Energy Intelligence

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ENERGY INTELLIGENCE **FINANCE**®

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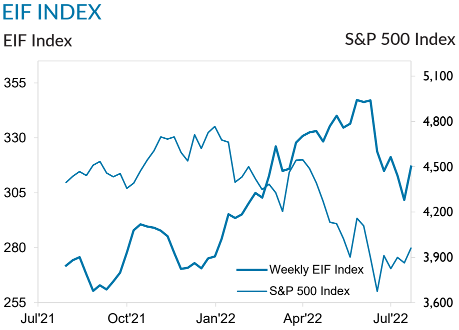

EIF Global Oil and Gas Index of 22 traded equities

OUR TAKE

Key Questions of the Quarter

Second-quarter earnings season is here and the industry has never faced such a complicated and conflicted landscape. Geopolitical and economic risks are rising, while high commodity prices are generating bumper profits. Investors want to know how much they will get paid today and how they will get paid tomorrow. Below, through the lens of our five core services, Energy Intelligence looks at the key issues executives should have an eye on in midyear earnings.

- **Competitive Intelligence:** Companies that reset their strategies for the transition now find those strategies challenged by an energy crisis. The projects that make the cut for final investment will shape the future supply mix and give insight into how companies view the energy system of the next decade. With ample cash, how will companies think about new investment in new fossil fuels and where will they turn for transition-proof supply? Most seem keen to raise transition investments but which projects and technologies will get cash and which need more time?

- **Risk:** Geopolitical risk has risen and diversified. Russia's war in Ukraine has opened up fissures that were already beginning to show. How will companies tiptoe around those cracks as governments and society increasingly ask them to choose sides? What do governments in consumer countries want from energy companies? How are producing countries balancing new investments in capacity with demands to tax the windfall profits of their national oil companies (NOCs)?

- **Energy Transition**: Environmental, social and governance issues are not going away but are evolving, with big implications for strategies, financing and investor sentiment. How might investor demands shift as the world looks to balance the demands of energy security, affordability and decarbonization? Are companies achieving decarbonization goals and how? Will we get any clarity on where companies are placing transition bets? Is inflation in both raw materials and power prices changing strategies?

- **Oil Markets:** The global energy system is being ripped apart by sanctions and shortages. Significant differences between dynamics in the East and the West — as well as between paper and physical markets — make discerning fair value prices difficult. How do companies see potential for a global recession in the near term and the eventual energy transition interact driving price dynamics? How will the West's isolation of Russia distort crude and product markets? How much demand destruction will be driven by high prices and is it permanent?

- **Global LNG:** Gas liquefaction has been lucrative for majors and NOCs. How are companies choosing to get LNG exposure and what is the right balance between offtake and equity volumes? For those focused on equity projects, what is next in the development queue and can they get the contracts they need for financing? For LNG buyers, how are contracts evolving to deal with market risks? And is Europe willing to lock in long-term supply to replace Russian volumes?

PEER STRATEGY

Services Firms: Upstream Boom Has Room to Run

The world's biggest oil-field services firms agree that the uptick in E&P activity worldwide since the Russian invasion of Ukraine will be sustained and could be just the start of a multiyear market upcycle. It may have started out among private US firms cautiously taking advantage of higher prices but has now developed into a scramble to secure supplies and services both for this year and next.

- **Bullish Halliburton believes higher services rates will be the norm for now.**

The most bullish of the Big Three service companies to report second-quarter earnings last week was Halliburton, whose CEO Jeff Miller said the Houston-based company was effectively "sold out" in North America for the rest of 2022. So tight was the service market there, said Miller, that even "incremental" additions to diesel fleets were almost impossible. This was effectively the case across the industry in North America, he said, and could be seen in continuing shortages of equipment, consumables and skilled labor.

The reality of scarcity can be seen in the skyrocketing cost for such everyday oil-field items as frack sand, which has gone up in price by about 150% for Permian Basin operators, and premiums being paid for both labor and equipment by all companies, whether they are E&Ps, giants like Halliburton, or smaller, more specialized players. The scramble is not just boosting oil-field prices, but also increasing interest in vertical integration so companies can ensure access to critical components and personnel.

Consequently, Halliburton says its North American and international customers are starting the process of securing services and supplies for the next year or contract cycle even earlier than normal. What's more, they accept that higher rates will be the norm until either oil prices cool or supply-chain and labor snarls get resolved, Miller said.

- **Schlumberger says customers everywhere are bowing to pricing pressure.**

If Halliburton's commentary on the oil market confirmed the red-hot situation in North America, then Schlumberger's pointed to the slow burn elsewhere. CEO Olivier Le Peuch told investors during his company's quarterly call that Schlumberger was seeing the beginning of a "broad-based ... multiyear upcycle" around the world, with spending visibly higher across all customer types." The situation, he said, was "positive in all dimensions."

