Hedging Your Bets

Best Practices To Manage And Better Control Fuel-Hedging Risks

By Peter Berdy  I  ASCEND I SPECIAL SECTION

Airlines hedge fuel and foreign exchange to mitigate fuel-price volatility and exchange-rate fluctuations. Some airlines have suffered significant losses due to hedging, raising the question of hedging is like betting part of the ranch. Trading in carbon is the next frontier for airline hedging.

Fuel Hedging On Fire

Fuel represents about a third of an airline’s costs. A fuel hedge is a form of insurance policy, protecting an airline’s cost structure from potentially catastrophic increases or spikes in jet fuel prices due to external factors outside its control. Fuel hedging removes the future uncertainly of volatile jet fuel prices. Knowing fuel prices are locked in, it allows airlines to build and follow their business plans.

However, there are risks and costs involved in fuel hedging. Purchasing the derivatives costs millions of dollars and involves transaction fees. Aggressive fuel hedging cannot leave an airline open to the negative impact of a sharp decline in fuel and oil prices.

On a day-to-day basis, airlines have to deal with fuel price volatility. How volatile can fuel prices be? During 2008, crude oil peaked at a high of more than US$147 per barrel and hit a low price of under US$35 per barrel, a swing of US$112. This dramatic change took place within a period of only five months. During 2011, crude ranged from US$113 in April to US$77 in October, a change of US$36 per barrel. The price per barrel of crude oil was in the US$30 range as recently as 2006.

In addition, the price to refine crude to jet fuel, called the crack spread, can fluctuate and add to airlines’ costs. The gap between the maximum and minimum crack spread was US$23 per barrel in 2008. The gap closed to US$3 per barrel in 2010 and US$8 per barrel in 2011.

Brent Versus WTI Showdown

Since there is no financial instrument specifically for jet fuel, the closest commodities used for hedging are crude oil and heating oil. West Texas Intermediate, or WTI, provides the most


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Value Of Carbon Carbon is on track to be the world’s biggest commodity market. The value of carbon has grown from US$11 billion traded in 2005 surging to over US$140 billion by 2010. Nearly 85 percent of current trades are EU ETS allowances.

HIGH-STAKES ECONOMIC CRISIS TOOK PLACE IN 2001, THE DOWNSLOPES OF THE U.S. CREDIT RATING, QUESTIONS OF UNITY IN THE EURO ZONE, CURRENCY VOLATILITY AROUND THE WORLD AND CONTINUED INSTABILITY IN FUEL PRICES. SIMILAR ECONOMIC EVENTS ARE LIKELY TO TAKE PLACE THIS YEAR, AND THEY WILL CONTINUE TO HAVE MAJOR EFFECTS ON AIRLINES.

AIRLINES ARE HEAVILY EXPOSED TO FUEL PRICE SWINGS. MANY OF THEM ARE ALSO EXPOSED TO FOREIGN EXCHANGE (FOREX) MOVEMENTS. WHILE FUEL HEDGES WORK TO MAKE THE MOST HEADLINES, FOREIGN EXCHANGE HEDGES BUILD UP SOME TERRORISM HEADQUARTERS FOR AIRLINES — ESPECIALLY THOSE WITH A SIGNIFICANT PORTION OF REVENUES OR COSTS THAT ARE EXPOSED TO FOREIGN CURRENCIES.

TO MITIGATE THE RISKS ASSOCIATED WITH LARGE SWINGS IN FUEL AND CURRENCIES, MANY AIRLINES, AS WELL AS AIRCRAFT MANUFACTURERS, ENGAGE IN Hedging in one or both of these areas. Therefore, it is important to examine how fuel and currency hedges work as well as how some airlines have coped with the uncertainty that accompanies fuel volatility and currency exchange.

TIME BOMBS AND RUSSIAN ROULETTE

While airlines have engaged in hedging for years, there are critical points of the practice. These critics have their claims backed in time.

Critics’ Point Of View

“Trying to predict the price of a barrel of oil is a little bit like playing Russian roulette today,” said travel analyst Peter Yesawich.

“Betting on the weather is like a death sentence,” said George Chu, a trader with Hudson Capital.

