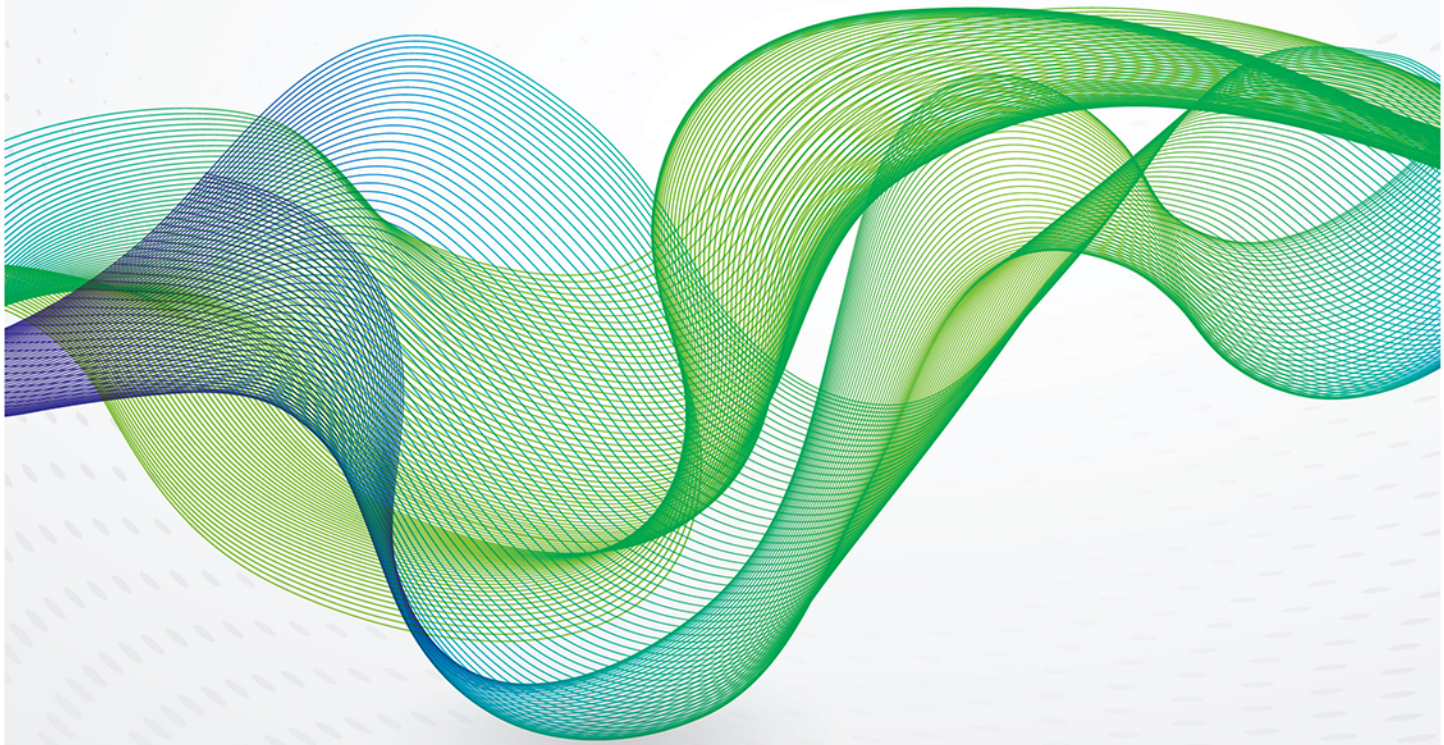
THE OXFORD INSTITUTE FOR ENERGY STUDIES

A RECOGNIZED INDEPENDENT CENTRE OF THE UNIVERSITY OF OXFORD

UNIVERSITY OF OXFORD

July 2020

The Shanghai Oil Futures Contract and the Oil Demand Shock



OXFORD ENERGY COMMENT

Michal Meidan, OIES and
Adi Imsirovic, OIES, Research Associate

Introduction

The global oil demand shock due to the COVID-19 pandemic has sent markets and benchmarks into turmoil. In the height of the demand shock, WTI traded at negative values[1] while the divergence in Middle Eastern benchmarks was laid bare.[2] Excess supply of oil naturally gravitated to China, the biggest oil importing country in the world, increasing 'spot' activity in delivered barrels into the country. This, in turn, led to a flurry of activity on the Shanghai International Energy Exchange (INE) oil futures contract, which traded at a hefty premium to ICE Brent and DME Oman.

This relative newcomer to the global oil futures club was launched on March 26, 2018. The contract is for delivered crude into designated bonded shore tanks (so that the price is net of tax), for seven medium sulphur grades of crude oil (32 API and 1.5%S) including Chinese Shengli and six other Middle Eastern grades including Basra Light, Oman, Dubai, Upper Zakum, Qatar Marine and Masila. The contract, which trades in the Chinese currency, the Renminbi (RMB), was almost an instant success, with volume of trades quickly exceeding those on the DME exchange, making INE the third largest oil exchange in the world. But while Chinese retail investors have been active on it, physical deliveries into the contract have been limited, in part due to storage limitations.

At the height of the crisis in April this year, however, as it temporarily decoupled from other regional and global benchmarks, the INE contract made several significant steps forward: Liquidity increased markedly and in response, the INE added a substantial amount of storage capacity. This allowed for increased volumes of physical deliveries and has also encouraged more established foreign traders to deliver into the INE contract.

