

## **The Crude Oil Price Stops High Even after the Iraqi War “Weaknesses” of the U.S. Market Liberalization Need A Review**

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### **Gist**

- **The crude oil price, having collapsed synchronously with the start of the Iraqi war, stopped high from May and on. It reflects gasoline, heating oil and natural gas price spikes in the U.S.**
- **The halt of gasoline and heating oil exports from Venezuela in January and February hit the U.S. market seriously. One of the essential problems is a low of crude oil, petroleum product and natural gas stock levels.**
- **Over-20-year liberalization of energy market has deprived the U.S. of room for retaining spare capacity. It appears time has come for the U.S. to review weaknesses of market caused by liberalization.**

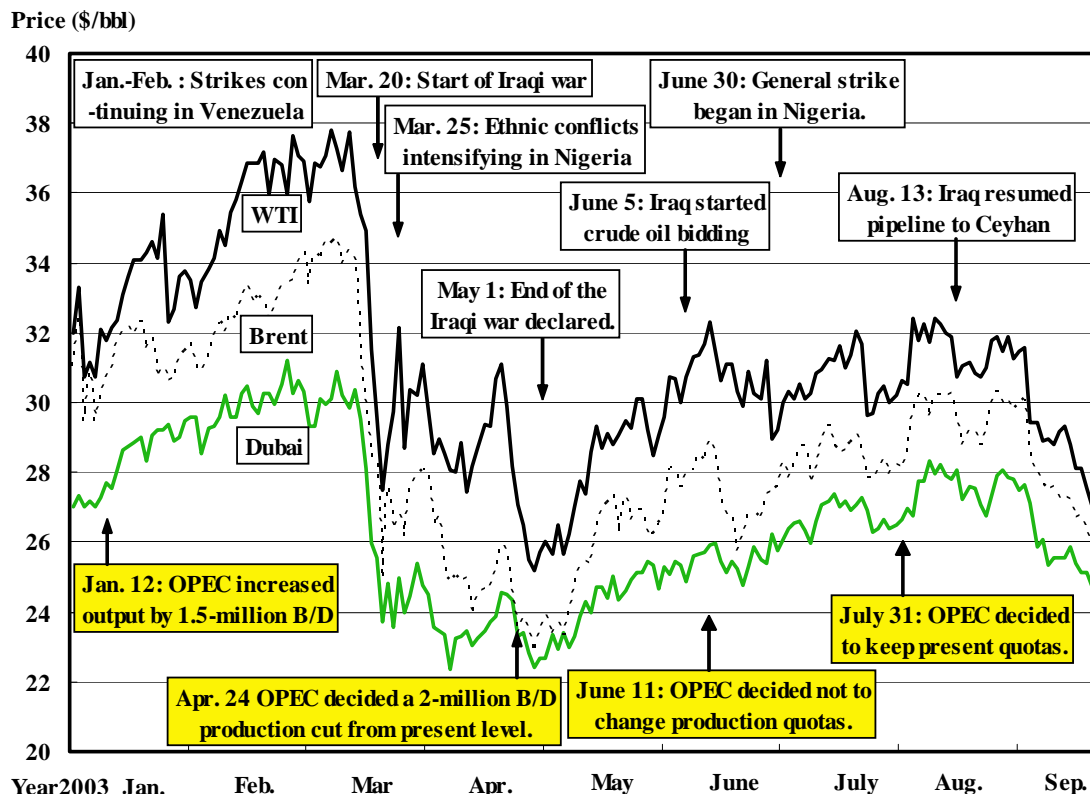
Despite popular expectations for cheap oil after the short-period settlement of the Iraqi war, the crude oil price has inched up since May, then stopped high, thus presenting a similar appearance to 2000. Including (1) production cuts and output quotas abided by the OPEC (Organization of Petroleum Exporting Countries), (2) shrinking production capacities of Venezuela and Nigeria, and (3) delays in resuming the Iraqi oil exports, contributors to the stop-high oil price are found on the producer side. Yet, the present stop-high price cannot be explained fully with them alone. As in 2000, it is necessary to review if the U.S. market really faces no problems. With the aforesaid question kept in mind, changing energy prices and stockpiling trends in the U.S. are scrutinized by getting them linked to such commodities as gasoline, heating oil and natural gas.

