Use Derivatives to Tackle Turbulence in the Air

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Amid high fuel prices and price volatility, Indian carriers—despite having a meagre share in the global aviation market—are losing much more than their international peers, since unlike foreign airlines, they do not have a 'derivatives use policy'. To survive in the current market turbulence, domestic airlines must lock in the fuel and interest costs in advance to offer a stable fare structure that will help retain the demand while keeping the costs under check.

The latest industry estimates ironically indicate that despite having an insignificant share of just around 2% of the $470 bn global aviation industry, the Indian airline industry is likely to account for one-third of the world's total accumulated losses. One of the main reasons for the same can be attributed to the high volatility in fuel costs. The other possible cause could be the high capital expenditure, a part of which might be financed through borrowings from the markets whose costs might be rising under tightening monetary conditions.

Our curiosity and rather worry is: Why the Indian carriers, despite having a meagre share, are suffering more losses than their international peers that have a larger pie in the world aviation market. This, in turn, raised more disturbing question: If the current market turbulence lasts long, can domestic carriers sustain their business without having major changes in the micro and macro structures of the industry, and yet continue to contribute to a stable growth of the overall economy?

Clearly, this is not possible unless interest rates and fuel costs stabilize, thereby making operational costs and, to some extent, capital costs stable enough to allow the airline companies concentrate on structuring their fares effectively for keeping demand stable for a long period. This calls for locking in the fuel and interest costs in advance, at the operational level and, thus, being able to offer a fairly stable fare structure to beat the turbulent economic/market trends affecting not only the costs but also the demand.

It is well-known that in a declining economy, the aviation industry would be one of the early birds to hit the air pocket, due to the intense competition within the industry as well as from other modes of transportation. It would be particularly so in a condition wherein growing ICT infrastructure and its quality besides reducing the communication costs could already be leading to the substitution of growing travel needs with increased usage of telecom services.

Currently, the airline industry in India is going through an intensely competitive phase with the increasing number of new entrants willing to explore the industry and this aspectis forcing the existing players to extend their operations/frequency all the time. At the same time, the

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rising and, more significantly, volatile fuel expenses, which account for about 35 to 50% of total operating costs, are adding to the industry's woes. Particularly, the low-cost airlines that have a higher elasticity of demand compared with their full-service peers would be hit by this ongoing market turbulence. In the domestic aviation industry, increase in fuel costs is conveniently passed on to the passengers in the form of higher fares or fuel surcharges. This may force the borderline consumers of full-service airlines to shift towards the low-cost carriers, but will not make up for the erosion in the capacity utilization of the low-cost carriers created by more of their marginal travellers shifting to other modes of transportation. Hence, to reduce their costs, the operators would typically resort to initiatives such as switching over to fuel-efficient aircrafts during new acquisitions, reducing HR costs and route rationalization. But all this may not compensate for the current rise in fuel prices and volatility or may be running in the opposite sides making it difficult to deal with. Consequently growth in the industry starts to ebb out. The sector that was looking so bright till yesterday has all of a sudden begun to lose its allurement. Many airlines have shelved their expansion plans, forcing some players to postpone the deliveries of new aircraft, surrender a few of their leased aircraft or sell their aircraft delivery rights to others. Thanks to higher oil prices and subsequent series of hikes in fares and surcharges leading to a gradual fall in passenger traffic.

The Role of Derivatives

The availability of appropriate derivatives and a policy of using them efficaciously have helped international aviation players remain market-fit. While managing the interest rate risk is not possible in India due to lack of a derivative, the fuel costs could of course be stabilized through crude oil derivatives such as the one on MCX with good liquidity to enable their participation. This is because the fuel used by airlines is a derivative product of crude oil and their prices accordingly share a high correlation of more than 90%. MCXs liquid crude oil futures contract provides the country's airliners with the option of covering their entire fuel price risk at the domestic level without getting exposed to the foreign exchange risk. Our case study of Deccan Aviation clearly demonstrates the pressing need for domestic aviation companies to have the policy of using the derivative instrument.