“FILE 1900s. It used Japanese financing to acquire airplanes, but did not protect itself from currency fluctuations. When Brazil’s economy crashed in 1994, with a sharply declining currency and high inflation, Varig could not pay its aircraft leases, ultimately leading to bankruptcy. Critics indicated that Varig did not do an adequate job to prepare for the future and should have used forward hedging to ensure the company would not go under due to a drop in currency.

VARIG WAS BRAZIL’S LEADING AIRLINE IN THE 1990S. IT USED JAPANESE FINANCING TO ACQUIRE AIRPLANES, BUT DID NOT PROTECT ITSELF FROM CURRENCY FLUCTUATIONS. WHEN BRAZIL’S ECONOMY CRASHED IN 1994, WITH A SHARPLY DECLINING CURRENCY AND HIGH INFLATION, VARIG COULD NOT PAY ITS AIRCRAFT LEASES, ULTIMATELY LEADING TO BANKRUPTCY. CRITICS INDICATED THAT VARIG DID NOT DO AN ADEQUATE JOB TO PREPARE FOR THE FUTURE AND SHOULD HAVE USED FORWARD HEDGING TO ENSURE THE COMPANY WOULD NOT GO UNDER DUE TO A DROP IN CURRENCY.
liquidity over the longest period. WTI has been used by many airlines for hedging. However, Brent crude, the European benchmark, came into favor in 2011.

Historically, Brent traded at a slight premium to WTI, around US$1 to US$2. However, the relationship changed dramatically in 2011, and Brent’s premium over WTI began to rise. The price of WTI fell while jet fuel prices, which more closely tracked to Brent, remained high. Concerns about rising oil inventories and strained pipeline capacity in North America put downward pressure on WTI, while the war in Libya and emerging market growth helped increase Brent’s prices.

At its peak in 2011, the spread between Brent and WTI widened to a record US$36, causing trouble for airlines using WTI futures contracts.

As a result, Delta Air Lines shifted almost all of its jet fuel hedges to Brent from WTI in 2011. “We’ve needed to reconstruct our hedge position,” said Delta Air Lines President Ed Bastian. “WTI, which is the instrument that many of our hedge in this market, has dislocated from Brent in terms of pricing.”

The widening of the spread in 2011 “was an exceptional situation that had a lot to do with the anomalies of the North American production situa- tion and the landlocked crude in North America,” said Bill Wallack, a senior director at Fitch Ratings.

“That’s likely to be addressed now, and so we would expect some continued reduction in the spread.”

Fitch said the narrowing spread was a positive, though not an enormous one, for airlines. “A lot of airline management teams have been tweaking their approach to hedging for a while now in response to this spread,” he said. “It’s good for U.S. airlines to the extent that they are more exposed to Brent-based hedging strategies.”

The premium of Brent to WTI has since nar- rowed and was around US$9 a barrel at the end of 2011.

“Til the extent we see WTI and Brent come together, I think that’s helpful and the hedges that we have in place will really give us much better protection than they were when WTI was trad- ing at a discount,” said Southwest Airlines Chief Financial Officer Laura Wright.

Due in part to the WTI differential plus oil price changes, carriers such as Southwest Airlines, United Continental Holdings, Alaska Airlines and Delta Air Lines had markups or special expenses tied to fuel, including:

• United Continental reported a US$56 million charge related to “fuel-hedge ineffectiveness” in the third quarter. It was an apparent reference to the fact that its exposure to WTI was insufficient protection against jet fuel prices that more closely tracked Brent crude.

• Southwest had a net loss of US$140 million for the third quarter 2011, reporting a net cash markdown of more than US$200 million tied to its hedge portfolio.

• Alaska Air Group said hedge markups ate into its third-quarter profit by US$52 million.

Surcharges: The Other Way To Manage Fuel Risks

Airlines typically have not been able to increase prices to cover rising costs for fear of losing market share to competitors, or scar- ing away passengers from flying altogether because of added surcharges and fees. A solution intended to address fuel hikes was the fuel surcharge, quoted separately from the base fare.

Surcharge: The Other Way To Manage Fuel Risks

In the United States, so its cost base is also in dollars. The majority of Boeing’s contracts with external suppliers are dollar denominated, which requires its foreign suppliers to deal with how to hedge.

