

Russian oil strengthens, *bucking* sweet/sour *trends*

Sour crude prices strengthen over sweet despite tighter sulfur restrictions. Price analysis reveals several interrelated explanations

Despite a Europe-wide move towards tighter sulfur restrictions in transportation fuels, the value of Russia's relatively sour Urals crude has strengthened over the past year against sweet crudes such as North Sea Brent. This strength came despite overall weakness in oil prices; Brent has averaged just \$20.30/bbl so far in 2002, compared with around \$24.75 in 2001 and just under \$29/bbl in 2000. What is behind this apparently anomalous change?

The outright price of Urals crude is typically made up of three distinct components: the Brent price on or shortly after the bill-of-lading date, the negotiated quality differential to Brent, and the cost of moving the oil to its destination. The CIF Mediterranean outright price has averaged approximately \$18.40 in 2002, and has fluctuated between a floor of \$16.50 and a peak of \$21/bbl with the outright Brent price. These prices compare with a Urals CIF Med aver-

age of just under \$23/bbl in 2001 and around \$26.60/bbl in 2000 (Fig. 1).

When a Black Sea cargo is sold at dated Brent less \$1.30-1.20 CIF Augusta, which was the prevailing level of deals reported in February, the outright value of the cargo is based on the dated Brent price FOB Sullom Voe on or shortly after the bill of lading date. The Urals differential is then applied to this outright price to establish an outright price for the Urals. The Urals differential can be broken into two components: a quality differential and the freight rate.

Any analysis of the price of Urals needs to factor in these variables. The outright price of oil is highly volatile. The benchmark Brent crude price has fluctuated wildly in the last few years, hitting a low of under \$10/bbl in late 1998, recovering to just under \$38/bbl in 2000 before slumping again to below \$17/bbl in 2001 after the Sept. 11 terrorist attacks. Urals values have more or less tracked this volatility on an outright basis.

Seasonal pattern prevails

The differential of Urals to dated Brent (Fig. 2) has also been volatile, but reveals some interesting seasonal patterns that are masked by the outright price volatility.

Since 1984, 15-day Brent has typically held a premium between zero and \$2/bbl over the Urals CIF Med price. That differential makes up on average around 6 to 7% of the outright price, and the volatility of this differential is fairly limited when compared to the overall volatility of the Brent market.

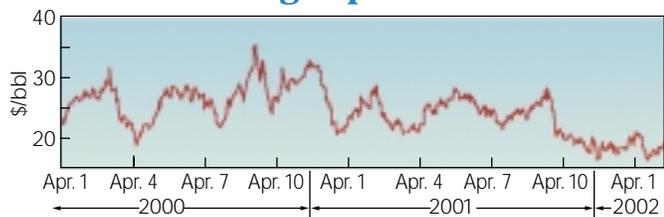
There have been brief periods when Urals has broken out of this box, which appear largely related to OPEC supply policy. In July 1998, for instance, the Urals CIF Med differential plummeted to \$3.50 under Brent as OPEC pumped more and more oil onto an already glutted market; this trend was reversed by subsequent production cuts after oil prices hit 12-year lows in December 1998. The logic here is that when OPEC opens the taps and when it cuts, the swing production tends to be made up of poorer quality crudes.

A slightly different situation occurred in summer 2000, when Urals dropped steeply to more than \$5/bbl under Brent. Again this had a logical explanation. Although OPEC continued to keep a tight rein on production, which should in theory have favored Urals because sour supply was tight, the U.S. refining industry faced a potential serious gasoline shortage in summer 2000, which created immediate and substantial demand for extra sweet crude.

Within the \$2/bbl "typical" differential, there is a relatively clear seasonal pattern. Urals tends to be strongest in the winter months, especially December and January, and the reasons for this are fairly clear. Because supply tends to be curtailed in the winter by bad weather and domestic demand, and because demand in the Mediterranean tends to be at its peak in winter, the supply-demand balance alters in that period. Urals is also a short-haul crude, and therefore can more easily

Oil prices

1. Urals outright price



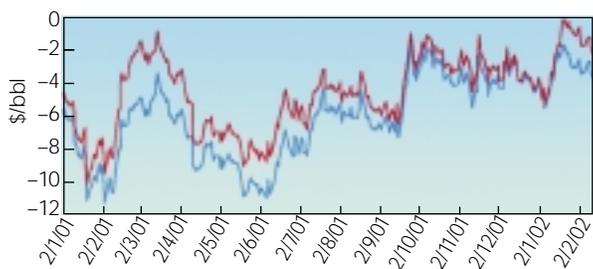
make up for any shortage of base-load sour crudes from longer-haul origins such as the Gulf.