What's more, Le Peuch continued, the market outside of North America is about to heat up considerably, with growth rates likely outpacing North America from the second half of the year. This would be led by regions such as Latin America and Europe, but especially in the Middle East where producers are expanding capacity both in oil and gas. The region, said Le Peuch, is early in its growth cycle and will "certainly" see a large ramp-up in the near future.

As in North America, rising demand for oil-field services is straining the ability of companies like Schlumberger to supply them and pushing rates higher as a result. This supply pinch, said Le Peuch, is creating a dynamic where customers that wanted to secure their ability to increase output or expand capacity were bowing to pricing pressure. This was happening everywhere, not just in North America. "It's broad. It's happening today, and it's expanding," said Le Peuch to drive home the point. "For every contract, for every customer. A year ago, it was mostly in North America. Now, it is international and across all customers."

- **Baker Hughes is more cautious after taking a large write-down in Russia.**

Unlike Halliburton and Schlumberger, Baker Hughes approached earning seasons with a bit more trepidation, largely due to a $365 million write-down it was forced to make on its operations in Russia. The company posted a net loss of $839 million for the second quarter of 2022, whereas Halliburton and Schlumberger each posted large gains, with neither seemingly overly encumbered by the suspension of their Russian operations.

Despite the setback, Baker Hughes CEO Lorenzo Simonelli said that services activity continued to grow in North America and internationally, with the North American drilling rig count "continuing to track above our expectations." Simonelli said he expected "modest growth" in the number of active drilling rigs to continue through next year, but warned that "the outlook for 2023 will be dependent on broader macro factors and oil prices."

- **What recession? The oil market is currently decoupled from macro concerns.**

Simonelli noted that oil markets faced unusual circumstances. On the one hand, demand for oil looks like declining due to inflation and rising interest rates. On the other, structural factors such as years of underinvestment and new concerns over the insecurity of supply should, according to Baker Hughes, "realistically" keep commodity prices and oil-field activity at high levels, even if moderate demand destruction occurs.

The question of whether oil had for the time being become decoupled from the broader economy was also addressed by Halliburton and Schlumberger. Halliburton's Miller said plainly that there was no talk of recession at all with his customers, and that all signs pointed to continued expansion.

Schlumberger's CEO Le Peuch likewise noted that energy security was once again a major factor motivating investment decisions. It was, he said, leading decision-makers in the industry to "double down" on securing the equipment and services needed to ensure supply, putting "resilience into the investment cycle."

How long this situation will last was an open question, but he was certain that near-term volatility would not suddenly lead to a dramatic rollback. Decoupling is here and it will make the current upcycle stronger, longer and pricier as a result. "I think there is a lot of space in it," he said.

Jeffrey Cavanaugh, New Orleans

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PEER STRATEGY

Caspian Pipeline Posturing Spooks Western Majors

- *Western producers in Kazakhstan fear Russia may nationalize the Caspian Pipeline Consortium (CPC) terminal and cut their access to international markets.*

- *Chevron, the biggest Western partner in CPC, would have to invest heavily in new export infrastructure for crude from the Tengiz field if the terminal shuts.*

- *Closure of CPC would massively raise transportation costs from Tengiz and delay cost recovery from the field's $45 billion expansion.*

The Issue

Western majors operating in Kazakhstan had taken the Caspian Pipeline Consortium (CPC) scheme — their primary route to world markets — almost for granted. The pipeline runs some 1,500 kilometers from the giant Tengiz field to a 1.4 million barrel per day oil terminal on Russia's Black Sea coast, taking in volumes from the Karachaganak and Kashagan projects en route. CPC operated smoothly for more than two decades but its reputation has been eroded this year as an increasingly anti-Western Russia tries to shut the scheme down. It is still flowing crude for now but there are fears Moscow may have more tricks up its sleeve.

Moscow Rules

Set up as a 50-50 joint venture between the Russian and Kazakh governments, on the one hand, and a group of Caspian oil producers on the other, the CPC scheme loaded its first tanker of crude in 2001. Its Western members include Chevron, Exxon Mobil, Eni and Shell, who may have vowed to reduce exposure to Russian oil and gas in the wake of the Ukraine conflict but made no mention of exiting the all-important CPC.

Russia is CPC's largest shareholder, however — its 31% stake is managed by state pipeline operator Transneft — and the scheme cannot function without Moscow's consent. This year's shenanigans began in March, when Transneft closed two of the terminal's three single point moorings, allegedly due to a storm. Earlier this month, a court in nearby Novorossiysk ordered the terminal to be shut down on the basis that CPC had made numerous, unspecified safety violations. The punishment was later downgraded to a fine.