Airbus is a different story. EADS, the par- ent company of Airbus, reports its financial results in Euros. The majority of revenues and costs come from Airbus. A significant portion of Airbus revenues are dollars denominated while a substantial portion of its costs are in Euros. This makes Airbus highly vulnerable to currency shifts between the Euro and U.S. dollar.

Airbus hedges are tied to purchases of individ- ual airplanes that carry on delivery schedules, cost and percent Euro content. Airbus policy is to hedge each aircraft at 100 percent based on the forecasted inflow of cash.

EADS manages its currency exposure to shield earnings from foreign currency volatility by using a hedge portfolio to help secure rates for future dollar-denominated revenue streams are converted to Euros. In 2010, EADS cash flow hedges amounted to US$702 million, hedged against the euro.

Historically, EADS recorded losses since the Euro had been strengthening against the dollar. With problems in the Euro zone, the Euro has fallen against the dollar. As a result, EADS is expected to record foreign gains.

Airline Hedging Examples

Southwest Airlines

Southwest Airlines has been one of the most consistent and aggressive hedgers in the airline business. A key to the company’s financial success has been its long-running fuel-hedging program. From 1998 through 2008, Southwest saved US$3 billion in fuel costs due to hedging. However, this trend reversed in 2009.

Due to fuel hedges Southwest had in place in 2009 and including the affect of accounting requirements to report derivatives and hedging, the airline experienced net losses of US$467 million in fuel and oil expense relating to fuel- derivative instruments. This amount included cash payments of US$245 million for fuel derivatives, a major reversal from 2008 when Southwest received US$1.3 billion in cash from fuel derivatives. During 2010, Southwest rec- eived US$324 million in losses in its income statement due to佛教 because of fuel hedging. Southwest reported hedging losses of US$117 in the third quarter of 2011.

Lufthansa Group

The case of the Lufthansa Group points to the complexities involved in managing a complex multinational business. Lufthansa Group hedges fuel cost and fuel now, and carbon credits. International ticket sales and the purchase of fuel, aircraft and spare parts present foreign currency risks for Lufthansa Group. It has more than 400 subsidiaries and associated companies, including short-haul and long-haul airlines, Lufthansa Cityline Austrian, Swiss, Germanwings, Eurowings, Air Dolomiti, as well as ownership in other airlines such as jetBlue.

Lufthansa Group

Southwest Airlines and Lufthansa Group are also exposed to hedging losses that can be used to deal with forex and fuel risk under different environments.

GOL

The Brazilian airline, GOL, operates in an environment exposed to currency risk, interest- rate risk and fuel-price risk. As a result, GOL engages in hedging of fuel risks using WTI and has interest-rate hedges tied to future U.S. aircraft deliveries.

Although GOL’s revenues and expenses are dollar denominated, most of its hedging is done in the United States. Forex risk is not recognized, and Brazil’s currency, the real, has experienced frequent and substantial fluctuations relative to the U.S. dollar. Amount of GOL’s revenues are denominated in reals, while 72 percent of its liabilities are tied to the dollar.

GOL reported a loss in the third quarter 2011 stating, “The loss was mainly due to the appreciation of the dollar, which increased from R$1.56 (US$.90) at the end of the second quarter to R$1.85 (US$1.07) at the end of the third quarter, an 18.8 percent upward.

GOL reported a R$76 million (US$43.2 million) loss on other income due to hedging of WTI, forex and interest rates during the third quarter.

Southwest Airlines

Southwest Airlines has gained a reputation for proactive risk management, especially through effective use of fuel hedging and mastery of forex-risk strategies. Some analysts suggest that Southwest speculates on energy prices without a formal rationale for doing so.

Most airlines have hedged each aircraft at 100 percent based on the forecasted inflow of cash.
Carbon Hedging

“Carbon will be the world’s biggest commodity market, and it could become the world’s biggest market for carbon derivatives,” according to Cedric Leurquin, a spokesman for the Transport Action Group. Lufthansa said it would need to buy around 7 million carbon units this year, compared to 50 million Euros (US$66 million) in 2011, making aviation the second-largest buyer of carbon after the electricity sector according to Thomson Reuters Point Carbon.

Accounting for carbon emissions in the open carbon market.

