A smoother ride

COMPANIES BASED IN COUNTRIES WITH BANKRUPTCY PROCEDURES THAT FAVOUR CREDITORS OVER SHAREHOLDERS HAVE A GREATER INCENTIVE TO HEDGE. DR AMRIT JUDGE LOOKS AT THE EVIDENCE

In their seminal work, Nobel prize-winning economists Franco Modigliani and Merton Miller (M&M) argued that in a perfect capital market, where there are no taxes and no contracting costs, such as those associated with bankruptcy, a firm's choice of financial policy does not affect its market value. As a firm's hedging policy involves the issue of financial claims against a firm, it is also a component of its financing policy. Therefore, the M&M proposition can be extended to hedging.

We might argue that, if a shareholder can buy and sell risk on the same terms as firms, no service is provided to shareholders by corporate hedging. A shareholder can obtain 'home-made hedging' by hedging for their own account, implying that the corporate hedging decision is irrelevant. Furthermore, since value creation in the M&M world takes place on the asset side of the balance sheet (through the realisation of positive net present value projects), hedging as part of the firm's financing policies cannot create value per se.

However, this view of hedging seems to be at variance with what we observe in practice. For example, my research on hedging, which examines the financial statements of listed UK non-financial firms over the period 1995-2015, reveals that more than 75% of firms

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used derivative instruments for hedging. So perhaps there's a country-specific reason why companies hedge.

Hedging has the potential to increase value by reducing external claims to the cash-flow stream, flowing from the firm's assets and, in doing so, facilitating investment in value-enhancing projects. And in the UK context, it seems to have particular relevance in relation to risk management around potential corporate financial distress.

Financial distress occurs when a firm's income cannot cover its fixed claims, that is, interest payments on debt capital, and repayment of principal and other fixed contractual payments. Firms with lower interest cost coverage, along with greater variability of cash flows, are more likely to find themselves in financial distress. By reducing cash-flow variability arising from exposure to volatility in exchange rates, interest rates and commodity prices, hedging lowers the likelihood of the firm encountering financial distress and, in turn, lowers the expected costs of financial distress. This decrease in expected financial distress costs increases the firm's expected cash flows, and so benefits the firm's shareholders.

Direct and indirect costs

Financial distress costs can be categorised into direct and indirect costs. Direct costs consist of all the costs pertaining to the administration of the bankruptcy process, for example, accounting and legal fees, and management's time spent on the bankruptcy procedure. However, even if the firm does not actually experience bankruptcy, the perception of having a high likelihood of default can impose substantial indirect costs on the firm. These might come in the form of lost market share as customers switch their purchases to rival firms or suppliers tightening credit terms, leading to an increase in working capital requirements.

Loan covenants may also be triggered as a firm approaches financial distress, which might result in costly refinancing. These indirect costs will increase at an accelerating rate as the likelihood of financial distress grows. Firms with a higher probability of financial distress and higher financial distress costs will generate larger benefits from hedging, and so have greater incentives to hedge their risks.

The severity of the indirect costs of financial distress depends crucially on the types of products a firm sells. Firms that sell products that carry warranties or include service agreements enter into long-term relationships with their customers. The value of these warranties and service agreements will be significantly diminished if these firms are under pressure, and potential customers may turn to more viable competitors.

This was the experience of several motor manufacturers, such as General Motors (GM) and Chrysler, in the months before and after they filed for Chapter 11 bankruptcy during the 2009 financial crisis. In 2009, GM saw sales halve and its US market share fall from 22% to 18% as customers switched to more creditworthy rivals. Speaking to *The Guardian* in May 2009, GM's CFO, Ray Young, said dwindling sales were partly down to the recession. He went on to say: "The other factor, frankly speaking, is the increased concern about bankruptcy by consumers, particularly in North America."[1]

Airlines and hedging

Indirect costs are also likely to be higher for firms that sell goods or services where quality is important, but difficult to determine prior to consumption. Air travel is a good example. Tickets are purchased in advance of travelling, but the customer won't know whether the travel experience is a good one until they have flown. The need to conserve cash and manage costs is the focus for most airlines, and the pressure intensifies during a downturn.