While the global demand shock bolstered the prospects of the INE contract, a key question remains: Is this a blip or a trend? It is difficult to answer this question at this stage. First, it remains to be seen whether these high volumes of deliveries into the contract will continue, or whether the events of the past few months are merely the result of the April anomaly. Second, it will be important to see if crude from some of the newly added INE tanks will end up with the Shandong independent refiners, as some oil from the bonded storage actually ended up being sold into Korea. As the INE contract matures and the physical infrastructure continues to develop, much will also depend on domestic reforms and whether more private Chinese refiners and traders are able to trade the contract more actively, which in part will be contingent on a further liberalisation of the domestic crude buying system.

At the same time, the question of the INE's position as a regional or even global benchmark will continue to attract attention. But this Comment argues that even though the INE is still far from being a benchmark, this should not be mistaken for China's lack of pricing power in the global oil market. Arguably, China has become increasingly active in price setting for a decade now. The COVID-19 pandemic, and the surge in Chinese buying, have further highlighted China's importance as a global price-setter, with or without its own established crude benchmark. China's state-owned oil majors have been cementing their power in global benchmarks for several years now, and more recently, have reportedly been mulling negotiating jointly with sellers. So far, they have been supporting the development of the INE somewhat half-heartedly as this could end up benefitting private refiners and traders. Indeed, the independent refiners could become more active on the INE as the exchange expands storage capacity in Shandong and Liaoning and eases restrictions on crude and product trading. But the independent refineries are already impacting global prices too, by using exchange-based Brent 'trigger 'pricing, which has served them and the sellers well.

[1] See Fattouh and Imsirovic: 'Oil Benchmarks Under Stress', Oxford Energy Comment, April 2020. https://www.oxfordenergy.org/publications/oil-benchmarks-under-stress/

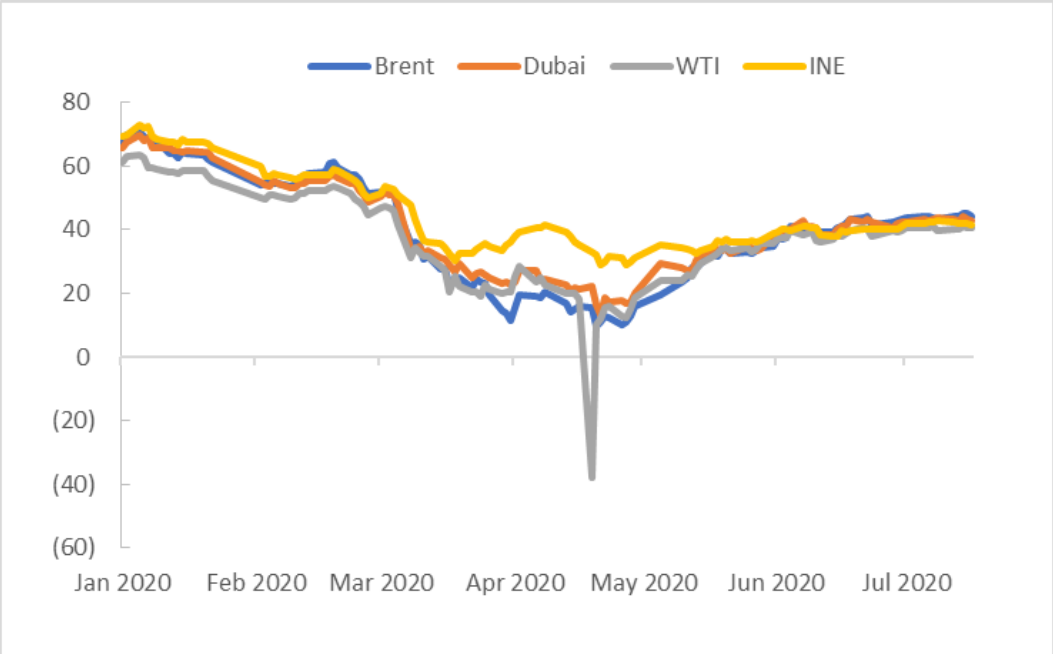
[2] See Fattouh and Imsirovic: 'Middle East Benchmarks and the Demand Shock', Oxford Energy Comment, July 2020, https://www.oxfordenergy.org/publications/middle-east-benchmarks-and-the-demand-shock/

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

The benchmark bloodbath

The market shock from the COVID-19 pandemic wreaked havoc with global oil markets. The same week that WTI, the US benchmark, plummeted below zero, the INE held a premium of more than $10 a barrel over ICE Brent (Figure 1) and was trading as high as $14 higher than the equivalent June DME Oman contract (June FOB loading DME Oman can be purchased, shipped and delivered into the July INE contract).

Figure 1: Key Oil Contract Settlements in 2020 ($/Barrel)



Source: Argus

Yet this was not a reflection of a tight domestic market. Rather, the anomaly was driven in large part by retail investors, who account for most of the activity on the contract, exacerbated by their preference for long positions in the deferred delivery months (as judged by open interest, see figure 2 below). Expecting that crude prices had bottomed out, they bought into the INE contract, as this was also considered as a better hedge against inflation than leaving cash deposits at banks.