Going forward, Moscow could take the nuclear option: nationalize the Russian leg of the line and force all users of the terminal to operate under Russian law. It has so far given no hint it will do this, but as Russia hardens its anti-Western position, such action cannot be ruled out. "There is no real protection," said a source who has worked on the CPC project since its inauguration. "In the end, Russia does whatever it wants — it doesn't care about the legal repercussions." Chevron and the other big producers in Kazakhstan may end up paying a heavy price for relying on CPC for too long and failing to come up with a Plan B, he added. "Now they are looking extremely exposed."

Chevron Under Strain

Life without CPC would indeed be a nightmare for Chevron, the largest private-sector oil producer in Kazakhstan with around 300,000 b/d last year, or one-sixth of the US major's global liquids output. Most comes from Tengiz, which Chevron operates with a 50% stake alongside Exxon (25%), Kazakhstan's state-owned Kazmunaigas (20%) and Russia's Lukoil (5%) in the Tengizchevroil (TCO) consortium. Some extra is accrued from its 18% interest in the Shell and Eni-led Karachaganak gas and condensate field.

The recent tensions come as Chevron finalizes a $45 billion expansion at Tengiz, which is due to start up in earnest by 2024 and will add will 240,000 b/d. Chevron and its partners had assumed that spare capacity in CPC would take up most of the extra barrels but are now having to rethink that plan and will be mindful of making the right call with their lucrative 40-year contract due to expire in 2033. Kazakh Energy Minister Bolat Akchulakov recently said the field had enough resources to keep producing oil until 2090.

The TCO partners may have no choice but to team up with other major producers, including the international consortium developing the supergiant offshore Kashagan field, and look at joint investments in new export infrastructure. Kashagan — which groups Shell, TotalEnergies, Eni, Exxon, Kazmunaigas, China National Petroleum Corp. and Japan's Inpex — is now pumping around 400,000 b/d and also relies on the CPC pipeline.

Crossing the Caspian

The obvious choice would be to dust off old plans for the Kazakhstan Caspian Transportation System (KCTS), which was considered as far back as 2007. This would first take oil across the Caspian Sea to Azerbaijan and then on to international markets from Turkey. Indeed, just two days after the Novorossiysk court order, Kazakh President Kassym-Zhomart Tokayev told Kazmunaigas to speed up plans to develop a new oil transportation system that would involve shipping large amounts of crude across the sea in new tankers and developing infrastructure around the western port of Aktau. He also called for consultations with the foreign partners in TCO.

The investment required for a project of the scale of KCTS would be in the billions of dollars and it could take up to five years to come to fruition, said a source who looked at it closely several years ago. By comparison, the CPC scheme cost $2.67 billion to build but the consortium pays dividends to shareholders, which amounted to $586 million for 2021.

Closure of CPC would massively increase TCO's transportation costs and considerably delay cost recovery from the Tengiz expansion, possibly for years. But if Chevron and its partners want their contract extended, they will likely have to convince their Kazakh hosts by making investment in new infrastructure. At $100 oil, the cost of KCTS would be "manageable" for Chevron and the other majors, the source added. "This is a project Chevron has been desperate to avoid, but they appear to have no choice now. Otherwise, they may have to shut in wells."

Warning Shot

Landlocked Kazakhstan, which shares a long border with Russia, would suffer the most if CPC-Russia was to be nationalized. There was speculation that the court order to shut the scheme was a warning shot fired by the Kremlin at Kazakhstan, after Tokayev pledged to step up energy cooperation with the EU.

Tokayev also called for the expansion of the 400,000 b/d West-East oil pipeline that runs across Kazakhstan to China. A large part of this pipe's capacity is taken up by Russian crude under a long-term offtake contract between state-controlled duo Rosneft and PetroChina, leaving little space for Kazakh barrels. Since April, some crude from Kashagan has been pumped to China, with PetroChina the buyer.

In terms of cost and distance, the most logical new pipeline route from Kazakhstan would run south to northern Iran via Turkmenistan. But punitive US and EU sanctions on Iran mean this is a definite no-no.

Paul Sampson, London

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CORPORATE STRATEGY

Petrobras Braces for Impact of Bruising Election

- *State-controlled Petrobras last week cut domestic gasoline prices for the first time this year following significant pressure from Brazil's president.*
- *Jair Bolsonaro has vowed to make sweeping changes to Petrobras if he is re-elected in October and has repeatedly pledged to privatize the company.*
- *Both Bolsonaro and election rival Luiz Inacio Lula da Silva appear to have a penchant for intervention at Petrobras.*

The Issue

Brazil's Petrobras — no stranger to upheaval in government — finds itself being kicked around like a political football between the two main candidates in this year's presidential election: incumbent Jair Bolsonaro, an erratic right-wing populist, and former left-wing President Luiz Inacio Lula da Silva. The result — and to some extent Petrobras' future profitability — will be decided in October by a Brazilian electorate that is currently being squeezed at the pump.