### **Real reasons**

The outbreak of the Iraqi war was expected to send the crude oil price soaring a bit at least. But, taking Dubai as an example, the price collapsed synchronously with the first military action from \$31/bbl to \$24. Because a war premium has already been taken for granted, the start of the war rather provided a momentum toward a clearance. In the subsequent days the crude oil price kept softening and was expected to reach around \$20 not in a distant future.

But, it was not a course in reality and the crude oil price stopped high after having inched up since May. Lately WTI has been priced at \$30~32 and Dubai at \$27~28 (Fig. 1).

Fig. 1 Crude Oil Price Trend in 2003



Certainly the OPEC took late April a bold action of 2 million B/D output cut in order to curb excess production. The subsequent two general meetings of the OPEC either did not change the production quotas. With its domestic upheavals having continued until July, Nigeria is still distressed at the aftereffects and unable to back full-capacity production yet, just like Venezuela.

The Iraqis on their part gradually started crude oil exports. But, due to frequent sabotages domestically occurring even postwar, actually exports cannot be increased as much as they want. A crude oil pipeline running to Ceyhan, of which operation was resumed in August, was partially blown up by sabotage immediately after the resumption.

Given these developments, it appears not necessarily unreasonable to explain that the stop-high crude oil price is chiefly attributable to these crude oil supply-related factors on the producer side. Yet, is it really so?

OPEC members keep cheating their production quotas as in the past, and watching moves of the return of the Iraqi exports with restlessly alternating feelings of joy and sorrow. Production in Venezuela and Nigeria, though not yet back to their full capacity, has recovered much compared with the worst days. Also, the Iraqis no doubt have steadily resumed their export activity. To explain the stop-high with factors on the OPEC-led producer side sounds weak somehow.

Differentials between WTI and Brent, around \$1 at the year's beginning, kept widening and often reached around \$4~5 (Fig. 1). Entering August, the differentials finally fell below \$2, but the average of the first nine months showed WTI was priced as much as \$2.4 higher. Differentials between Brent and Dubai widened to \$4~5 pre-Iraqi war then shrank to \$1 or less as a result of the price collapse when the war began. Subsequently, since mid May, the differentials have stayed at around \$2. During the first eight months, Brent was priced \$2.1 higher on average.

These price changes, obviously led by WTI, are akin to the situation in 2000 when the crude oil price stopped high despite repeated output increases by the OPEC. The stop-high in 2000 after all was chiefly attributable to the U.S. heating oil and gasoline stocks slumped to unusually low levels when the northeastern part of the country was hit by an extremely severe winter.