With open interest rising on the contract, the INE scrambled to add storage tanks. In April, the eight designated bonded oil tanks which guarantee future delivery into the contract—which are dotted along China's coast, spanning 2,700 km from Dalian in the North to Zhanjiang in the South—had an approved capacity of 37.4 mb, but an active capacity of 19.8 mb.[3] The exchange swiftly doubled capacity to 57 million barrels, by hiring additional tanks.[4] As a result, between the 17 April and 24 April 2020, the

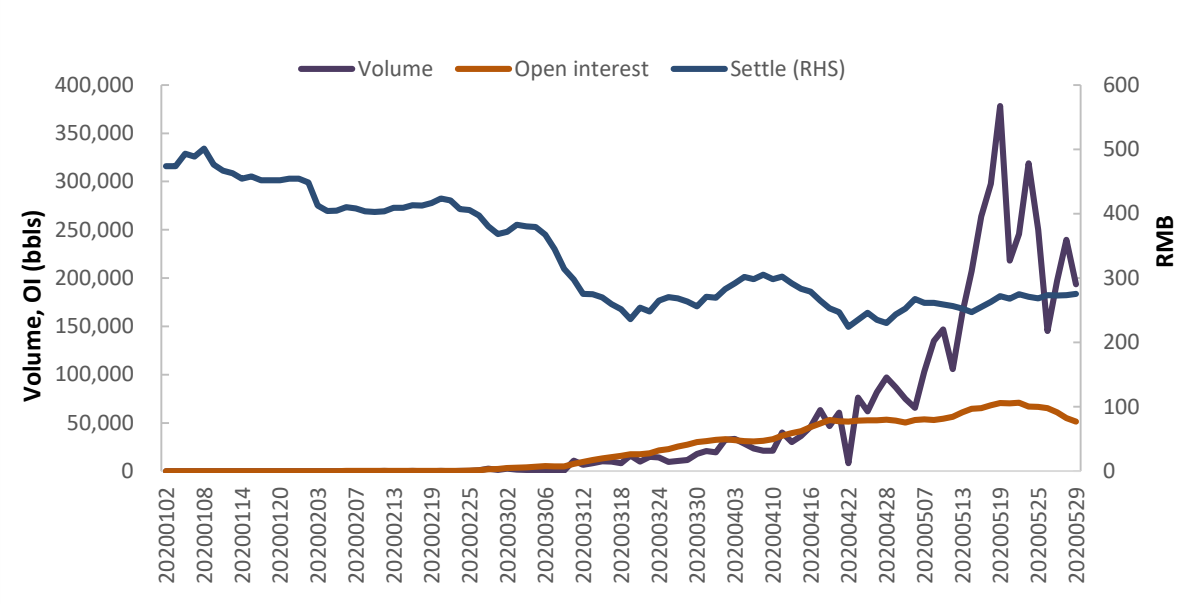
[3] Michal Meidan, "China's crude awakening", Oxford Energy Forum issue 113, May 2018

[4] Throughout April, the INE rapidly added new storage capacity: On April 2, INE approved 1.15 million cubic meters (mcm) of storage in Dalian (http://www.ine.cn/news/notice/2793.html), followed a week later by two Sinopec storage tanks in Hainan and Shandong, with a combined 2.2 mcm of storage (http://www.ine.cn/ news/notice/2814.html); on April 16, INE announced that it added another 1.2 mcm of PetroChina's storage in the north-eastern port of Dalian as delivery tanks for crude oil futures (http://www.ine.cn /news/notice/2832.html); followed by 0.4 mcm of Dalian North Oil Petroleum Storage (http://www.ine.cn/news/notice/2835.html); In a separate statement, the exchange also said it will adjust the storage fee for delivery tanks to 0.4 yuan ($0.06) per day per barrel, effective June 15 (see http://www.ine.cn/news/notice/2838.html). In late April, the exchange approved 5 mcm of Sinochem-Hongrun owned storage capacity in Shandong, stating that storage would incur a premium of 3 yuan ($0.43) per barrel in this location (http://www.ine.cn/news/notice/2842.html). In late April, the exchange added a further 0.70 mcm of PetroChina tanks in Zhanjiang and 1.1 mcm of Sinopec tanks in Caofeidian, Hebei. Finally, in June, the exchange approved another 1.45 mcm of PetroChina storage capacity in Dalian. https://www.reuters.com/article/china-oil-futures-storage/update-1-chinas-ine-adds-petrochina-storage-as-futures-warehouse-doubles-storage-fee-idUSL3N2C428B

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

volume of crude held in INE tanks more than doubled from 3.4 mb to 7.2 mb. By the end of May, this had risen to 20.4 mb and at the time of writing, 39 mb of crude was delivered into the INE. This is partly due to relatively cheap INE storage compared with the extent of the contango in prices reached in April.[5]

Figure 2: INE July crude oil contract: volume traded and open interest (barrels), prices (RMB)



Source: INE

As the prices between benchmarks diverged widely, the state companies Sinopec, PetroChina and Zhenhua Oil, purchased Oman and Basra Light for delivery into the contract, partly alleviating the problem.[6] Arranging the additional tankage helped resolve the storage issue but caused further operational problems by creating bottlenecks off Shandong ports and on the pipelines into the province.[7]

Indeed, the locus of physical deliveries on the INE has shifted rapidly to Shandong and Liaoning provinces, home of the independent refiners. To begin with, the INE had no tanks in Shandong, and the logistical challenges and high costs of diverting crude from the existing tanks into Shandong were limiting the independent refiners' appetite for trading on the INE. By mid-July, however, 14 mb were delivered into tanks in the province, of which 9.7 mb delivered into Sinochem-Hongrun owned tanks. Similarly, INE tank space in neighbouring Liaoning province, has increased significantly. In mid-May, 1.8 mb of crude had been delivered into local tanks, but by mid-June, Liaoning province recorded 11.4 mb of crude deliveries through the INE (Figure 3).

In short, the INE has responded to rising liquidity by rapidly adding storage capacity. It has also sourced tanks that should allow sellers to serve the most dynamic part of the Chinese market: the independent refiners. Over the coming weeks, it will be interesting to see if, under the pressure from backwardated Dubai market, the Shandong and Liaoning volumes are drawn down and delivered into the local market. For now, however, the Shandong independents are already struggling to absorb the large volumes that they have already sourced. Tankers are currently piling up off China's shores raising concerns about massive demurrage costs amidst the independents' already weakening margins. Sinochem-Hongrun, the owner of the newly added storage tanks, is also prioritising its own crude as well as INE-settled crude onto the pipeline going inland (that it owns), leaving other refiners to rely on trucking to deliver the crude inland.