While in Chapter 11 bankruptcy in 2012, American Airlines began imposing cost-cutting contract terms on pilots and announced plans to lay off more than 4,000 mechanics and other airport ground workers as part of its restructuring. During this period, flight delays began to rise and American's on-time arrival rate of 59% was significantly below the 85% achieved by United Continental Holdings and the 76% achieved by Delta Air Lines, both operating outside of Chapter 11.

This suggests that all airlines should hedge their financial price exposures, such as jet fuel price, to avoid the distress costs. However, evidence suggests that hedging practices between US and European airlines vary. Since 2014, jet fuel hedging has been on the decline in the US, in response, some would say, to the decline in its price volatility. American Airlines has not hedged its jet fuel exposure since the second quarter of 2014; United Airlines hedged 21% in the fourth quarter of 2014; Southwest Airlines hedged 25% of its fuel cost in 2014; JetBlue Airways hedged just 15% of its second-quarter 2014 fuel consumption; and US Airways, which recently merged with American Airlines, has gone without hedging since 2008.

Airlines outside the US are hedging a significantly higher percentage of their fuel costs, however. According to recent analysis from Platts, hedging remains a key tool in managing fuel-price exposure for Europe's major airlines. Platts noted that Ryanair had hedged 90% of its fuel consumption for the year ending March 2015; Aer Lingus hedged 90% of its requirements for 2015; easyjet was 80% hedged in 2014; Lufthansa had covered 78% of fuel exposure for 2014;

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and Air France-KLM was 65% hedged in 2014. Reports suggest that British Airways and Air France-KLM have not made major changes to their hedging plans in response to falling oil prices.

Outside Europe, a similar picture prevails, with Qantas hedging 94% of its fuel requirements for the first half of 2015; Japanese ANA Holdings hedging around 75%; and Virgin Australia and Air New Zealand hedging 72% and 67% of their 2015 fuel exposures, respectively. Notable exceptions are Etihad and Chinese carriers, who currently have no jet fuel hedges in place. However, as these airlines are backed by their governments, it could be said that they have fewer concerns about future oil price hikes.

Outside the US

Even prior to the recent decline in oil prices, airlines in the US have traditionally hedged on average a relatively smaller fraction of their fuel purchases than their European competitors. But financial distress costs are higher in Europe (and other countries) than in the US. This, I believe, might arise because of differences in the bankruptcy code between the US and other countries. The bankruptcy code in the US is regarded as shareholder-friendly, because it places greater emphasis on management or shareholders retaining control in the event of default. This enables firms to seek advice at an earlier stage of financial distress, resulting in a greater chance of long-term survival. When Chapter 11 works, the company emerges from the process as a financially healthy company.

On the other hand, the restructuring of bankrupt companies via an administrative receivership, as practised in Canada, New Zealand, the UK and in various European countries, is perceived as debt-holder-friendly because it confers greater rights to creditors. If these rules make liquidation more likely for firms in financial distress, then firms in these countries potentially face higher distress costs than they would in the US. So, firms based in countries with bankruptcy procedures that favour creditors over shareholders have a greater incentive to hedge.

Several interested observers, such as those holding senior positions in the airline industry outside the US, have argued that Chapter 11 has enabled US airlines to walk away from many obligations, such as billions of dollars of pensions liabilities, resulting in a considerable competitive advantage. A number of commentators are calling for the UK to adopt a similar procedure or at least 'cherry-pick' the best aspects of the Chapter 11 regime.

1 www.theguardian.com/business/2009/may/07/gm-results-bankruptcy-fears

Dr Amrit Judge is associate professor in finance at Nottingham University Business School