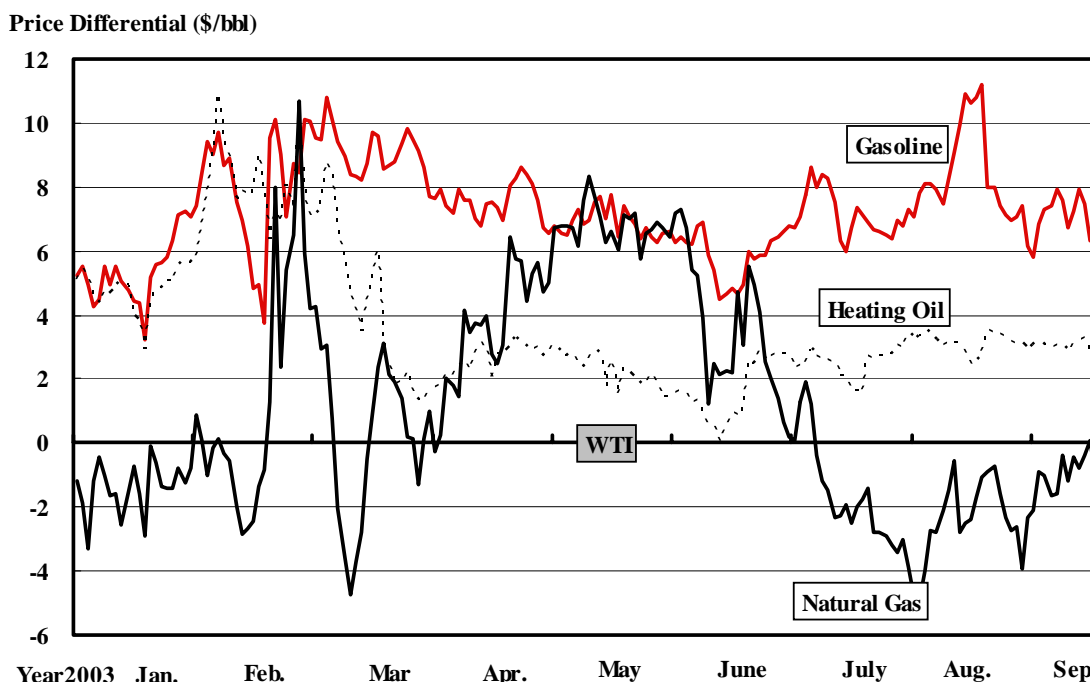
## **Verification**

Given futures prices on the NYMEX (New York Mercantile Exchange), how price differentials of gasoline, heating oil and natural gas have changed against WTI during the January–August period was analyzed in an attempt to grasp the U.S. market trends in response to the stop-high crude oil price (Fig. 2). From changing price differentials of gasoline, heating oil and natural gas each, some moves of spikes against WTI can obviously be read out. It appears all right to say that the price of WTI no doubt was greatly affected by the U.S. domestic energy prices.

Natural gas posted the sharpest change in the differentials. In terms of futures prices on NYMEX, natural gas is usually priced lower than WTI. Indeed, the January – mid February trends accorded conventional wisdom. But, from mid February to

early March, the natural gas price spiked, which sent the differentials widening to a plus of around \$10. As a result of the crude oil spike before the Iraqi war, the price relation reversed briefly, but the crude oil price collapse after the war opened helped the differentials widen again to a plus of around \$4~8. Entering July, the relation finally returned to the ordinary state where natural gas was priced lower.

**Fig. 2 Changing Differentials of Gasoline, Heating Oil and Natural Gas against WTI (NYMEX Prices)**



(Source) Prepared from NYMEX data.

Heating oil set to spike earlier than natural gas, or late January, with the differentials broadening to a plus of \$10-strong at maximum. The differentials, having widened to around \$6~8 before the Iraqi war, subsequently stayed at around \$2 in reflection to the collapse at the opening of the war and the full-scale start of non-demand season. Entering August, with the demand season looming, the differentials are gradually widening.

Perhaps the factor having the gravest impact on the heating oil price changes in winter was the halt of heating oil exports from Venezuela due to general strikes continuing there from December 2001 to January.

Gasoline too started soaring late January, virtually concurrently with heating oil, and the differentials expanded to a plus of \$10-strong at maximum. Just like heating oil, the halt of product exports from Venezuela and growing imports by the U.S. have produced massive impacts on the gasoline price spike.

Unlike heating oil, differentials of gasoline, on the verge of its demand season, did not shrink rapidly but showed mild declines to a plus of around \$6 in the days to late June. However, since July when natural gas set to be priced lower than WTI, the differentials resumed widening again and surpassed \$10 in mid August. From July through August, gasoline-led spikes were reproduced.

The analysis unveiled that a wide variety of energy prices (e.g. gasoline, heating oil and natural gas), in reflection to their seasonal demand fluctuations, have massive impacts on WTI pricing. In other words, WTI does not lead all price changes but, depending on situations, various energy prices serve as a prime mover.

