

Crude Mystery: Where Did 800,000 Barrels of Oil Go?

Tally of unaccounted for oil hit highest level in 17 years in 2015; Oil data is ‘an imperfect science’

By Georgi Kantchev
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There is mystery at the heart of the oversupplied global oil market: missing barrels of crude.

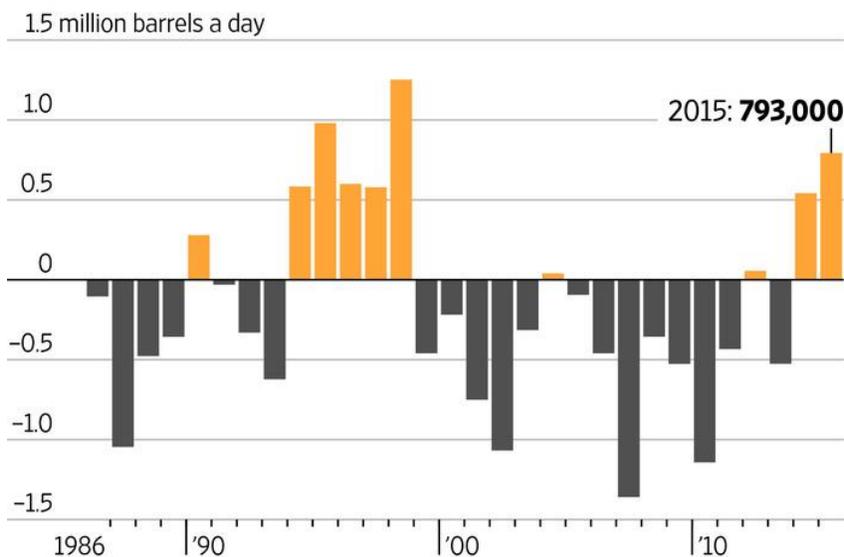
Last year, there were 800,000 barrels of oil a day unaccounted for by the International Energy Agency, the energy monitor that puts together data on crude supply and demand. Where these barrels ended up, or if they even existed, is key to an oil market that remains under pressure from the glut in crude.

Some analysts say the barrels may be in China. Others believe the barrels were created by flawed accounting and they don't actually exist. If they don't exist then the oversupply that has driven crude prices to decade lows could be much smaller than estimated and prices could rebound faster.

Missing in Action

The number of missing barrels has increased, suggesting that the global glut of crude might be smaller than thought.

Number of barrels not accounted for in OECD storage, floating storage or oil in transit data



Source: International Energy Agency

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Whatever the answer, the discrepancy underscores how the oil price flips around based on data that investors are often unsure of.

Barrels have gone missing before, but last year the tally of unaccounted for oil grew to its highest level in 17 years. At a time when the issue of oversupply dominates the oil industry, this matters.

“If the market is tighter than assumed due to the missing barrels, prices could spike quicker,” said David Pursell, managing director at energy-focused investment bank Tudor, Pickering, Holt & Co.

Here’s how a barrel of crude goes “missing” in the data. Last year, the IEA estimated that on average the world produced around 1.9 million barrels a day more crude than there was demand for. Of that crude, 770,000 barrels went into onshore storage while roughly 300,000 barrels were in transit on the seas or through pipelines. That left roughly 800,000 barrels a day unaccounted for in the data.

In the fourth quarter, the number of missing barrels reached as high as 1.1 million barrels a day, or 43% of the estimated oversupply.

The IEA collates production and demand data from around the world, and its monthly reports often move prices. Other major market monitors, like the U.S. Energy Information Administration and the Organization of the Petroleum Exporting Countries, don’t break down their data to show the number of missing barrels.

In 1998, the last time the number of missing barrels was so high, concern over the discrepancy reached the U.S. Congress. A U.S. senator asked the Government Accountability Office, a nonpartisan agency working for Congress, to examine the IEA data. The agency found that “[statistical] limitations can introduce errors into the data, although the magnitude and direction of these errors are not clear.”

That is what most analysts think.

“The most likely explanation for the majority of the missing barrels is simply that they do not exist,” said Paul Horsnell, an oil analyst at [Standard Chartered](#).

Standard Chartered projects U.S. crude averaging \$63 a barrel in the fourth quarter, an above consensus forecast that has been shaped partly by the bank’s belief that the glut is smaller than it seems. The average forecast among 13 investment banks surveyed by The Wall Street Journal last month was oil at \$45 a barrel by the end of the year.

On Wednesday, West Texas Intermediate, the U.S. price benchmark, rose \$2.12, or 5.8%, to settle at \$38.46 a barrel, while Brent, the international gauge, gained \$1.59, or 4.1%, to close at \$40.33 a barrel.

A spokesman for the IEA referred to the agency’s website, which says that the barrels’ “miscellaneous to balance” could be explained by overstated supply, understated demand or

stockpile changes in countries outside the Organization for Economic Co-operation and Development.

While the IEA estimates supply and demand from global data, its numbers on where the oversupply is being stockpiled come only from members of the OECD. That means that some of those barrels might be found in non-OECD countries like China.

Some analysts disagree. The missing barrels have become such a large proportion of the oversupply that this would imply that stockpiles are building up in non-OECD countries at a much faster pace than those in the organization, something that they question.

Analysts also point out that collecting data on oil is hard.

Demand data is derived from models rather than from real measured consumption and is often substantially revised, investment bank DNB Markets said in a research note. More than half of global oil demand also now comes from non-OECD nations where statistical gathering isn't as well developed, the bank said.

“We hence suspect that demand in non-OECD in reality is meaningfully larger than what is reported by the IEA,” they said.

Given this, some investors look at trends in oil data rather than the precise numbers they throw up.

Oil data is “an imperfect science,” said Rob Haworth, senior investment strategist at U.S. Bank Wealth Management, which oversees \$125 billion in assets.

Still, Mr. Haworth said that whether these barrels are missing or not, the global glut of crude is still far from over.

“The market could be a little tighter but the barrels we do know about—it’s still a lot of them,” he said.

Write to Georgi Kantchev at georgi.kantchev@wsj.com