

What are the Best Ways to Estimate Supplier Financial Risk?

Multiple Methods are Needed to See the Complete Picture; Calculating the Z-Score

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he risks of supplier quality and delivery problems and potentially even outright failure in this economic environment have been much discussed - as have recommendations to get more on top of supplier financial information to perhaps understand these risks while mitigation strategies are still possible.

But how do you really do that sort of financial analysis effectively?

Most companies rely on two sources: Dun & Bradstreet reports for smaller or private companies, and reported financial data for public ones.

Both approaches have their limits. For example, there are "latency" issues with both sources – in today's environment, a liquidity crisis at a supplier can happen very rapidly, perhaps well before D&B shows a potential problem, or the next quarter's 10k filing is issued by public companies. D&B data is useful for initial credit approval, but may not be enough for a broader risk assessment.

For key suppliers, companies can also ask to see current financial data privately. Many suppliers may balk at this, however, and it takes a great deal of skill to analyze the data presented effectively – and to ask the right questions. That takes a lot of time on both sides, and probably needs to include a member of the buyer's finance team in addition to someone from the procurement organization.

Procurement managers need to stay in close contact with their peers in the supply chain to ensure supplier issues that first manifest themselves in delivery or quality problems are rapidly communicated to the Companies considering using the Altman Z-Model for supplier risk analysis should really work to understand the underlying theory and mathematical approach, and to recognize it is simply one indicator.

manager for additional follow up.

There are also a variety of business-to-business credit agencies – each with their own view of the supplier's financial health. For particularly important suppliers or those for which financial stability questions have already been raised, it may make sense to access reports from several sources to get a more complete picture. This will also help a company put together the most targeted questions to ask the supplier about its financial health.

Using the "Z-Score"

Companies can also consider using something called the "Altman Z-Score," a finance analysis model developed in 1968 by NYU Finance professor **Edward Altman** to predict corporate bankruptcies.

Based on substantial research, Altman found five company financial ratios well predicted what companies would file for bankruptcy in the next two

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years. Those ratios are:

- Working Capital / Total Assets
- Retained Earnings / Total Assets
- Earnings Before Interest and Taxes / Total Assets
- Market Value of Equity / Total Liabilities
- Sales/ Total Assets

Altman then created a formula using these five ratios for a given company that has been shown highly predictive of bankruptcy risk. The formula in the end allows a company to classify suppliers as having high, medium or low risk of bankruptcy filing. While it is primarily meant to be used with public companies with data in public SEC filings, it could also be used with private companies who can be moved by carrot or stick to share this information. While two years may seem like a long horizon in today's environment, the approach may highlight incipient or even short term issues at a supplier.

Companies considering using the Altman Z-Model for supplier risk analysis should really work to understand the underlying theory and mathematical approach, and to recognize it is simply one indicator.



Nevertheless, there are several web sites with "Z-Score" calculators. One example is linked to here: <u>Altman Z-Score Calculator.</u>