### **Low-level stocks**

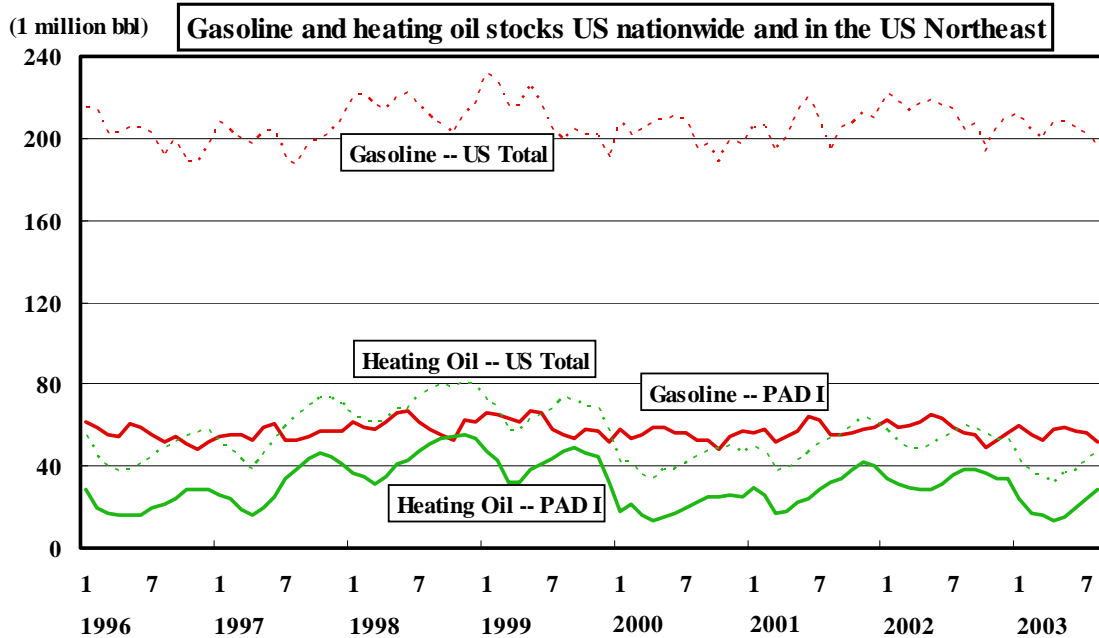
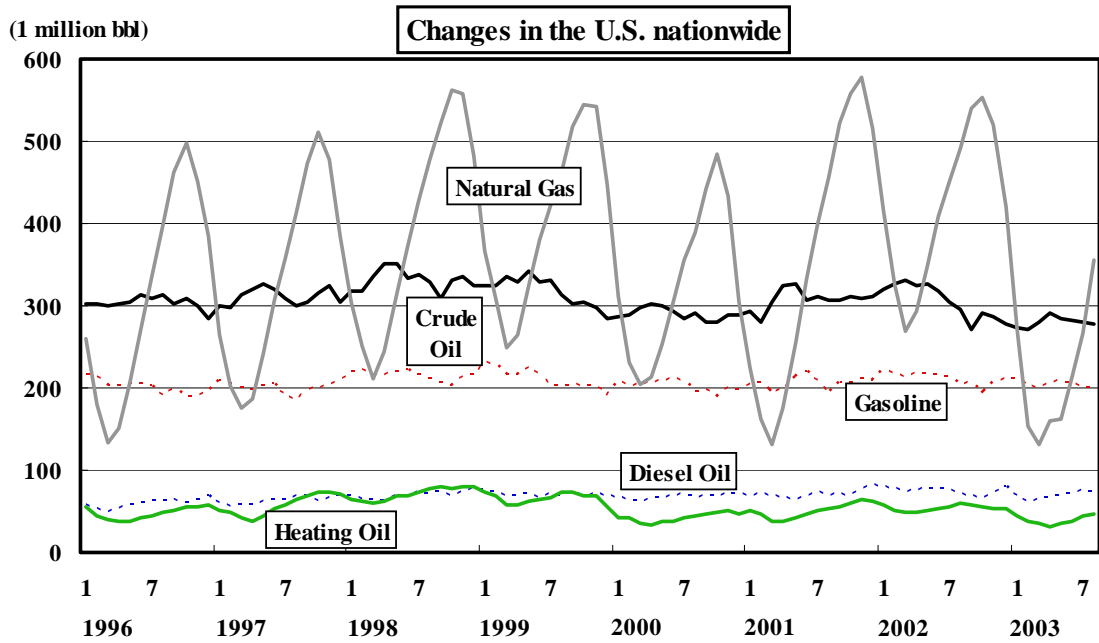
How come the energy price is so volatility-prone on the U.S. domestic market? Certainly, this year has many factors originating from producing countries, which included (1) Venezuela's general strikes, (2) the outbreak of the Iraqi war and the overthrow of the Hussein regime, and (3) upheavals in Nigeria. Yet, weaknesses of the U.S. market, once questioned in 2000, are intensifying, aren't they? To confirm this point, how the U.S. oil and natural gas stock levels have changed was examined (Fig. 3).

