

Analysts Predict Lower Crude Prices But Warn Of Market Uncertainties

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Even as the airlines continue to recover from the industry-wide slump of the past few years, they could be getting some good news in the form of lower jet fuel pricing, at least in the early portions of 2004.

Oil prices are currently above \$30 a barrel, but oil analysts from across the country noted that all indicators point toward a gradual reduction in early 2004 to the mid-\$20 range, or possibly even lower.

Of course, every analyst we spoke to said any number of factors - from the severity of the winter weather and its impact of heating fuel to the stability of oil producing regions, including Iraq, to the continued prospects of global

economy and its impact on overall demand - could quickly send oil prices shooting off in one direction or another.

"It's not comfortable," said **Tom Kloza**, chief oil analyst at **OPIS Energy Group** in Lakewood, NJ. "And the one thing we're going to have to get used to is paroxysms on the upside and the downside. It's going to be fitful."

That being said, oil industry analysts all said the pressure at least over the next few months seems to be downward. "My opinion is that they're going to have a difficult time supporting values...at

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Improved Fuel Efficiency Prompts Increased Popularity of Winglets

Southwest Airlines is adding winglets to its fleet of 133 Boeing 737-700's cutting fuel costs by upwards of \$45 million annually. Trying to squeeze every drop of fuel efficiency from its fleet, winglets will also be installed on 36 new planes scheduled for delivery to Southwest from now through September 30, 2004. "They really look kind of cool," **Rob Myrben**, vice president of fuel management, **Southwest Airlines**, says about the blended winglets.

Comments on winglets' cool, new-age look -- curving up and out from the wingtip and adding about five feet to the total wingspan -- are not uncommon, but of course that's

not the reason more and more airlines are adopting the technology. The most attractive attribute of winglets to financially squeezed airlines is the fuel efficiency that can be achieved.

"It all depends on how they fly, but airlines can achieve a 3-5% improvement in fuel burn," says **Mike Marino**, CEO of **Aviation Partners Boeing**, a joint venture company formed in 1999 almost exclusively to focus on bringing the blended winglet technology to market. **Airbus** offers similar technology on its A320 and A340 planes.

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“I think \$22-24 will be the trading range next year, but all bets are off if we get into some kind of price war between OPEC and Russia.”

anywhere close to \$30 levels next year,” said **Jim Ritterbusch**, market analyst and president of Galena, IL-based **Ritterbusch & Associates**.

Ritterbusch cited a number of factors, but suggested the biggest trend may be that OPEC’s ability to dictate global prices may be beginning to ebb. “Often times the fact that the pricing ends up near their trading targets is purely coincidental. Supply and off-tank are relatively balanced and give them a chance to take a little credit.”

But Ritterbusch pointed out, “They’ve been relinquishing market share for a number of years. But they’re getting somewhat of a double whammy here with Iraqi production coming back on ...and at the same time the longer term trend toward increased Russian production.”

Ritterbusch predicted that it’s unlikely prices will drop down to the \$20 a barrel level in the coming months, adding, “I think \$22-\$24 will be the trading range next year, but all bets are off if we get into some kind of price war between OPEC and Russia. If OPEC doesn’t get enough cooperation between non-OPEC producing nations such as Russia, then we could see a sharp price downdraft.”

John Parry, vice president/senior equities analyst for Norwalk, CT-based **John S. Herold, Inc.**, added that even most OPEC members realize that \$30/barrel may not either be sustainable, or, more importantly, even desirable.

“If Iraq comes back on and Norway is back on and Russia (increases production) there’s probably a mindset that the price has to give somewhat,” Parry said. “OPEC, in my judgment, would probably be willing to accept \$25. I think the Saudis, despite what they’re saying, are not going to be doing any more cutbacks. But if they had to take another half-million or 750,000 barrel a day reduction, I rather think they’ll do it with an eye toward holding the mid-\$20 level.”

Parry added most of the influential OPEC members nations are heavily invested in other industries as well and therefore realize that lower oil prices could spur additional global economic recovery.

“We’ve been averaging \$30 a barrel and if you bring oil down \$5 a barrel, you’d be cutting costs to the economies of the world approximately a billion dollars every three days,” he said.

“Some of the countries could take a hit ...but a lot of them are benefiting more and more from natural gas and they’re getting some offset,” Parry continued, “But even OPEC knows that it’s important that the overall pie grows. In the wake of 9/11 and the worldwide recession the pie shrunk and they know that letting prices drift down a dollar here and a dollar there to some target price in the mid-\$20s is relatively healthy for them.”

