Take to the sky

European fuel prices – how are they affecting the tourism industry?

Airlines are much more than just people carriers – they are crucial to a country's competitiveness, taking millions of people to work, business meetings and on vacation.

Across Europe alone, more than 25,000 aircraft cross the skies every day, making up a large chunk of a transport industry that accounts for more than 10% of the EU's GDP and employs nearly 10 million people.

However, the combination of very high fuel prices plus increased volatility in fuel process are threatening the viability of some airlines and the International Air Transport Association (IATA) predicts some businesses may fail.

And with every additional cent per gallon slapped on the price of jet fuel resulting in an overall cost to the airlines of $600million a year, companies are turning to price risk management techniques using financial derivatives instruments to protect their profitability. How are airlines safeguarding their future?

Coping with record highs

Airlines, perhaps more than any other sector of the travel and tourism industry, have been knocked back by the aftermath of September 11 and the continuing threat of terrorism.

Tension in the Middle East and the war in Iraq have also pushed up international crude oil prices and subsequently the cost of refined oil products, such as jet fuel – on which it is totally dependent.

High oil prices have impacted airlines for the past two years, costing them around US$5.5bn in 2005 and could now drive some companies to the wall, according to IATA. At the AirFinance conference in New York in April last year, the Association suggested total industry losses between 2001 to 2005 could top US$40 billion. The picture could be even worse because its 2005 figure is based on an average price for European crude oil (Brent Crude) of US$43 a barrel, yet this hit US$57.10 in April last year and went to a record high of close to US$70 a few months later.

Airlines are particularly damaged by high oil prices because fuel makes up such a substantial part of their costs. Some major European airlines say fuel accounts for around 20% of their operating expenses on average, while Asia-based airlines put it as high as 40%. These estimates are based on jet fuel prices of over US$50 per barrel, and as airlines have no alternative to this single fuel technology, anything affecting the international oil industry will impact them.

Their problems are exacerbated by the fact that transport is totally price-inelastic in the very short term, meaning they cannot pass on sudden short term cost increases to customers; and totally price-elastic in the very long term. Deregulation across the global industry means competition is fierce across most routes, so it would be folly to pass on fuel price increases to consumers in the short term without damaging competitive status.

Continental Airlines Inc tried to boost overall fares a number of times, citing higher fuel costs, but intense competition meant it had to abandon its plans.

Some airlines have dealt with sudden increases in oil costs by introducing or increasing fuel surcharges. British Airways Plc, for instance, increased its fuel surcharge on long-haul tickets from £10 to £16 in March 2005 – a day after Virgin Atlantic Airways Ltd announced plans to raise its long-haul surcharge to £16.

Controlling exposure

Fuel charges are one way of coping with increased costs, but an increasingly popular option is to adopt price risk management, using financial instruments – derivatives – as a form of price insurance to control exposure to the volatile jet fuel market.

Over the past two years, more airlines have asked for training on using derivatives in this way, which, given the surge in oil prices since 2000, is hardly surprising.

This approach uses derivative instruments – such as futures, options, and swaps – to provide insurance against sudden and unexpected price increases, and is proving to be a very useful strategy.

To put prices and volatility into context, it's worth noting that at the start of 1999 prices were US$100 Metric Ton (US$13.50 per barrel) for jet fuel in North West Europe. By the end of that year they were just under US$340 Metric Ton, representing a whopping 340% increase in under 12 months, which would be difficult for any business to absorb. Again, in June 2003 prices were at around US$240 Metric Ton and within a year they were approaching US$500 Metric Ton, representing an increase of around 210%. (Figure 1)

By 2005, the price in Europe had reached four standard deviations in price from the historic average over the past 10 years, which – statistically – is a very remarkable price movement.

Figure 1 shows, the 2H, 3H and 4H line are historical standard deviations, 4th standard deviation is in itself a statistical change against historical patterns, and moving above this point is less than half a percent probability; yet this happened in March 2005. This remarkable and unpredictable price movement has made price risk management increasingly important to the airlines in terms of overall cost management and profitability. However, very little about airlines' activities in this area has been published so far.

