

A large commercial airplane is shown from a low angle, flying through a dark, stormy sky. The plane's landing gear is visible, and the engines are prominent. The overall mood is dramatic and risky.

Staring Into the Eye of the Storm

Why Airlines Need a New Game Plan for Hedging Fuels—Now.

It may seem like a distant memory, but just a year ago major airlines lost an estimated \$8 billion on their jet fuel hedges. As crude oil prices spiked, tumbled, and then doubled back to about \$70 per barrel, we estimate such hedges soared to become more than half of top airlines' total losses in 2009.

Today, jet fuel prices are less volatile. But airlines should not be lulled into a false sense of security. What airlines are experiencing now is the quiet before another storm. Large fuel price swings will return. The only question is when and which airlines will emerge from the turbulence in the strongest position.

The main reason why airlines need to prepare for future fuel price fluctuations is that energy markets have fundamentally and permanently changed. Jet fuel prices will continue to be volatile in nature in part because demand for all refined petroleum products often outstrips supply. Oil drilling has become more problematic and politicized just when fast growing countries like India and China use more fuel than ever.

Complicating matters, energy trading participants like investment banks and hedge funds who benefit from fuel price swings are contributing to their unpredictability. To curb their trading activities, Congress has signed financial legislation into law that will limit the size of trades for anyone not hedging fuel with the intent of actually using it. But banks and hedge funds will remain significant players.

Given the speed at which fuel prices are shifting, airlines should not be tempted into thinking this new law will solve many of their fuel hedging problems. Consider: Traditionally, jet fuel prices have appreciated by about 5% annually. Today, they move by that much on a weekly basis. In the last six months alone, New York Harbor jet fuel prices have fluctuated 23% from \$1.95 per gallon to as high as \$2.39.

Most airlines are poorly equipped to respond to such price swings. After being blindsided by fuel price spikes in the last couple of years, many have implemented rigid and programmatic hedging strategies determined on an annual basis. Some

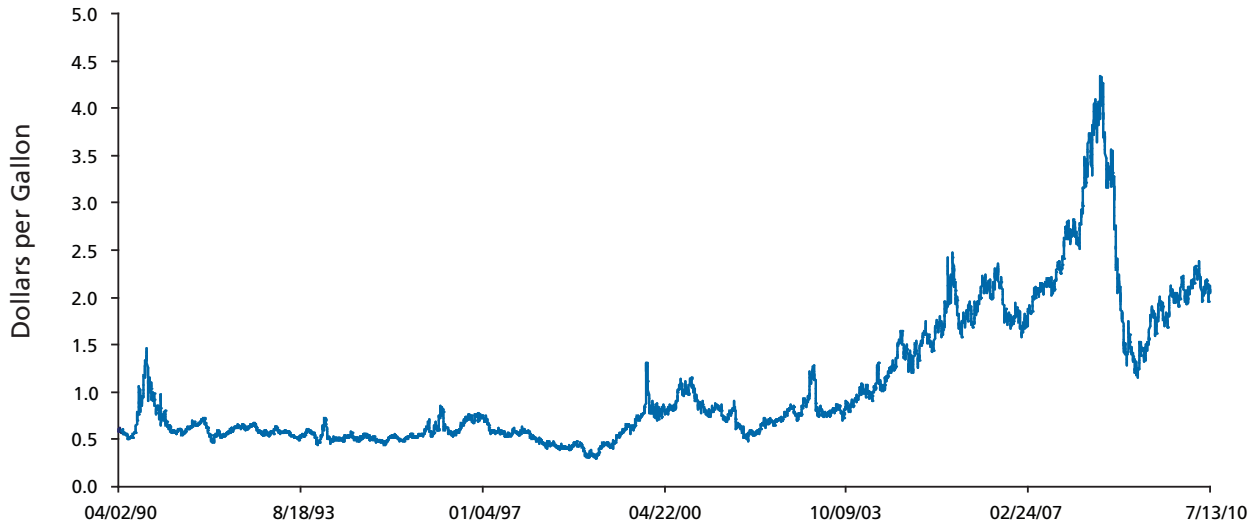
airlines have abandoned hedging jet fuel prices altogether.