Of course an economic recovery could quickly trigger a spike in global demand, especially in Asia, where Parry noted there’s the potential for a 500,000-750,000 increase in consumption.

But that could be offset by the fact that many nations are getting more comfortable with lower inventory levels. “One thing we learned in 2002 is how to muddle through with very low inventory that would probably have raised a lot of red flags in previous years,” said Kloza. “The industry realizes that it could make due with 275 million or 285 million barrels in storage.”

Given that oil inventory levels are now modestly about last year’s levels, Kloza said, “I think the market is pretty overvalued right now. It’s at the top of its range and given a normal winter, a warmer than normal winter, or even a modestly cold winter it will come down in the first quarter.”

But beyond Q1, Kloza thinks that oil prices have the potential to go back up again. “Technically the market looks a little bit soft going into the first few months of 2004 and then it’s kind of a crap shoot when you get out a little bit forward—it’s

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“When you look beyond 2004 into 2005...I think there’s going to be tremendous upward pressure on refined products in the US, and that tends to bring upward pressure on crude oil prices.”

gets toward the scary high scenario rather than the scary low scenario,” he said. “When you look beyond 2004 into 2005 ...I think there’s going to be tremendous upward pressure on refined products in the US and that tends to bring upward pressure on crude oil prices.”

Kloza also warned that that many Wall Street analysts are already anticipating increased production from Russia and Iraq, “The problem is that so much of the global supply comes from places that are scary places around the globe. You look what nearly happened in Nigeria this spring and you realize it’s a scary place to produce a couple of million barrels of crude each day.”

Kloza said Iraq is another example where expectations have not matched reality. “When Bush landed on the aircraft carrier the rhetoric was that they’ll be up to 4-5 million barrels a day in no time,” he said. “But now the talk is more that it is going to be in fits and starts—going up to one million, then two million, and then maybe down to zero.”

Of course, a drop in crude oil prices is no guarantee of lower jet fuel prices and as Kloza pointed out the disconnect between refined product futures and crude oil only looks like it’s going to increase. “There’s an awful lot of people out there who are saying a lot of downstream products are becoming unhedgable by traditional... methods,” Kloza noted.

Thus, even as they keep their fingers crossed regarding crude futures, the airlines are also counting on the crack spreads for crude oil and jet fuel staying within their historical range. “There are times when crude oil doesn’t change and the crack spread narrows and jet fuel goes down or crude oil doesn’t change and the crack spread widens and jet fuel goes up,” said **Richard Bittenbender**, vice president/senior credit officer for **Moody’s Investors Service**. “But if one assumes the crack spread is reasonably well behaved a (\$5) reduction in crude oil ...would

definitely impact the airlines in reducing their costs.

Part of the reason for this is that airlines primarily hedge in crude oil rather than refined products, but a lot of that will depend on each carrier’s individual hedging strategy. “If they’re hedged at \$27 and they’re the type of hedges you have to perform on, then being below \$27 doesn’t help them,” he said. “But if they’re the type of hedges that prevent a catastrophic ceiling as opposed to a floor then it won’t make any difference. So it depends on how the airline is hedged and the percentage of its needs that it has hedged.”

Bittenbender added that the airlines will probably benefit from having more tools in their hedging arsenal going forward. “As the airlines industry recovers, there’s a good chance that individual airlines will be perceived as stronger and more desirable counterparties in the hedging transactions,” he said. “That should allow to airlines to one, reduce their cost of hedging and two, allow them access to a wider variety of hedging techniques, both of which would be positive if...they were used right. There are fuel contracts and options, there’s swaps, there’s “swaptions”. If you’re a little nervous about their hedging strength somebody the only thing you might do is sell them an option.”

But Bittenbender stressed additional hedging tools won’t have nearly the impact on airlines than a sustained drop in crude oil prices would. “Most airlines are not 100% hedged and so a drop in crude oil of any magnitude would probably have an effect on jet fuel prices. So if you gave me one option or the other...I would probably choose reduced crude oil prices. Lower crude oil prices are almost certain to benefit the airlines whereas their increased financial strength may or may not, depending how they execute the strategy.” **JFR**

Airlines will probably benefit from having more tools in their hedging arsenal going forward.”