[5] Platts: 'INE's Shanghai Crude contract sustains Chinese demand for cheap Middle East barrels', May 2020
[6] 'China's 'hermit' investors fill doubled oil storage with crude bet', Reuters, 25 May 2020
[7] 'Shandong pipelines face overload', Argus, 29 May 2020

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

Figure 3: Crude deliveries into the INE by region, mb

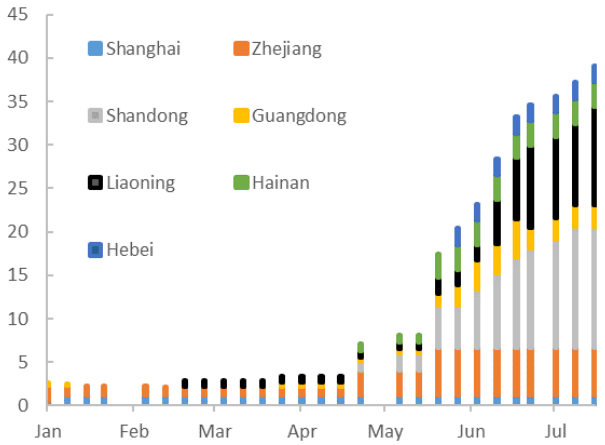
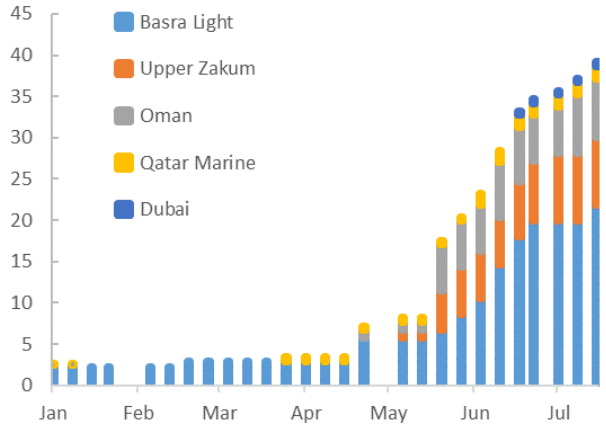


Figure 4: Crude deliveries by grade, mb



Source: INE, OIES

At the same time, some volumes of crude are reportedly being re-sold outside China. Storage economics on the INE have turned negative, and Gulf producers are raising OSPs to Asia which, together with backwardated Dubai prices are making cargoes from the bonded exchange storage attractive for regional refiners. Two cargoes of Oman crude have reportedly been delivered to Korean refiners, after being purchased by a Chinese trader.[8] Yet these Oman sales do not point to the INE becoming a regional storage hub, rather, they may be a sign of problems of disposing of the physical barrels acquired through the contract. With most of the bonded storage controlled by the Chinese majors, possible credit issues weighing on a number of independent refiners and the overwhelming of the connecting pipeline system with the recent deliveries, incurring additional freight costs, re-selling the cargoes might have been the only option left to the holder of storage certificates. And while these re-exports were predominantly of Oman crude, the main deliveries into the INE remain Basra Light (see Figure 4), given that it is normally the cheapest grade acceptable by the contract. Nonetheless, deliveries into the contract have continued with BP and Mercuria, established international traders, reportedly also selling into it more recently.[9] This episode has highlighted the exchange's ability to rapidly solve some of the operational problems even as new issues arise.

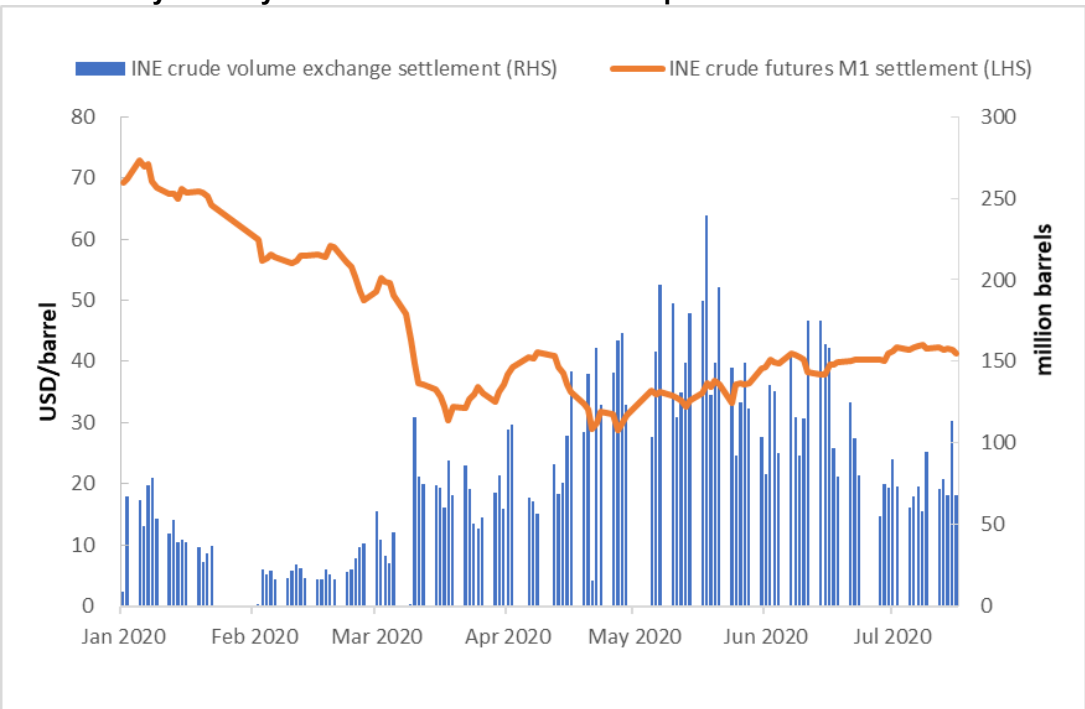
Most importantly, at the height of the demand collapse and the stress felt by several oil benchmarks, the INE volumes picked up significantly (see Figure 5), especially in May and June. But does this mean that the INE is on track to become a regional, or even global benchmark?

