

## Feature

### KEY POINTS

- Every transaction has many different types of risk, eg interest rate, commodity, credit, etc.
- Each risk type has to be completely mitigated for a trade to be considered a full hedge.
- Generally, the purported hedge will have residual risks.
- Any purported hedge is likely to be part hedge and part speculation.
- The extent of each of the residual risks and all of them in aggregate have to be considered in the light of the circumstances of the party to determine whether the boundary into speculation has been crossed.

Author Hanif Virji

# Capacity: is the question of hedging or speculation mis-stated?

The question of legal capacity to act in purported hedging transactions inherently assumes that all transactions are binary: either hedges or speculations. In this article, Hanif Virji explains how the reality is more complex – going beyond even a one-dimensional spectrum to a multi-dimensional one.

A purported hedging transaction typically is neither a hedge nor a speculation, but somewhere in between. The risks of every transaction are multi-faceted: its value may change with changes in interest rates, commodity prices, equity markets, bond prices, etc. Each of these elements represents a risk. For a hedging transaction to be a full hedge it needs to nullify all of the risks, that is the value of the original transaction when taken together with the hedge is insensitive to every element. In practice, this will not have been achieved for those transactions that are in dispute: there will be residual risks. The question then becomes to what extent each of these residual risks and all of them taken together become classified as more a speculation than a hedge – where is the line to be drawn?

## INTRODUCTION

Whether a transaction is labelled as a “hedge” or “speculative” is important for many reasons not least because it can determine the question of the legal capacity to act (*ultra vires*). The issue has a long history from *Hazell v London Borough of Hammersmith and Fulham* [1992] 2 AC 1 to *Deutsche Bank AG London v Comune di Busto Arsizio* [2021] EWHC 2706 (Comm), the most recent case. The question inherently assumes that all transactions are binary: either hedges or speculations. This is incorrect and is the source of angst faced by the courts. In his recent article, Christopher Bond concluded that:

“The analysis of whether a transaction is a hedge or speculation plainly requires its location on a spectrum, rather than on one side or other of a dichotomy.”<sup>1</sup>

The reality is more complex still.

## A COMMON PROBLEM FROM INTEREST RATE RISK

Corporations, including local authorities such as the London Borough of Hammersmith and Fulham, often borrow money on a variable interest rate basis. That is the periodic (often quarterly) interest payable on the loan changes with each period and is linked to an interest rate such as LIBOR (as was), SONIA, SOFR, etc. The borrower is exposed to the risk that the interest rate increases causing a loss or, worse, a default. An interest rate swap (IRS) mitigates such a risk. Consider a \$100m loan repayable after five years with interest payable quarterly linked to SOFR (Secured Overnight Financing Rate, the intended replacement for \$ LIBOR). To mitigate the risk of SOFR rising and thereby increasing the interest payable on the loan, the borrower enters into an IRS with a counterparty (usually the same bank as the lender of the loan). The IRS is structured such that quarterly for a period of five years the borrower receives interest calculated using SOFR (which exactly off-sets the interest it has to pay on the loan) and pays a fixed rate of interest. In this way the borrower has fixed the interest payable on the loan. This is not an unusual transaction in order to mitigate interest rate risk.

Should the borrower wish to cancel the IRS, a compensatory payment, often termed the break cost, has to be made by one party to the other. In this example, the break cost is payable by the borrower should interest rates decrease and, conversely, it will receive the break cost should interest

rates increase. To off-set the effects of the financial crisis, central banks globally reduced interest rates dramatically to near zero and, in some currencies, even negative rates. This caused the break costs to balloon against the borrowers. It is in this context that IRSs were challenged on the basis of capacity.<sup>2</sup>

## WHAT IS RISK?

When a party enters into any transaction – stock, currency, bonds, etc or their derivatives – they take on risks, that is the value of the transaction will change (either to the benefit or detriment of the party) as market prices change and, in some instances (for example with option transactions), with the passage of time. A working definition for the purpose of this article is if a transaction mitigates the risks fully, it is a “full hedge”, or, if the risks are partially mitigated, then it is a “partial hedge”, or, if it does not mitigate the risks at all, then it is not a hedge.<sup>3</sup> This then is Bond’s hedge spectrum.

An example will illustrate the point. Suppose an investor buys 1,000 shares of company XYZ and simultaneously sells 900 XYZ shares in derivative form (for the purpose of this discussion, whilst the derivative is an entirely separate transaction, it is considered to mimic exactly the sale of the shares). There are two ways in which to consider this transaction. First, the derivative is analysed in the context of the purchase of all the shares of XYZ (1,000) in which case it can be said to be a partial hedge because it mitigates the risk of 90% of the share purchase. Alternatively, the original share purchase can be broken down into two segments: (a) the purchase of 100 shares; and (b) the purchase of 900 shares. The derivative is then a full hedge for the latter and not a hedge for the former. From the perspective of capacity most people would agree that the derivative as a whole is

**Biog box**

Hanif Virji is a founder and director of Vivadum. Following a career in investment banking, he acts as an expert in financial services disputes. He has provided risk management advice to corporations and funds globally. He is qualified as an Expert Determiner. Hanif is a member of the Sustainability Specialist Group of the Chartered Institute of Arbitrators. Email: [hv@vivadum.com](mailto:hv@vivadum.com)

categorised as a hedge if only for part of the original position. But what if 1,100 shares were traded in the derivative form? The investor would be net 100 shares short (they have sold 100 shares more than they owned). Dissecting this transaction suggests that the derivative is a hedge for all the 1,000 shares and a separate speculative transaction on 100 shares. Is the derivative as a single transaction a hedge or a speculation? Where is the line to be drawn?

