How Do You Calculate Debt Service Coverage?

Debt service coverage is a critical component of loan underwriting. Given its importance, it’s surprising how little uniformity there is in how debt service is calculated - not only from one bank to the next, but within the same bank.

Virtually every bank establishes a minimum debt service coverage ratio for borrowers as part of its loan policy - generally 1:2 or 1:2.5. But there are multiple ways the ratio can be calculated (see chart below for two examples).

**Two Commonly Used Formulas to Calculate Minimum Debt Service Ratio**

\[ \text{Net Income} + \text{Depreciation \\ \\ & Other Non-Cash Charges} \\
\text{Interest} + \text{Current Maturities of Long-Term Debt} \]

or

\[ \text{EBITDA (Earnings Before Interest, Taxes, Depreciation \\ & Amortization)} \\
\text{Interest} + \text{Current Maturities of Long-Term Debt} \]

**Right or Wrong?**

Neither method is necessarily right or wrong, but they can lead to different results, which can lead to disagreements within the bank about whether a borrower cash flows or not. Not surprisingly, the lender will probably use the method most likely to result in getting the loan approved, while the analyst will tend to use the method that provides the most protection for the bank.

Absent guidance, new lenders you’ve brought on board will probably calculate debt service coverage the way they were trained to at their previous bank - which may or may not be the way you want them to.
How do you Calculate Debt Service Coverage? (continued)

Here are a few nuances to keep in mind with regard to calculating debt service coverage:

• Remember that because EBITDA is a pre-tax measure of cash flow, the loan’s principal payment should be tax-affected. To make a principal payment of $50,000, for example, a borrower will need to earn $76,000 pre-tax (at a 34 percent tax rate). Failure to tax-affect the principal payment could result in a significant overstatement of the borrower’s ability to earn debt service.

• For this reason, EBIDA (which doesn’t factor in taxes) is often considered to be a more accurate measure of a company’s ability to earn its debt service. But don’t forget to subtract an estimate of distributions in lieu of taxes (e.g., 34 percent of net income) for S corps, partnerships and LLCs.

• Current maturities of long-term debt are considered to be principal payments due within the next 12 months. But do you use this year’s or last year’s current maturities? If you are measuring compliance with loan agreements or assessing a borrower’s ability to earn debt service this year, use last year’s current maturities. If you’re projecting a borrower’s ability to earn debt service on a new loan, use this year’s current maturities.

• When adding back depreciation, keep in mind that borrowers will have to replace these fixed assets at some point. Therefore, you should subtract an estimate of replacement capex. If you don’t, you’re implying that the bank will fund replacement capex, which you may or may not be prepared to do.

• When calculating debt service coverage for revolving debt and lines of credit, are you assuming the line will be paid down at some point during the year, or that it will be termed out and included in the debt service coverage calculation? If the intent is to term out the line of credit at some point, an assumed amortization of the line should be included in the debt service coverage calculation. Also, do you assume the line of credit is fully funded?

Cash Available For Debt Service

It’s important to note that the debt service coverage ratio only measures a borrower’s ability to earn its debt service - it doesn’t address how much cash is actually available to service debt. The company could invest earnings in new receivables and inventory to support growth, for example, or the owner could take earnings as distributions to support his or her lifestyle.
How do you Calculate Debt Service Coverage? (continued)

This is where the Uniform Credit Analysis (UCA) cash flow statement comes into play. UCA measures how much cash is available for debt service by highlighting changes in the balance sheet that impact cash. Consider these two ways of using a UCA cash flow statement:

1. **Cash After Operations** – Essentially, this is EBITDA less changes in working capital. This will often be negative for a company that is growing and positive for a company in financial distress, making it very misleading.

2. **Cash After Debt Amortization (CADA)** – Positive CADA indicates that a company has enough internally generated cash to cover working capital requirements, operating expenses, taxes, owner distributions and debt service. Only mature companies or growing companies with large gross margins and short operating cycles usually have a positive CADA, and neither of these is typically a large borrower.

Bank management should define within its loan policy how debt service coverage will be calculated. Not doing so opens the door to disagreements, misunderstandings and inaccuracies that can derail good credits or result in problem loans.

*Please give us a call if you have questions about how to calculate debt service coverage for borrowers.*