This seasonal pattern was repeated in 2001, but even when this seasonality is stripped out, there has been a clear appreciation in the relative value of Urals to Brent. Starting in March 2001, when run cuts traditionally weaken demand (the spring “dip”), Urals strengthened to within a few cents of parity with Brent by early January 2002.

The subsequent collapse earlier this year was almost identical with that at the start of the first quarter of 2001, when the Urals differential to dated Brent dropped from 90¢/bbl down to around \$3.40/bbl, before it began its gradual recovery. This drop is a recurrent feature of Urals, both in the north and south, because bad weather during winter often leads to loading delays and a buildup in stocks, which is released when the weather gets back to normal in the spring.

In summary, the short-term volatility of Urals appears to be rapidly responsive to supply-demand fundamentals. In contrast, its longer-term volatility appears to be mostly responsive to OPEC policy, and in particular, decisions to raise or lower the production ceiling. OPEC output in January 2002 was just 25.01 million bbl/day, the lowest level since August 1984, according to Platts’ estimates. As was seen ear-

3. Crack 3.5% to Brent/Urals



lier, OPEC cuts tend to impact sour crude more directly than sweet.

The tight supply of OPEC crude is reflected in the movement of the

fuel oil crack spread over the year. Fig. 3, which compares the value of 3.5% fuel oil CIF Med in \$/bbl to that of Brent and Urals, shows a high correlation between the crude and product, although there is a lagging relationship. The discount of fuel oil to Urals moved from as much as \$10/bbl in January 2001 to near parity in January 2002, and a similar pattern was seen in the differential to Brent. What that meant was that OPEC policy of production restraint had a direct impact on the value of fuel oil produced. When sour crude values rose, so did the price of heavy fuel oil in Europe.

Low-sulfur oil's comeback

A third factor that has in the past affected the Urals price is the sulfur differential, but this appears to have become less significant in the last year. To put this in context, Platts ran a data series of the differential between high- and low-sulfur fuel oil in the Mediterranean since 1990. It showed a gradual decline in the premium for low-over high-sulfur fuel oil until the start of 2000. At that time, the differential was approaching zero, probably reflecting widespread substitution of low-sulfur fuel oil by gas.

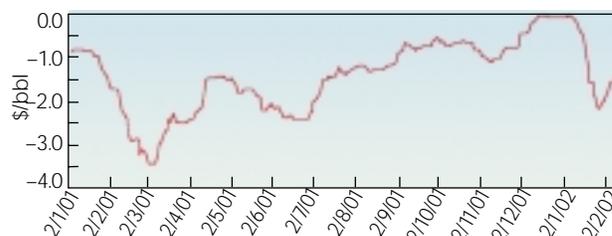
Since the start of 2000, however, a very different dynamic has prevailed. Low-sulfur fuel oil came back into fashion, and the premium between 1 and 3.5% CIF Med rocketed to around \$45/mt at the start of 2001, before collapsing again last year and then at the start of this year. Ironically, Urals differentials

were at times almost a mirror image of this volatility, with periods of Urals weakness coinciding with periods of weakness in the low-sulfur premium.

Oil analysts argue that currently sour crudes are in demand because sour margins are good. In Europe, however, sweet crudes should theoretically be in demand at a time when sulfur is being restricted in most oil products. Germany has moved over to tighter gasoline and diesel fuel regulation, specifying the maximum sulfur level as 50 ppm, and this is set to tighten further. But such a move to sweet crudes doesn’t appear to have happened.

There may be several, possibly inter-related explanations. The first is that fuel oil demand has shifted primarily towards bunkering grades, and the

2. Urals Med differential to Brent



marine industry is healthy. Therefore, sour crudes, such as Urals, remain in demand, despite the trend towards low sulfur in light and middle distillates. Second, upgrading capacity is gradually making the refining industry more efficient and more competitive; refineries can tolerate more poor-quality crudes as a result. It is possible that post-Sept. 11, when jet fuel has been in surplus, refiners have been able to use some of their jet fuel pool to meet the ULSD requirement. A third possibility is that as Urals volumes build, and as U.S. policy encourages supply diversification, the economics of running Urals may change from simple “slate-balancing” to more “base load.” ■

—Peter Stewart

This article is based on reports published in *Platts Nefit Trader*, a weekly providing market commentary, assessments, and news on the Russian and Caspian crude oil markets.