Natural gas, toward the winter demand season every year, has massive stock buildups in the underground doom. Drawn down during winter, the stocks fall to the lowest level in March or April. Given past changes, massive drawdowns took place in 1996 and from 2000 through 2001. In fact, due to considerable drawdowns made from February through March this year, the stocks were hardly recoverable before June unlike ordinary years. The unusual decline in the stock level can be counted as one of principal causes of the natural gas price spike until late June.

Excluding strategic reserves, the crude oil stock level fluctuates chiefly around 300 million barrels within the range of 270~340 million barrels. However, the stock level, which stayed much above 300 million barrels from 1998 through 1999 and during the first half of 2002, fell below 300 million barrels this year and a record low level since

1996 is continuing. Such a low of the crude oil stock level poses another contributor to the stop-high price of WTI.

**Fig. 3 Changes in the U.S. Oil and Natural Gas Stock Levels**



(Note) PAD I is the area in the U.S. northeastern part with New York as the centerpiece.  
 (Source) Prepared from the U.S. DOE data.

Examining the U.S. nationwide, the gasoline stock level centers on 200 million barrels and shows similar moves to crude oil. This year the stocks slumped to a very low level in July, which reflected drawdowns during the demand season as in 1996 and 2000. The gasoline price spike from July through August probably resulted from the plunge in the stocks. While the U.S. northeastern part with New York as the centerpiece has about one-thirds of the U.S. gasoline stocks nationwide, gasoline stocks available in this area dropped as low as about 52 million barrels in August.

Lastly, the heating oil stock level nationwide centers on 55 million barrels within the range of 30--80 million barrels and moves while showing similar seasonal fluctuations to natural gas. The most conspicuous characteristic of heating oil is that about 60% of its stocks need to be maldistributed in the U.S. northeastern part. Heating oil stock level in the U.S. northeastern part fluctuates around 30 million barrels within the range of 13--55 million barrels.

Heating oil stocks, in terms of both the U.S. nationwide and northeast regionwide, obviously shifted to lower levels by a step from 2000 and on. In March this year, stocks in the U.S. northeastern part were drawn down to a record low level of 13 million barrels. The low level of heating oil stocks rather is worried to become an emerging problem from September and on.

### **Liberalization gone too far**

The reviews so far disclose that, while producing countries are partially responsible for the problem of the stop-high crude oil price, various necks on the U.S. market should not be overlooked any longer. Recently, overriding the frame of petroleum products, like gasoline and heating oil, they came to produce very grave impacts even on natural gas supply and demand.

The U.S. nationwide situations and local ones, including those in the Northeast and the Midwest, are reflected on the WTI price through domestic petroleum product prices or natural gas prices formed on NYMEX. Once reflected on the WTI price, they have chain-like ripple effects on Brent and Dubai, thus going global. Why international oil prices in Europe and Asia have to dance to the peculiar situations to the U.S. in this way? This leaves something not clear to our mind even after the mechanism is explained.

Behind these market problems, there is energy market liberalization advanced by the U.S. over nearly 25 years since the early 1980s, which has gone too far in some points. Advance in market liberalization certainly resulted in efficiency gains and no doubt indicated a stringent international level of inter-energy competitions. But, as a result, amid uncertainties of fierce price volatility, few can deny that there is no choice but to underline short-term views when unfolding activity.

Accordingly, on demand side, a popular choice is a natural gas shift on the strength of its easy prospect. As a result, without introducing additional toppers even when refineries keep running at full capacity, petroleum product stocks are kept as low as possible in order to minimize cost burdens. In short, the actual state of the U.S is that the country has no room for retaining spare capacity to some extent from a long-range viewpoint that necessary equipment investment should be made, or in preparation for unexpected mishaps.

Indeed, the other day, a great blackout hit wide areas, particularly the U.S. northern part and Canada, which is now attributed chiefly to delays in capacity responses, typically aging transmission networks.

Americans are characterized by that they produce a result from very drastic changes they make, then add a reverse revision to the result while examining the outcome. It appears time has just come for the U.S. to review various weaknesses of the market caused by energy market liberalization. While carefully watching future developments of the debate in the U.S., Japan on her part needs to give prudent consideration to deregulation of the energy industry.

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