This is a one-dimensional spectrum, but risk is not quite so straightforward to categorise. Consider the following example of an investor again buying the same 1,000 shares of company XYZ. This time the investor decides to simultaneously sell 1,000 shares of a different company ABC. The analysis here may seem straightforward, however now further suppose that the correlation between the share prices of ABC and XYZ is 100%, ie if the share price of XYZ increases then without fail the share price of ABC decreases. In other words, the ABC share price does the opposite of the XYZ share price. Again, from the perspective of capacity the sale of ABC can be seen to be a hedge for XYZ. What if the correlation is 50% or zero? The spectrum now becomes two-dimensional – quantity and correlation. In reality the problem is multi-dimensional!

The example above of the corporate borrower which used an IRS to hedge their risk will illustrate the multi-dimensionality of risk. The five-year loan would be ideally hedged using a five-year IRS. What if a six-year IRS was used instead? Perhaps it could be said that it is still a hedge if it is deemed that the mismatch in maturity is sufficiently short. What if the maturity had been ten years? Again, the court would have to draw a line in terms of the maturity mis-match of the transaction: too long and it crosses the line into speculation.

It is unlikely that a transaction is a full hedge for any risk unless it is an exactly opposite transaction (a trivial example which a court is unlikely to have to deal with). It follows that any purported hedge in dispute is in reality a partial hedge and a partial speculation. The court will have to draw a number of lines with respect to, for example, quantity, correlation, maturity, etc before deciding the question of capacity and these

are likely to be specific to the circumstances of the parties.

**A SINGLE MEASURE FOR RISK**

In an ideal world the extent of all the different risks that exist in any transaction and its purported hedge taken together is measured by a single number. For example, this is done when inflation is measured. The prices of the various components of the basket of goods change differently, and, indeed, each is sensitive to different risks such as the price of energy, commodities, etc. Nonetheless, the calculation of the rate of inflation<sup>4</sup> is an averaging process that provides a useful single figure, say, the CPI. The court could then simply decide where to draw the line in this one-dimensional spectrum. Unfortunately, there is no such agreed market standard method for calculating the cumulative effects of all risks in a single scale. The “value at risk” methodology,<sup>5</sup> or more commonly known as VaR, is widely used by both risk managers and regulators. In line with the January 1997 US Securities and Exchange Commission’s ruling that risks must be reported,<sup>6</sup> it is often used by banks and corporations in their financial statements. Even if the underlying method of VaR is accepted by the courts, there are many differences in its application and the method itself has its detractors. A single, agreed barometer of risk is still far away.

**CONCLUSION**

Capacity is determined by the binary answer to the question of whether a transaction is a hedge or a speculation. In general, a purported hedging transaction will be classified as being somewhere in between – part hedge and part speculation. In other words, if a single, agreed scale for measuring all the different risks inherent in a transaction were available, a court could draw a line and make a determination. Such a scale has not yet been formulated. The difficulty is that the risks of a particular transaction are multi-faceted – sensitivity of the transactions to quantity, correlation, maturity, interest rates yield curve, etc – and each element requires separate analysis. The question then becomes to what extent each of these residual risks and all of them taken together become classified as more a speculation than a hedge? ■

Disclaimer: This article is not advice and the author accepts no liability for reliance upon any of the facts or matters stated. Financial and legal advice on the issues discussed should be sought in the ordinary way.

- 1 ‘Another roll of the dice: the elusive line between hedging and speculation’, (2022) 5 JIBFL 323.
- 2 Other causes of action were, for example, mis-selling and LIBOR manipulation.
- 3 The question of whether a transaction was a hedge or not was discussed in the context of variable rate loans and interest rate swaps in *HMG Investment Holdings Limited v National Westminster Bank plc* [CL 2015-000685], in which the author acted as an expert.
- 4 There are a number of measures of inflation such as the Retail Price Index (RPI) and the Consumer Price Index (CPI). A full discussion can be found in ‘UK inflation indexation and the end of RPI: some financial and legal considerations’, (2020) 2 JIBFL 86.
- 5 VaR is a measure of the risk of loss given a portfolio of assets (in this case the transaction and its purported hedge) and a time period over which the given loss could arise such as a month. For example, if US\$100,000 is the answer to the question, what is the loss over a period of one month with a chance of 5%, then the one-month 95% VaR is said to be US\$100,000. That is there is a 5% chance of the portfolio losing more than US\$100,000 in a month (or equivalently, there is a 95% chance of the portfolio losing less than US\$100,000.) The VaR is calculated using historic market prices of the assets comprising the portfolio. Using these the volatility of the assets and their inter-correlations are calculated. These are then used to calculate the VaR.
- 6 <https://www.sec.gov/divisions/corpfin/guidance/derivfaq.htm>

**Further Reading:**

- Another roll of the dice: the elusive line between hedging and speculation (2020) 5 JIBFL 323.
- UK inflation indexation and the end of RPI: some financial and legal considerations (2020) 2 JIBFL 86.
- LexisPSL: Banking & Finance: Practice Note: Derivatives: capacity and authority.