[8] The cargoes were sold from the Qingdao port storage facilities by a Hangzhou locally-owned company. "Shanghai crude oil futures tanks start a new journey", 16 July 2020, http://www.chinalubricant.com/news/show-102537.html

[9] 'BP, Mercuria first global firms delivering oil into Shanghai contract' - Reuters News 15-Jul-2020.

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

Figure 5: INE July delivery crude oil contract: settlement prices and volumes



Source: INE

Why the INE is not a regional or global benchmark yet

As a part of the country's economic ascent, there has been a conscious decision by the Chinese leadership to participate and 'compete for oil pricing power'. Guo Shuqing, chairman of the China Securities Regulatory Commission, China's top regulatory body, announced that China 'must focus on establishing futures for crude and other commodities, to gradually strengthen China's pricing power in international markets'[10]. This is not unexpected as China is projected to become the world's largest oil consumer before 2040.[11] At the same time, the contract is priced in the Chinese currency (RMB), as part of the government's efforts to support the internationalisation of the currency. While the prospect of trading in RMB is extremely appealing for smaller independent traders with less international exposure, it has been seen as an impediment for the INE's role as an international benchmark.

However, despite its success, the INE crude oil contract has several problems. Even though it is a delivered contract, well suited for smaller importers with no access to shipping, it has not been used by the independent refiners to procure supplies. This is due to a number of factors: First, the eight tanks designated originally for delivery into the contract were owned by the majors and located far from the main independent refiners' hubs of Shandong and Liaoning, raising concerns about the additional costs associated with the transport and potential infrastructure bottlenecks. Even though the government has been gradually liberalising energy markets, the oil market is still highly concentrated and dominated by a handful of state-owned companies: PetroChina Company Limited, Sinopec Group, and China National Offshore Oil Corporation (CNOOC) and Sinochem. Indeed, even after adding tank space this year, the INE now has fourteen listed tank designated delivery storage facilities for the INE crude oil contract, but only three are not owned by PetroChina, Sinopec or Sinochem.[12]

[10] Leslie Hook, "Shanghai to launch crude futures contract", Financial Times, 9 February 2012, https://www.ft.com/content/b2c6857c-5326-11e1-8aa1-00144feabdc0
[11] IEA, World Energy Outlook 2019 p129
[12] http://www.ine.com.cn/en/products/oil/manual/deliverydepots/

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

Second, the current quota system which regulates the independents' crude purchase limits their ability to buy in the distant future. While the government has been granting rights to an increasing number of independent companies to import crude oil—with 62 such licences issued to non-state owned refiners and traders this year totalling 185 Mt (or 3.7 mb/d for the year)—they use these licences in order to supply 43 independent refiners who have received approval by the National Development and Reform Commission (NDRC) to process 150 Mt (or 3 mb/d) of imported crude[13]. Moreover, the quotas are issued piecemeal with no guarantee of further volumes, making it hard for these companies to make long-term supply arrangements. For example, on 18 June 2020, the NDRC announced that it will not grant independent refineries crude import quotas if they have been found guilty of tax evasion. While any review of the independent's tax practices will rely on input from local authorities, which tend to support local refiners, the Shandong government is also launching a scheme aimed to accelerate capacity closures. The local government is offering compensation for refiners willing to close outdated capacity as it looks to move ahead with its own mega-refinery project, the Yulong project, which is currently slated for 2025. Given the changes in the licencing process; the ongoing government mandates to shutter the smaller plants and worsening financial conditions, a cloud of uncertainty continues to hang over the Shandong teapots.

Finally, to make INE truly international, the issue of the currency convertibility will also have to be resolved. It has been argued that the INE crude oil contract fits well into a programme of promoting the capital account liberalization[14], but this is impossible to achieve without some sort of exchange rate reform (or a wider, global, acceptance of trading in RMB). The trade-off between free capital flows and RMB stability has become a policy issue, making INE having to resort to a quota management system for foreign investors.

As a result, most of the volume on the INE have been traded by retail and financial participants with limited access to international oil exchanges. But this could be changing: with more storage tanks in Shandong and Liaoning, a potential for a further liberalisation of domestic oil trading and signs that established traders such as BP and Mercuria are becoming more actively involved, the INE could gradually become a supply source for the independent refiners through international sellers able to handle the currency exposure as a result of their large footprint in China.

Moreover, even though INE's potential of becoming an international benchmark is limited, it could become the basis for domestic price setting. In China, domestic product prices are controlled by the government. They are based on a formula, linking them with the international oil market with a ten-day lag (based on Brent 40%, DME Oman 40% and WTI 20%, with a floor of $40). If the INE contract was a part of this product price formula, the independent refiners could begin to trade it more actively or use it to hedge a portion of their crude oil purchases.

There is certainly room for one or more delivered oil contracts into China, for example for light and medium sweet crudes such as Brazilian Lula, Russian ESPO and Congolese Djeno, all very popular with the independent refineries as well as Chinese majors. Independent refiners could utilise such a contract for procurement of physical barrels as well as hedging the price risk. Sellers, who are mainly international oil companies, would find it a good mechanism for price discovery, managing risk as well as sales of physical oil. Additional infrastructure such as more connecting pipelines and storage would help. However, the key to creating an internationally traded, liquid contract is a full liberalisation of oil and financial markets. In China, that process still has some way to go.