Improved Fuel Efficiency Prompts Increased Popularity of Winglets

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That efficiency is what prompted Southwest Airlines to adopt the technology earlier this year. "It's really a no-brainer," Myrben says. "Primarily, it reduces the turbulence that you get off the edge of the wing. It curves out and eliminates a lot of vortex, really improving the efficiency of the wing. It gives you better range, it gives you better fuel burn."

Other airlines are also eyeing the benefits. **AeroMexico** debuted winglets on a 737-700 in October and will have them installed on the 15 planes it has on order from Boeing. **WestJet** also recently adopted the technology, which **Clive Beddoe**, executive chairman, president and CEO, says are "expected to bring reductions in fuel burn and extend engine life." Airlines sporting winglets on at least portions of their fleets include **Air Berlin, Copa Airlines, Qantas, Virgin Blue, Air Plus Comet, American Trans Air**, and others.

Aside from increased fuel efficiency, winglets offer other advantages. Marino says the key benefits are improved takeoff performance, reduced engine maintenance costs, lower emissions and noise. "We do an analysis for reach operator, depending on how they fly," says Marino, noting the benefits will vary depending on the procedures of an individual airline.

For Southwest, cost savings were key. The airline estimates it will save an average of 92,000 gallons of jet fuel per airplane, per year. However, Southwest also touts additional benefits. "Winglets not only gain efficiencies in our operation and save money..., they also offer environmental benefits including reduced noise and emissions," says **Jim Wimberly**, executive vice president, chief of operations. "Winglets reduce noise emissions by providing a more aerodynamic boost in takeoff. (They) also help lower engine maintenance costs, increase payloads out of high, hot and obstacle-limited airports, as well as shorten the time it takes to climb to cruising altitude."

The technology isn't inexpensive, of course. For Boeing's winglets, list price is \$725,000 a

ship set. One US airline analyst says that while the cost may seem prohibitive given the current financial distress of many airlines, those flying planes that can be retrofitted with winglets should consider doing so. "The long-term savings on fuel alone are significant, and anything airlines can do to cut their fuel costs is worth pursuing." The analyst also noted the other benefits, saying they would translate into cost savings.

Congestion Concerns

There could, however, be a downside to adoption of blended winglet technology. "The thing that concerns me is that as more and more airlines add winglets, and as the range of aircraft that feature winglets increases, there could be some congestion problems on the ramp," the analyst says.

That concern is not unwarranted, Marino says, but thus far airlines have been able to adapt their procedures to eliminate any potential problem. "There's been concern about parking," Marino says. "Sometimes they park airplanes wing over wing, and that poses some difficulty. For some airlines it's an issue that needs to be addressed, but we've always gotten around it."

Myrben says Southwest did an intensive analysis of the congestion issues that might arise and decided they could be overcome rather easily. "We don't anticipate any gate problems because it really is just a couple of extra feet on each end," he says. "There will be a little bit of moving gates around, perhaps at a smaller airport or a congested airport, but generally it looks like it fits pretty well within the current configuration."

For some newer aircraft that utilize low-drag wings, winglets aren't appropriate, but otherwise the range of aircraft where winglets are suitable is increasing as the technology advances. Marino is confident that more airlines will adopt in the near-term future. "We've seen a surge in business and we're working with other airlines too, including (Legacy) carriers," he says. "They're really catching on."

JFR

Southwest Airlines estimates it will save an average of 92,000 gallons of jet fuel per airplane, per year.

Oil Prices Steady Ahead Of Uncertain Winter Demand

*Barclays Capital
Craig Breslau*

After a fairly eventful past month that saw some fairly large swings in price, the oil market seems to have settled into a \$28-\$31 trading range. September saw oil prices fall to \$27 with the end of the summer driving season. However, OPEC put an abrupt halt to the downtrend with a surprise announcement at their last meeting on September 24 to cut production by 900,000 Bbls/d after which prices then overshot to the upside. The seasonal peak for gasoline demand is behind us. Now the market looks towards distillate inventories for direction; however, the uncertainty of winter weather in the US and Europe makes it difficult to predict distillate demand. Due to these factors and the absence of any major geopolitical issues, the market will tend to get a bit listless this time of year and will likely continue to trade the range.

