Test Ratio or Liquid ratio

Liquid assets are those that can be converted into cash quickly without loss of value. Cash in hand and cash at bank are the most liquid assets available to a firm. Other assets considered relatively liquid are debtors, account receivables, and money market instruments like treasury securities. Inventories and

prepaid expenses are excluded from this definition, as for instance, inventories require time to be converted into cash and have a tendency to fluctuate in value, at the time of realisation. Prepaid expenses cannot be recovered in cash normally. Therefore, liquid ratio formula becomes: Liquid assets/Current liabilities. A liquid ratio of 1:1 is adequate as a firm is able to cover its short-term liabilities using its available cash and relatively liquid assets.

✓ Cash ratio or Absolute liquid ratio

As earlier noted, cash is the most liquid asset. While accounts receivables and debtors may be better realisable than inventories, sometimes there are doubts regarding their realisation especially over time. As a result, they are excluded in this ratio. Therefore, the formula for cash ratio or absolute liquid ratio is:

✓ Cash ratio =  $\frac{\text{cash} + \text{Bank} + \text{Short-term Securities}}{\text{Current Liabilities}}$

According to rule of thumb a cash ratio of 1:2 is adequate because creditors will not demand to be paid at the same time, while cash may be realised from debtors, receivables, and inventories to provide additional cash cover with time.

### **Leverage ratios**

Borrowing can be for short-term and for long-term periods depending on the purpose. When it is for long-term periods such as for investment purposes, leverage ratios are used to conduct credit analysis to establish the long-term solvency of a firm. As a matter of fact, for a firm to be in good financial health, it should have both short-term and long-term solvency. Long-term solvency refers to the ability or capacity to meet interest payments on long-term debt or loans, and payment of instalment of loan principal amount when they fall due.

Ratios used to measure leverage are:

✓ Debt-equity ratio =  $\frac{\text{Total Debt}}{\text{Net Worth}}$

Total debt means short-term is also included, while net worth means that share capital, reserves, surpluses and losses are included.

This ratio determines claims on the firm's assets by creditors and shareholders. Therefore, it measures the extent to which external finance can be shielded in the event the business is liquidated. According to Ramagopal 2008, a ratio of 1:1 is satisfactory although this may vary by industry and firm internal policy. This particular ratio has no rule of thumb.

✓ Interest coverage ratio

This measures the ability of a firm to meet interest obligations on long-term debt when they fall due. It shows the number of times interest on debt is covered by funds that are ordinarily available to cover payment of loan interest. Its formula is as follows:

Interest coverage ratio = EBDIT/Interest

EBDIT stands for earnings before depreciation, interest and taxes. (Kabir, Jahan, Chisty and Hasin, 2010). The ratio has limitations as it is based on accrual accounting, which could mean cash may not actually be available when needed and it does not cover payment of loan principal.

Another ratio that can be used to assess capacity to meet obligations on long-term debt is the net profit margin of a firm.

### **Conclusion**

Analysis of capacity to pay is very important in credit decision making. Once assessed capacity has to be separately as one of the 5 Cs of credit and a customer has to score well on it stand a chance of obtaining a loan.

In the Ghana study referenced in the last article on character, both local banks and foreign banks ranked capacity as number five in importance.

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