What if we could better predict bankruptcy?

If we could better predict bankruptcy, would market participants be able to avoid some of the unintended consequences of costly default proceedings?

At the Academy Awards show in 2013, Life of Pi special effects company Rhythm & Hues Studios accepted its Oscar – yet famously declared bankruptcy just two weeks earlier. And Henry Ford's first venture, the Detroit Automobile Company, went bankrupt in 1901 due overpricing and low quality products. Global companies have always faced financial distress – and always will. In England and Wales alone, 3,368 companies were liquidated over a two-month period last year.

What if we could better predict bankruptcy and put measures in place before the point of no financial return?

Bankruptcy is often very costly for creditors and other stakeholders, and where government policies and financial infrastructures are inefficient, the cost of going bankrupt has the potential to increase at a dramatic rate. In one of my current projects, I examine the cost of bankruptcy in the UK and find that the expectation for creditors to be paid is rarely met. Why? Because the cost of the bankruptcy process is often much higher than the amount firms would make by selling off their assets. Bankruptcy's costly, but its efficiency could potentially be improved if default events are predicted better.

Transparent accounts
I worked with William Beaver, Joan E. Horngren Professor of Accounting, Emeritus, Stanford, when I studied for my PhD there – he's famous for his research on how accounting information in corporate financial statements affects security prices. Among the first to investigate financial ratios as predictors of business failure, his thinking made me question how market participants could better predict financial distress.

Bankruptcy's a big event and one that we should be predicting. At the core of my research is how accounting information can capture early signs of financial distress. Traditional models tend to focus on market information, such as firm returns and market size. What I've discovered is that a firm's accounts can help market participants develop useful tools to detect distress in a timely manner.

From tunnelling to fraud
I'm Portuguese, so I've been following the case of the Espirito Santo group in Portugal which collapsed in August 2014. There were large loans from the financial part of the group to its industrial subsidiaries. This suggests that the group was reshuffling resources across different subsidiaries,

which eventually led to bankruptcy of different parts of the group and the onset of a fraud investigation. This case is a prime example of how traditional bankruptcy prediction models could be improved to incorporate group dynamics and to predict group failure on a timelier basis.

The group started to collapse when the Bank of Portugal appointed auditors to review the accounts and they found irregularities. Companies need to produce good quality financial information which they should communicate in a transparent way. By doing that, they'll help market participants to correctly assess the firm's probability of distress.

In distress? Ask a parent

There's not been enough research into bankruptcy within groups, which is an area of interest to me. When a firm belonging to a business group (a subsidiary) files for bankruptcy within its group, I look for the next subsidiary that's likely to go bust and the type of help its parent can offer, before it reaches insolvency.

At the point of financial distress, I've found that it's the subsidiaries that bring the largest returns to the group and whose bankruptcy is likely to generate higher costs for the parent that are more likely to be protected from insolvency. If they share the parent's name for example, they're more likely to be supported as they approach distress and less likely to file for bankruptcy in the first place.

Creating positive returns

This research will help to inform rating agencies to better predict financial distress and creditors to structure debt arrangements with firms. In a study with Scott Richardson and Irem Tuna, both Professors of Accounting at London Business School, we show that credit spreads reflect information about forecasted bankruptcy rates with a significant lag. This suggests that accounting information can be used to identify mispriced credit securities and that there's a role for value investing in credit markets.

If companies are transparent and provide high quality accounting information, they may be able to avoid some bankruptcy costs – and if they do need help, they may be better placed to ask for it.

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