There is a better approach. Now is the perfect opportunity for airlines to invest in fuel hedging programs and capabilities that can mitigate the instability jet fuel prices introduce into their earnings. Jet fuel is the largest expense for many airlines and now accounts for about 25% of airlines' total costs. Carriers have already extensively managed to lower labor, maintenance and other operation costs. As a result, fuel is arguably one of their largest unresolved risks. The amount of margin—or collateral—that airlines must deposit with counter parties to carry out fuel hedges can put a strain on working capital that otherwise could be used for other parts of their operations. Yet airlines employ many more full time employees to handle the risk of potential operational problems than they do to control risks created by volatile jet fuel prices.

Some airlines recognize that introducing more sophisticated fuel hedging capabilities will distinguish them from their competitors. One airline recently built up a substantial energy trading team and invested in its own jet fuel storage so that it can supply fuel to other airlines. By doing so, the airline not only gains better visibility into what its fuel will cost but also can potentially reduce the total into wing expense.

When asked earlier this year what the greatest risk for airlines would be in 2010, Southwest Airlines CEO Gary Kelly

New York Harbor Jet Fuel Spot Price



Source: U.S. Energy Information Administration

responded: “That’s easy. It’s energy prices.” Southwest has hedged about half of its estimated 2010 fuel consumption, according to reports.

Other stake holders are placing a greater value on airlines’ fuel hedging capabilities as well. In May, Morgan Stanley recommended buying shares in Asian airlines in part because these airlines are expected to increase their fuel hedging positions with lower risk profiles.

The critical first step for an airline to steady its fuel hedge positions is for it to develop a set of analytics that make regularly evaluating fuel hedging recommendations manageable. Such tools rapidly process a wide range of data to truly cap-

ture the jet fuel market's dynamics. Savvy airlines base hedging recommendations on fast changing information available in jet fuel research like Jet Fuel Intelligence newsletters, ARGUS International papers and industry analyst reports. In addition, they examine thousands of potential scenarios involving risks like fuel price spikes that collapse immediately and the sudden decoupling of traditionally correlated currencies and energy prices.

Most software programs designed to calculate an energy portfolio's total value at risk cannot currently take such a wide variety of factors into account. They are also designed only to monitor risks—not to form a strategy based upon them. As a result, hedging strategies developed using

these tools often provide protection in some scenarios but cause significant fuel hedging losses in many others. By examining a much broader spectrum of issues in 2008, Oliver Wyman was able to design a framework that allowed one airline to meet its fuel hedging objectives in a much wider range of potential scenarios. It also reduced the volatility in the airline's energy portfolio in a cost effective manner.

For these tools to be effective, airlines must also introduce the appropriate infrastructure to conduct deep reviews of hedging recommendations on at least a monthly basis. Following a hedging strategy set at one particular point in time will not fix a fuel hedging portfolio's problems. In fact, that may create more difficulties.

Carriers need to determine what type of hedging transaction makes the most sense for their portfolio at any given moment. Instead of pursuing transactions without upfront fees, they may need to use more sophisticated hedging instruments with upfront costs to protect them against the potential downside in their earnings resulting from the cost of fuel or hedge settlements. One way airlines can gain some clarity around these benefits is simply by establishing more regular communication between their purchasing and treasury departments regarding their current fuel price assumptions.

At the same time, airlines require a clear reporting structure that enables them to make important fuel hedging decisions quickly based on changing market information. Responsibility for market analysis, potential hedging strategies and their execution must be appropriately segregated. A risk oversight committee with authority to approve hedge recommendations should also be formed.

Coping with volatile jet fuel prices will continue to be a challenge for the airline industry. In the long run, the price of air travel will adjust to reflect the cost of fuel. However, large fuel price swings could potentially force unprepared airlines to make difficult trade-offs in the short term. Significant fuel hedging losses could compel airlines to cut back growth plans, slash other costs, or raise their prices more than their competitors.

Some airlines are already making a pre-emptive strike to gain control over how increasingly complex energy markets impact their earnings. Oliver Wyman has developed proven approaches and tools that ensure the benefits of airline jet fuel hedges will far outweigh potential losses. ❖

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Hans-Kristian Bryn is a Partner in the Corporate Risk practice of Oliver Wyman. He has been with Oliver Wyman since 2005 and has over 15 years consulting experience in the risk management field. He has worked extensively with mining, metals, airline and other commodity intensive industries on strategy, risk management and fuel hedging topics in Europe, Australia and South Africa. His area of focus is the delivery of enhanced shareholder value through improved risk/return based decision-making in areas such as risk adjusted planning, portfolio management, commodity hedging and supply-chain risk management.

Prior to joining Oliver Wyman, Hans-Kristian was a consulting partner with a major consulting firm. He has an MSc from Norway and an MBA from London Business School.

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