How the INE evolves over the next few months will be important to watch. Will open interest remains high and physical deliveries continue? Will volumes from the local tanks in Shandong and Liaoning end up supplying the independent refiners? Answers to these questions will help assess whether the April anomaly was just that, an anomaly, or whether the INE is establishing itself more firmly already. But

[13] The state-owned majors rarely purchase crude from these traders and rely on their own trading arms

[14] Jie Zhang and Naoki Umehara, "How Far is Shanghai INE Crude Oil Futures from an International Benchmark in Oil Pricing?", Institute for International Monetary Affairs, March 2019, https://www.iima.or.jp/en/docs/newsletter/2019/NL2019No_4_e.pdf

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

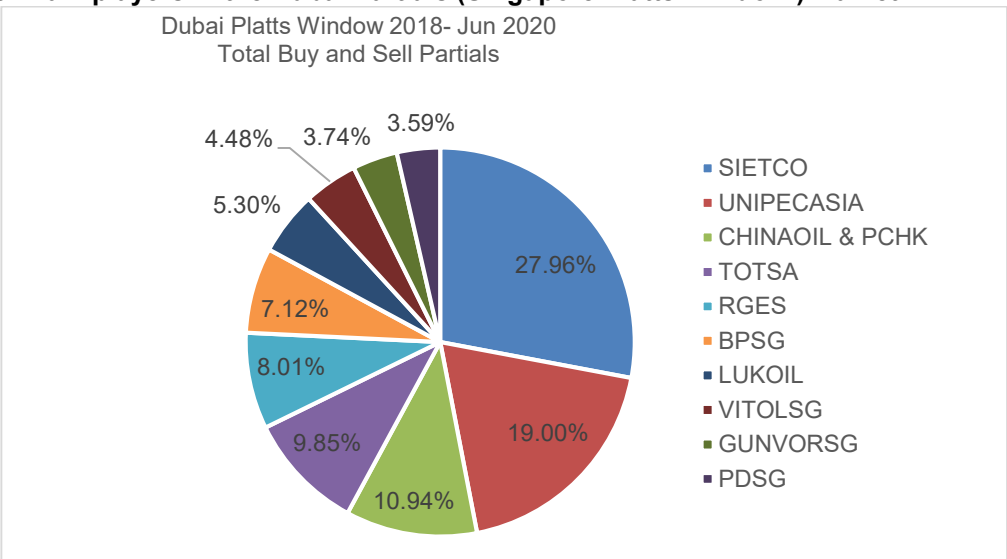
even if activity on the INE moderates over the next few months, the exchange has shown its ability to adapt rapidly and will likely continue to evolve over the coming years into an important exchange.

But will it become the basis for China's global pricing power? The issue has been widely debated, but in fact, China's pricing power in oil markets does not depend on the INE.

China's pricing power

China's largest state-owned oil traders have been influential in global crude benchmarks for quite some time. As it stands, the Chinese majors' trading arms buy Middle Eastern crude on a Dubai-related basis and 'sell' it to their refining system through formulas similar to the domestic pricing mechanism. They benefit when Dubai is priced competitively relative to Brent, Oman and WTI. While they have relatively little influence in the Brent and WTI markets, these trading arms are major players in the Oman and Dubai markets. Even though it is difficult to 'see' their activity on the exchanges, Unipec and ChinaOil are in the top three players in the Dubai partials markets, used to assess the value of this major Asian benchmark. The two of them alone make up almost 30% of the market See Figure 6).

Figure 6: Main players in the Dubai Partials (Singapore Platts 'window') Market



Source: S&P Global Platts

For now, the domestic pricing formula described above incentivises the Chinese majors as well as other refiners to focus on these benchmarks for price risk management purposes and as a way of influencing the domestic pricing mechanism. Therefore, a higher degree of transparency in domestic pricing may not be in their favour as this could further consolidate the independent refiners' influence in the domestic market.

Given that the Shandong independents form a highly diversified market, with a high number of buyers and sellers, many of the major global trading companies, including state-owned ChinaOil and Unipec, compete to market cargoes to the 40-odd refineries with crude processing quotas. But the rise of the independents has come at a cost for the majors, squeezing their domestic market share and, if they gain product export rights, potentially competing with them overseas. Within China, the independents are marketing cheaper products (in part due to their ability to avoid taxation)[15] and unlike their state-owned peers, they are not saddled with social duties such as employment and supply security. Post-COVID-19, for example, the majors bore the brunt of run cuts in order to balance the domestic market, while the independent refiners ramped up their crude buying and throughputs, squeezing the majors

[15] Michal Meidan, China's Independent Refiners: A New Force Shaping Global Oil Markets, Oxford Energy Insight 12, May 2017, https://www.oxfordenergy.org/publications/chinas-independent-refiners-new-force-shaping-global-oil-markets/