In this period where the flow of information has been fairly quiet, speculative interest has taken a more prominent role in the markets. The last set of commitments of traders data showed the heaviest ever net buying of US oil futures contracts in a single week by non-commercial traders. This was the major factor in pushing prices up while the decrease in prices witnessed over the last week can be attributed to speculative interest abandoning some of their long

positions. The net long non-commercial position in oil and refined products currently stands at 58,932 contracts.

The latest US inventory statistics show no significant change in the overall deficit in oil and refined products inventories from the 5 year average. The deficit now stands at 45.7 mm bbls. A closer look at the data shows that while crude inventories decreased, we saw an increase in distillate and heating oil inventories. We suspect that the end of the rising crude inventories are starting to take shape but the heating oil inventories of last week were an anomaly.

In the forward markets, the front heating oil cracks have come under pressure over the past few weeks as inventories have built. Weak natural gas prices, warmer weather forecasts and some fund liquidation have also contributed to the weakness in the cracks. In the past 2 weeks, the Q1 04 crack has come off nearly \$1. Jet differentials have also drifted lower on speculative interest and a large seller in the dealer market.

If you would like further information or indicative forward pricing, please do not hesitate to contact Barclays Capital.

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Swaps Indicative Prices (as of 10/29/03)

	WTI (\$/bbl)	H.O. Crack	H.O. Swap (cents/gal)	GC Jet Swap (cents/gal)	NW Europe Jet CIF (\$/MT)
Q1 04	29.27	4.75	80.75	81.10	277.50
Q2 04	28.03	3.00	75.50	74.20	258.50
Q3 04	27.15	3.60	73.20	73.80	257.50
Q4 04	26.00	4.80	74.50	75.00	260.00
Cal 4	27.60	4.05	75.75	76.00	n/a
Cal 5	25.90	4.05	71.25	71.00	n/a

World Jet Fuel Prices

Spot Cargoes Trend ?

Rotterdam			Mediterranean			Middle East			New York			US Gulf Coast		
11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24
282.3	274.6	280.4	277.6	266.4	272.3	33.9	32.5	33.8	81.69	80.48	83.80	79.11	78.42	81.66
Chicago			Los Angeles			Pacific NW			CIF Japan			Singapore		
11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24
83.39	83.09	87.00	89.15	85.85	87.45	89.55	86.35	87.95	35.7	34.8	35.1	34.5	33.6	34.0

Futures/Differentials Trend ?

IPE Gasoil*			NY Heating Oil			WTI Crude			Brent Crude			Rott Jet/IPE Gasoil		
11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24
261.0	257.5	251.7	84.00	80.50	83.85	30.85	29.23	30.30	28.91	27.70	28.58	21.3	17.1	28.7
NY Jet/Heating Oil			Gulf Jet/NY 2 Oil			Gulf/Los Angeles Jet								
11/7	10/31	10/24	11/7	10/31	10/24	11/7	10/31	10/24						
1.34	1.53	1.67	-1.29	-0.90	-0.90	-10.04	-7.43	-5.79						

Key: U.S. weekly averages cents per gallon, WTI Crude, Asian jet in \$/barrel, Europe, Medd \$/Ton

Sources: Opus Jetfax, JFR

News Briefs

Supply Security Key In Japan Airlines RFP

Japan... Supply security considerations will rank higher in importance in Japan Airlines' latest contract renewal. The airline, in its RFP for its January 2004 contract renewal, said recent disruptions at Australia's Sydney Airport and Charles De Gaulle in Paris prompted increased emphasis on supply security. The airline is probing potential bidders on how they will manage risks such as refinery outages, logistic disruptions and labor disputes. The airline has embarked on the first of two rounds of talks and will make final awards by the end of November 2003.

The contract involves 10 locations with an aggregate estimated uplift of 8.29 million gallons per month, accounting for about 17% of JAL's total consumption outside Japan. The deal involves two Asian airports, five European and three US airports.

New System Ordered For Sydney

Australia... Fuel companies and the airline industry in Australia have two weeks to formulate a new system to ensure jet fuel shortages don't happen again. The demand, from Australia's federal resources minister Ian Macfarlane, comes after a late-September, early-October jet fuel shortage

that left Sydney airport with about 35% of needed supply. "The industry has to come up with a way to convince the government that it won't happen again," said one industry source. Macfarlane said the incident revealed "a poor planning system and a supply chain that is unnecessarily secretive," according to news reports. He added that he is looking for an "iron-clad guarantee" that a similar shortage won't happen again. *JFR*

