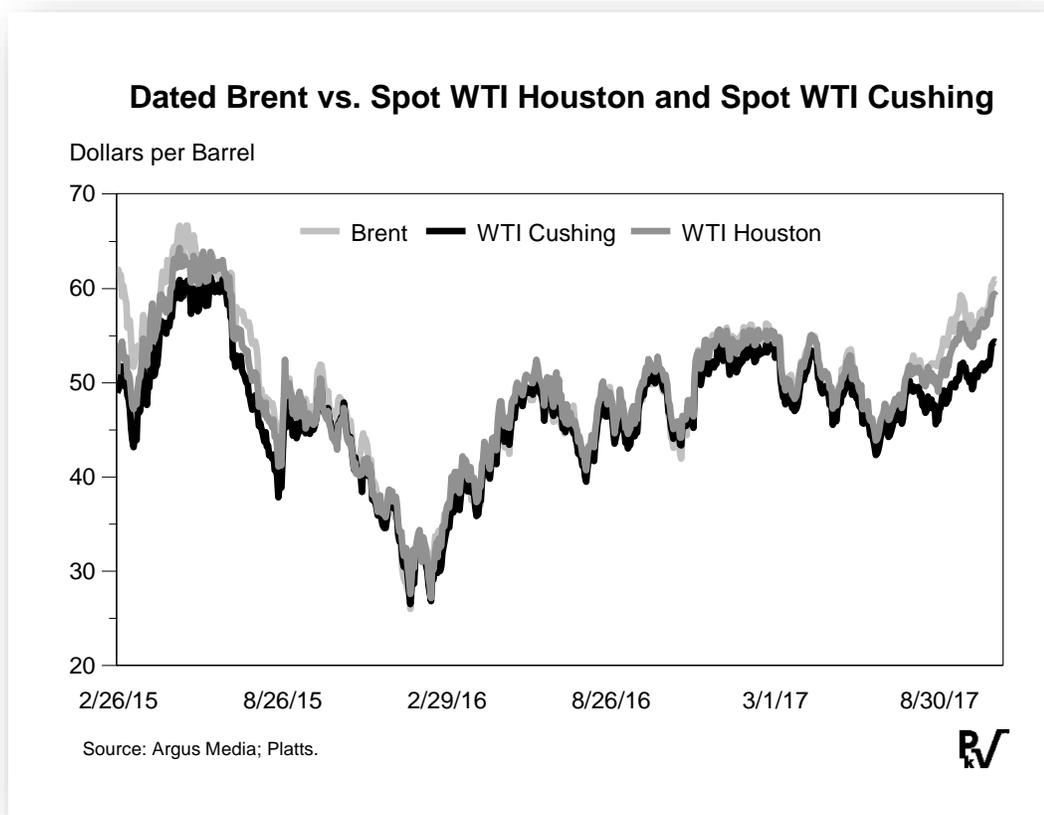


A Tale of Two Markets: WTI in Houston vs. WTI in Cushing



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Summary: Evolving Markets

West Texas Intermediate (WTI) was never seen as a global crude. Indeed, the few who knew of it thought it would fade away as US crude production declined. The elite among the world's petroleum analysts, particularly those in the United Kingdom, sneered at the promoters of crude oil futures at the Chicago Board of Trade and the New York Mercantile Exchange when the WTI contract was introduced.

The exchanges were particularly criticized for the contract's size. Traders used to buying or selling cargos of five hundred thousand barrels of oil could not understand why the CBOT and NYMEX made the delivery lot only one thousand barrels. A 1982 article in *Petroleum Intelligence Weekly* expressed skepticism regarding whether the exchange volumes would ever permit companies to conduct large transactions in futures.¹

WTI futures were also dismissed because the crude was landlocked. Brent crude, produced in the North Sea, was viewed by two prominent English energy experts, Robert Mabro and Paul Horsnell, as "central to oil price formation." In a 1993 volume, they wrote extensively on the leading role played by Brent and how it compared to WTI's minor role.² Regarding the relative advantages of the two crudes, they made this observation:

Brent has inherently greater flexibility than WTI in being both waterborne (and therefore not totally subject to the problems of US pipeline scheduling), and exportable (and thus able to react to demand changes through the western hemisphere).³

While the authors acknowledged that WTI had quickly become the crude oil with the greatest liquidity in the world, they considered it to be a poor indicator of world prices. They noted that "WTI is the dominant crude oil for price setting in the US domestic market. This market is based on US pipeline deliveries, whereas most world crude traded is in waterborne crude" and then added this observation:

We have suggested that not only can WTI prices at Cushing, Oklahoma, become decoupled from world prices, they can even (because of pipeline logistics) become decoupled from prices at the US Gulf, the major import market into the USA.⁴

This led Mabro and Horsnell to conclude that "the NYMEX contract essentially represents the US domestic crude oil market and **is inappropriate** [emphasis ours] either for price setting or for hedging of waterborne cargos that are the basis of most world trade in oil."

Their assertion regarding the WTI Cushing contract remains correct today. However, just as Britain has been ousted by the United States (and in many cases China) as the leader of the global economy, the United States' crude market is replacing the North Sea market as the key market for pricing international crude because increased US oil production and surging

¹ "US crude futures add new dimension to oil trading," *Petroleum Intelligence Weekly*, September 27, 1982, p. 7.

² Paul Horsnell and Robert Mabro, *Oil Markets and Prices* (Oxford, England: Oxford University Press, 1993).

³ *Op cit.*, p. 231.

⁴ *Op cit.*, p. 241.

US oil exports are displacing declining North Sea output. In the same manner, the key market for pricing now is the US Gulf as WTI priced in Houston is beginning to replace Brent as a benchmark.

Our cover graph compares WTI prices reported in Houston and Cushing to Dated Brent prices. WTI Houston (reported by Argus Media) closely follows Dated Brent. WTI Cushing does not. The Mabro/Horsnell criticism penned in 1993 still holds today.

Today, WTI Houston is already a strong competitor to Brent and will likely replace the latter as the benchmark crude for several reasons.

First, the Houston volumes are large and growing. The amount of trade in it today exceeds that of Brent.

Second, Houston has storage available and Sullum Voe does not. Thus, traders acquiring WTI Houston need not remove purchased volumes immediately.

Third, many more competitors participate in the US Gulf crude market than in the North Sea. Consequently, while major oil companies are large players in the North Sea, they play a smaller role in Houston.

Fourth, the US now exports almost two million barrels per day of crude, mostly on large tankers to buyers in Europe and Asia. Export volumes will likely surpass exports from the North Sea within a year.

For these reasons, the US Gulf will likely become the location where global oil prices are set. Furthermore, the global price benchmark will become WTI Houston.

This report traces the emergence of WTI in Houston as well as two other Gulf Coast export crudes: Mars and Louisiana Light Sweet (LLS). Many writers have noted that the fracking revolution has made the United States the world's swing producer for crude. Few, though, have recognized that, given this fact, prices reported for US crude will become the world's benchmark.

A future issue of this report (probably the November one) will provide greater detail on the growing importance of US benchmarks compared to Brent. Here the focus is on the emergence of Houston as Cushing's successor as the key global pricing location.

This development does not, though, necessarily presage the Cushing contract's demise. The latter could survive, just as major grain contracts that still specify delivery locations that are no longer active survive and even thrive today.