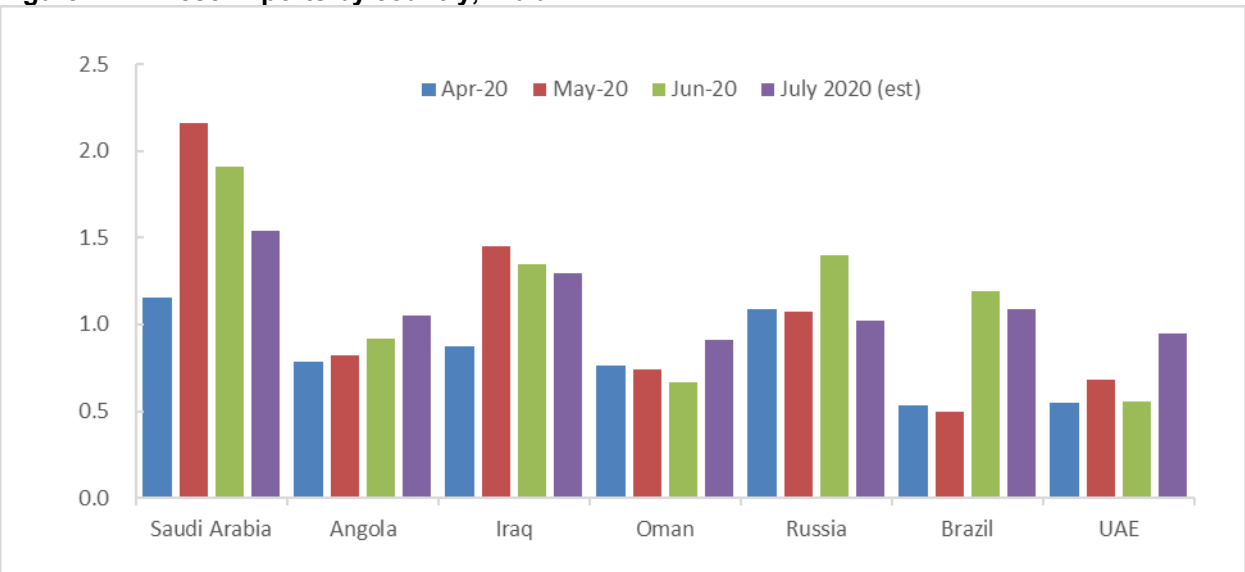
from their traditional market.[16] A greater involvement on the INE—if it were to become part of the domestic price-setting mechanism—and the transparency associated with it, could further erode the majors' domestic monopoly. Already, perhaps counter intuitively, the independents are beginning to shape global prices too.

The Independents: an unconventional pricing force

The Shandong teapots' favourite buying formula is a differential to the Brent futures contract on a delivered ex-ship (des) Shandong basis with a 'trigger'. This is a mechanism by which a supplier allows the buyer to 'trigger' the price at the time of her own choosing if it can be executed on the exchange. The final price is then calculated as a weighted average of these 'triggers' plus the pre-agreed quality differential. For most sophisticated suppliers, this is a minor inconvenience, while the buyer receives important ability to fix the oil purchase price, relative to the expected domestic product prices (which in turn determines the refinery profit). The interesting point here is that, by 'triggering' a fixed price, the independent Chinese refiners are directly influencing the price of Brent, the key global benchmark. Since these Brent 'triggers' involve end users choosing a fixed price at which they are happy to buy oil on the exchange, they are effectively setting a price 'floor' at which a good volume of Brent buying occurs.

In general, the independent refineries tend to lack the extensive hydrotreating capacity of their larger, state-owned peers, and favour sweeter crude from west Africa and Brazil, or Russian ESPO Blend. Also, these grades are easier to buy on spot, delivered basis. Brazilian Lula crude and Norwegian Johan Sverdrup, whose prices are harder to assess on an FOB basis near their points of origin, send clear pricing signals from Shandong, where they can account for two thirds of spot trade (see Figure 7 below). Lula, in particular, is in high demand, with spot traded volumes averaging nearly 500,000 b/d in 2020. Even major refiners such as Rongsheng or PetroChina will buy Lula or Johan Sverdrup on a DES basis.

Figure 7: Chinese imports by country, mb/d



Source: Kpler

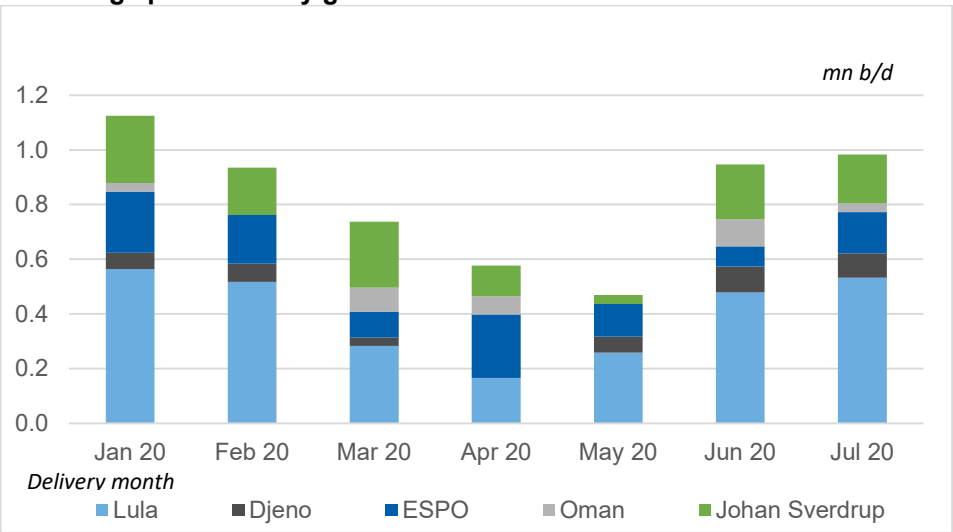
But there is demand for sour grades too. When the OPEC+ agreement broke down in March of this year, that showed up clearly in the Shandong spot market. Saudi Arab Light established a clearing price in China for May arriving cargoes, only to be priced out by tumbling discounts on June-arriving cargoes of Russian Urals. And the latter, in turn, was undercut by US Mars for July delivery trading $8/bl below

[16] Michal Meidan, Geopolitical shifts and China's energy policy priorities, Oxford Energy Comment, March 2020, https://www.oxfordenergy.org/publications/geopolitical-shifts-and-chinas-energy-policy-priorities/

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

Brent futures.[17] It is clear is that the market has become diversified in terms of buyers and sellers (as well as diversity of imports as Figure 8 clearly shows) and highly competitive.