Digging deeper

To discover how airlines across Europe were managing the risk of increased fuel prices, a survey was carried out which asked 80 European airlines – these airlines were randomly selected IATA-registered companies from four types of carriers. The groupings comprised:

- Leading international airlines operating out of a European headquarters hub, such as British Airways Plc, Air France and KLM, who are operating long-haul intercontinental flights.
- European prime carrier airlines who are members of an alliance e.g. Star Alliance, One World.
- Discount budget airlines operating limited routes in Europe only.
- Discount budget airlines operating within domestic routes in one country only.

The survey revealed that 100% of those who responded are already involved in hedging, or plan to do so. They are not speculating on the market, simply using derivatives to hedge price risk. Most use derivatives to protect budgeted price levels and they all have a formal, written risk management policy approved by the board of directors, and/or a senior management group. More than 75% of derivatives usage is in Over the Counter (OTC) instruments which offer tailor-made hedges, such as Swaps and other OTC options, to meet their needs

The most popular approach to assess risk exposure is to analyse likely scenarios, for instance, if the market goes up US$5 or goes up by 10% what will be the risks and can we handle them?

All respondents trade over the counter derivatives using the International Swaps and Derivatives Association master agreement legal framework to govern the terms and conditions with their counterparties, and within most organisations, it's the CFO or Treasury function that deals with hedging the price risk. This finding supports the view that airlines want to protect budgeted price levels, which are set by the finance management, not the fuel procurement division.

Most airlines have several people looking after risk management, it is not centralised within one department. Interestingly, 25% had hedged over 81% of their annual jet fuel requirements at some point between July 2002 and November 2004, and half of respondents follow a policy that requires them to always hedge a certain percentage of their annual fuel requirements regardless of fuel prices.

When we asked how far in advance they used derivatives, the most common response was to look between one and 12 months ahead. Only the Platts-related North West Europe Construction Industry Federation jet fuel index is used to price derivatives between 19 and 36 months into the future.

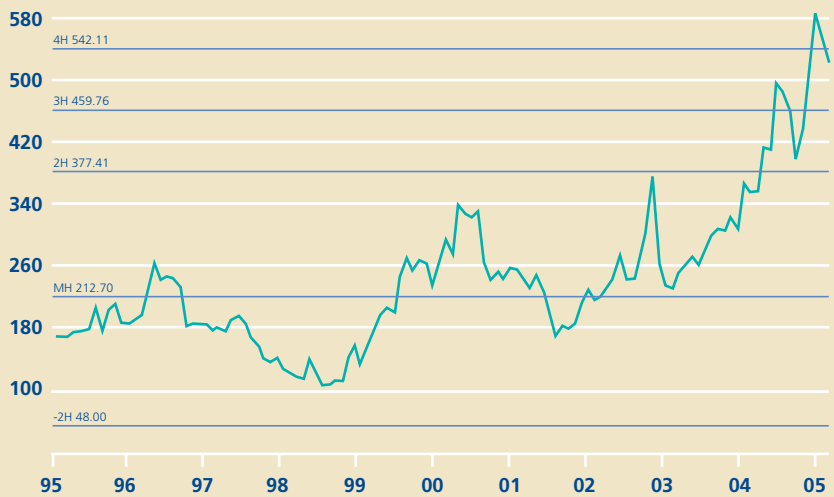
A concern for governments

Across Europe, the impact of high oil prices on travel concerns governments as well as the airlines themselves, as transport is crucial for commercial, economic and cultural exchanges and the industry accounts for such a large slice of the European Union's GDP.

European air markets are also expanding rapidly, with passenger numbers up by more than 19% during the past few years, mainly because flying has become so affordable. The average fare of low-cost airlines represents only 3% of the average European Union industrial wage and out of the 280 airports across Europe, more than 100 of them are now served by low-cost airlines.

Clearly, if airlines did not protect their profit margins and were driven into bankruptcy, the knock on economic impact would be considerable.

Figure 1 – Jet fuel prices in Europe – US$



Source: Data © Platts North West European Jet Fuel Prices – Graph Courtesy of www.cact.com Graph shows Jet Fuel Price in $US overlaid with Standard Deviations. By 2005 the market had reached 4 standard deviations in price.

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