Hedge Accounting

Jet Fuel, WTI and Brent
(Source: U.S. Energy Information Administration)

Crude Fluctuations

Wild fluctuations in the price of crude oil took place during 2008, peaking over US$147 and dropping under US$35 per barrel. Crude has steadily continued to rise since 2009. WTI and Brent crude traded in parallel until 2011 when a surplus of oil in the United States caused WTI to drop versus Brent. The cost to refine crude to products like jet fuel, called the crack spread, adds additional fluctuation based on supply and demand for different petroleum products and refinery capacity.

Hedge Accounting Headaches

GAAP generally accepted accounting principles report for derivative instruments requires significant compliance work to document changes in hedge value over time and to prove that hedge relationships are effective. Although it may be possible to follow the changes in the accounting trail, these adjustments can be significant.

Accounting for derivative financial instruments under international Accounting Standards and is covered by IAS39 (Financial Instrument: Recognition and Measurement). IAS39 requires that all derivatives are marked to market with changes made to the profit and loss account. For many companies, this results in significant and loss volatility from the use of derivatives.

Hedge Accounting In A Nutshell

Accounting guidance for hedge transactions specifies that the derivative must be marked to market on the balance sheet. The offsetting journal entry is not booked to earnings but rather to other comprehensive income (OCI). Entries to the OCI account are booked directly to retained earnings, bypassing the income statement. Then, when the forecasted transaction hits the income statement, the amounts booked to OCI are transferred to the income statement. This offsets the earnings fluctuations from the price of jet fuel. The net result is that the derivatives are carried at market value on the balance sheet, but there is no volatility introduced to the income statement.

While airlines follow these international standards, they also report what they believe are more meaningful results to shareholders.

For example, Southwest states, “The Company believes it is more meaningful to provide its financial results on an “economic” basis reflecting its actual net cash outlays for fuel consumed during the current period, inclusive of settled fuel derivative contracts, as current market prices are not always indicative of actual future settlements. As a result, the company also provides its financial results excluding these unrealized, noncash special items, to provide a better measure of the impact of the company’s fuel hedges on its current period operating performance and liquidity. The actual cost impact of hedges related to fuel to be consumed in future periods will be reported in the applicable future economic results.” These economic results provide a better measure of the impact of the company’s fuel hedges on its operating performance and liquidity since they exclude the unrealized, non-cash adjustments and reclassifications that are recorded in GAAP results. In accordance with accounting guidance relating to derivative instruments, and they reflect all cash settlements related to fuel derivative contracts within fuel and oil expense. This enables the company’s management, as well as investors, to consistently assess the company’s operating performance on a year-over-year or quarter-over-quarter basis after considering all efforts in place to manage fuel expense.”

Hedge accounting is not easy to follow. Due to hedge accounting and reporting complexity, clear communication by management of hedging results is critical to the company’s shareholders and analysts who are interested in understanding actual hedging performance.

Best-Practices Risk Management

Loses from hedging can be blamed on many variables, including:
- Governance failures by management
- Poor risk management
- Inaccurate forecasts
- Inadequate hedging
- Inadequate information systems
- Inadequate communication
- Inadequate risk reporting
- Inadequate data analysis
- Inadequate internal controls
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Hedging provides a way for airlines to manage future cash flows and refine capacity. Since there are no hedges for jet fuel, airlines must use futures contracts to manage fluctuations in commodity prices and project the impact of potential changes in the future. The case for hedging includes being able to better manage future cash flows and earnings. By locking in cash flows, airlines are better able to reduce their most volatile expense category and earnings volatility. The case against hedging is that it can also produce low profit volatility and is difficult to implement in specific cases, large losses. Best-practice controls help develop clear accountability and transparency with an emphasis of using hedges to manage and better control risks. 

Top 14

The number of European airports that require slot coordination because they don’t have enough capacity to meet demand, according to IATA.

2014

The year by which European governments agreed to reduce average flight delays to 30 seconds and improve cost efficiency 3.5 percent per year. According to IATA, only five out of 27 European states are on track to meet their targets.

1,715

The number of airlines that operate a fleet of 23,000 aircraft serving 3,750 airports through a route network of several million kilometers by 2016 or navigation service providers, according to the Air Transport Action Group.

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