Figure 8: Shandong spot trades by grade



Source: Argus

The success of the Shandong spot market in generating a price signal that is truly Chinese is an irony not lost on the central government, which strongly backed the Shanghai INE contract as a potential Asian benchmark. In late-2019, the NDRC encouraged the state-owned Qingdao Ports Group (QPG) to establish spot indexes based on trade in crude delivered to Shandong.[18]

Considering the above, asking when China will achieve 'pricing power' is an invalid question: China has achieved this goal long time ago. Chinese oil traders have been a force in the international oil markets for at least a decade[19]. The turning point for the Chinese majors was August 2015 when ChinaOil went on a buying spree, buying pretty much the whole production of oil that was deliverable into the contract and having a major impact on the Dubai benchmark.[20]

Therefore, the INE crude oil or any other contract is not necessary to achieve greater pricing power. So far, Brent benchmark has served well both the independent Chinese refiners and their suppliers. Local market conditions have been reflected in the quality differentials to Brent futures to the extent that independent price reporting agencies (PRAs) Argus and Platts also assess prices for crude traded on a des Shandong basis. Given the relatively sporadic trades and information, these assessments add to market transparency, but they still have a way to go before becoming an 'index' price.

Finally, the Chinese majors, by the sheer weight of their purchasing power, also have a very direct way of flexing their pricing muscle. Unipec, for example, reportedly sought to renegotiate contractual volumes with Aramco in 2018, resulting in a suspension of imports. The strength of China's post COVID-19 recovery has served as an additional reminder of the country's importance for global crude market with the majors now, reportedly, seeking to capitalise on this and create a joint purchasing group to

[17] Argus: Producers vie for Chinese sour crude demand https://direct.argusmedia.com/newsandanalysis/article/2085266
[18] Tom Reed, "China's independent refiners: The great survivors", Oxford Energy Forum, forthcoming
[19] Asian traders have become visibly more assertive in the market place. Some of them, such as Unipec and China Oil, are now regularly involved in setting the price in the Platts Dubai window, becoming 'price makers' rather than 'price takers' – see Adi Imsirovic, 'Oil Markets in Transition and the Dubai Crude Oil Benchmark' Oxford Energy Comment, October 2014, p.1
[20] Platts data show 78 cargoes were declared during the month - 51 of those cargoes were Oman Blend, 24 were Upper Zakum crude and 3 were Dubai crude. According to Platts Analytics data monthly Oman production was about 55 cargoes, and Dubai about 3 cargoes in August 2015. Upper Zakum spot cargo availability was unknown at the time given that some volumes were released from destination restrictions on an ad hoc basis, though total production stood at about 40 cargoes. Rushford and Blei: 'Yields vs. sulphur: What is driving crude benchmarks in 2020?', Oxford Energy Comment, July 2020, p7.

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.

collectively issue bids on Russian and West African crudes (to begin with).[21] While there are numerous obstacles to the creation of such a bidding group, there is a growing desire among both the Chinese refiners and government to reduce purchase costs. Moreover, in the context of deteriorating US-China relations, any such coordinated pricing effort may include purchases in RMB, as a means of promoting the international use of the RMB and reduce China's exposure to the US dollar.

Conclusion

The role of 'independent' oil companies in China is growing. More and more oil import quotas are being allocated to them both in terms of numbers and volume. This has created a vibrant delivered market for crude oil in the country. Many buyers and sellers engaged in spot activity of a very wide range of crude oils has created a liquid, competitive and relatively transparent market. At the same time, the Chinese government has been actively encouraging the INE to develop into a financial tool, as well as a Chinese crude oil benchmark, traded in RMB. Both these processes have taken place in parallel, with the independents limiting their activity on the INE, in large part due to the dominance of the state-owned majors on physical deliveries.

The demand shock, post COVID-19 has altered some of these dynamics. It has created a massive oversupply of oil looking for home which the largest crude importer in the world, with a growing storage capacity and a 'guaranteed' refinery margin (when crude oil is below $40 per barrel), was happy to soak up. The combination of these demand and supply-side circumstances, amplified spot trading activity. The relatively new INE oil contract was a beneficiary of these events. Over the course of the past three months, the exchange has seen increased liquidity and managed to add storage capacity rapidly, leading to close to 40 mb of physical deliveries. As the trading activity on the exchange increased, more oil was delivered by a wide range of traders, with storage tanks in Shandong and Liaoning opening up and potentially facilitating crude deliveries to the independent refiners, including by some big international players. Going forward, it will be interesting to see if some of the crude delivered into the INE can make its way into the Shandong refineries, offering an additional way of suppling this vibrant market.

As liberalisation of the Chinese energy market continues, delivered oil market in China will grow in importance and the role of the INE contract will increase with it. The medium sour crude oil contract has every chance to become an important regional benchmark, not unlike WTI in the US. However, without full liberalisation of the energy as well as financial markets, it is unlikely to become a global benchmark.

There is room for at least one more, sweet oil benchmark in Asia and with already existing and improving assessments by PRAs, it could happen soon. With the newly announced Murban contract in the Middle East, the wrestle for 'pricing power' continues. Yet the Chinese majors have been dominant players in the key benchmarks 'East of Suez' for well over a decade. They do not need a successful INE contract to continue in that role. If anything, growing liquidity and transparency in the Chinese delivered market may undermine their role and benefit the independents, who have already become an unconventional pricing force.

[21] China oil titans plan joint crude buying, 30 June 2020, https://themalaysianreserve.com/2020/06/30/china-oil-titans-plan-joint-crude-buying/

The contents of this paper are the authors' sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.