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Air Deccan – A Case Study

There has been increased volatility in the northbound oil prices that contributed approximately 54% to the losses during FY 2007-08 and this was preventable. This essentially means that both the northward moving markets and the volatility in them led to the losses of approximately Rs. 528 cr. Crude oil contracts which can be used for surrogate hedging had enough liquidity for Air Deccan to participate in the first month of each financial year, i.e., to buy at an average price at which crude oil was traded on the exchange. Though it would account for 54% of the total losses, a major part of the other losses could have been prevented by adding to the revenue flow keeping their fare structure steady and competitive. An analysis of international ATF prices (INR equivalent) and MCX nearby crude oil prices suggests an optimal hedge ratio of 87%. This means that to participate in every Rs. 100 cr worth of ATF the airline might have to buy crude oil worth Rs. 87 cr on the exchange platform. Given the assumptions for FY 2008-09, the losses are likely to double pointing out that there is no way to mitigate the same other than implementing a derivative use policy.

International Experience

Available information indicates that international airlines lock in their costs through an effective derivative use strategy. The percent of costs hedged by airlines usually varies with their risk appetite. For example, Singapore Airlines (SIA) is reported to be hedging within a range regardless

of oil price movements. Current data indicates that the airline has hedged about 36% of its fuel costs at an average price of $104-$109 a barrel. According to its existing policy, SIA hedges between 30-60% of its fuel requirement. Operators like Air New Zealand and Qantas have locked in up to 65% of their fuel costs, while Japan Airlines has hedged 75% of its fuel costs. More significantly, Southwest Airlines has reportedly locked in more than 70% of the fuel they are expected to consume in 2008 at approximately $51 a barrel, far below the current crude prices.

Interestingly, a Morgan Stanley analysis of airline earnings estimates for 2004 indicated that an increase in oil prices by up to $4 a barrel would have little impact on the EPS of Southwest and Jet Blue, as they hedged up to 80% of their consumption. At the same time, the same analysis indicated that carriers such as American, Delta and Northwest did not have a sustained price risk management program and were, therefore, more likely to report a negative EPS due to rising oil prices.

Employ Derivatives to Defeat Volatility

Convinced that use of derivatives can make the aviation industry more vibrant, we are sure that people are more likely to ask what that means. It means locking in costs that vary in short durations enabling airline companies to structure their fares not only to keep their balance sheets healthy but also to achieve better capacity utilization and add value for all ecosystem participants. Very clearly, as seen in the case study, the fuel costs are an area of concern for Air Deccan, particularly so because crude prices have been highly volatile during the past six months leading to unpredictability on the returns front with a strong bearing upon the future of all the lined up projects. The fact that interest costs and fuel costs constitute a significant part of the total costs of airlines necessitates use of derivatives to fix their costs allowing them to stay competitive and yet remain healthy. However, risk management with regard to volatile fuel prices does not necessarily mean locking in fuel prices only when the prices are moving north. Even when the prices are heading south, an effective use of derivative would help the operators secure their bottom lines. Contrarily, one may feel happy to take as it comes. In real sense, one may not be ready to face short-term surprise movements in prices which often keep balance sheets shaky. After all, it makes no sense to leave costs uncontrolled and chase returns. It should be noted that use of derivatives for risk management strictly involves simultaneous actions in both the derivatives and the physical markets in terms of quantity and entry and exit. In addition, it needs efficient hands to analyze the markets, take appropriate positions, and close them at appropriate levels in coordination with the procurement policy of the company. As discussed earlier, while it may be possible for Indian aviation players to cover their fuel price risk, covering the interest rate risk would be impossible sans efficient interest rate derivatives being traded on a transparent exchange platform such as MCX.

International experiences of the aviation industry widely cited in the media have clearly shown that global aviation players' ability to absorb oil price shocks has improved with effective derivative use policy. Like other businesses, the aviation industry must also grow, but growth without planning is not sustainable in the long-term. And planning involves fixing targets and achieving them through efficient business strategies. No doubt, such targets should involve costs of which fuel and interest rates constitute a major chunk that could be fixed helping the industry to have sufficient returns to plough them back for organic growth. While forward/upward targets are a traditional way, their derivatives are the modern tool for doing the same efficiently. Importantly now, with fast ascent in the oil prices from $70 a barrel in August 2007 to above $140 in July 2008, followed by a still further fast descent in the prices back to $70 level in October 2008, a right opportunity has been presented to aviation companies to fix up their costs at manageable levels of the fuel price and, accordingly, ascertain their bottom lines. Juan Pablo Pérez Alfonso, a Founder of the Organization of Petroleum Exporting Countries, once said, "Petroleum is the devil's excrement. It brings trouble..." and one who is convinced of this statement may be apt to say: "An efficient derivative use can definitely shield you from that."♦

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