Fueling the Debate

Petrobras last week cut domestic gasoline prices for the first time this year, by almost 5%, following considerable pressure to do so by Bolsonaro, who trails Lula in the polls. The company insisted, however, that its product price adjustments "are made in the normal course of its business and follow its current commercial policies." Petrobras, which uses international prices as a reference point for its domestic rates, stressed in a filing its commitment to setting competitive prices in balance with the market, "while avoiding the immediate pass-on of external volatility and of the exchange rate caused by circumstantial events."

High fuel prices have featured heavily on the campaign trail. Bolsonaro, who took office at the start of 2019, has railed against prices that hit as much as 4.06 reals per liter ($2.80 per gallon) for gasoline, prior to last week's cut, and 5.61 reals/liter for diesel. The 67-year-old has also taken issue with what he charges is a lack of transparency at Petrobras, the dominant player on Brazil's fuel retail market, and has even alleged that some state governors had been colluding to keep fuel prices high in order to keep him from winning re-election.

Lula, meanwhile, has vowed to change Petrobras' pricing policy, telling local radio earlier this year that "dollar-based gasoline prices make no sense." The 76-year-old, who was in office from 2003-10 before being jailed on corruption charges that were later nullified, went on to say that Brazil would cease imports of gasoline and diesel if he is elected and rely on its domestic fuel production.

Going Private?

Petrobras, like most oil giants, has certainly seen its coffers swelled by higher crude oil and fuel prices in 2022 and its shares have gained some 20% over the past year. In the first quarter, it posted net income of $8.6 billion, up 53.6% from the fourth quarter of 2021 and exponentially higher year on year. E&P income alone was almost $8 billion, with retail marketing adding nearly $2 billion as all other segments ended in the red. Strong margins for diesel, which accounted for 48% of Petrobras' domestic fuel sales revenue in the first three months of 2022, were named as a contributing factor.

As if to head off an anticipated backlash against excess profitability, Petrobras' then-CEO, Jose Mauro Coelho, opened the first-quarter earnings release in May with the observation that the company had, in fact, "paid out to the federal government, states and municipalities the equivalent of 1.5 times our net income" in January-March and was "distributing the fruits of its value generation to the Brazilian population." That was not enough to convince Bolsonaro, however, who moved to replace him just weeks later amid tension over Petrobras' fuel price policy.

Upgrading the outlook for Petrobras and 30 other Brazilian corporates to "stable" last week, ratings agency Fitch noted that the "potential impact of social pressures on pricing policy in the future" had a negative effect on the company's credit profile.

Petrobras is 36.6% owned by Brazil's federal government, which also holds just over 50% of voting shares. But while the company is already listed in Brazil, Spain and the US, Bolsonaro has repeatedly vowed to privatize Petrobras — a move that would require amending Brazil's oil laws. His rationale? "Because I cannot control the company, I cannot direct gasoline prices, but when it rises it is my fault," he said last year. Lula has spoken frequently of his skepticism of Bolsonaro's privatization agenda.

Revolving Door

With Petrobras remaining a state-run entity for now, Bolsonaro in June responded to another fuel price hike by saying he would seek to bypass a key anticorruption law in order to — in his view — make state firms adhere to a series of commitments regarding their responsibilities to the public.

The law he wants to bypass was put in place after the Operation Car Wash scandal, which ended up examining widespread corruption in a variety of public institutions, including Petrobras, and resulted in a number of prominent political figures going to prison, including Lula. Petrobras is believed to have lost over $16 billion in the scandal, including $2 billion funneled directly to corrupt executives and firms.

Those turbulent days may be over but Petrobras' boardroom has been anything but stable since Bolsonaro became president. The company has had no less than four CEOs during his time in office, with his removal of Roberto Castello Branco in February 2021 sending the company's share price down 21%.

Last month, the Petrobras board approved former Ministry of Economy official Caio Paes de Andrade as the new CEO, replacing Fernando Assumpcao Borges, who held the position on an interim basis for just seven days after Coelho resigned under pressure from Bolsonaro. Paes de Andrade can expect to remain in charge until the election but will know all too well he is not in a job for life.

Lula's to Lose?

Lula has repeatedly criticized Bolsonaro for the high executive turnover at Petrobras, but many of his statements have also suggested he would continue with the current president's interventionist approach, albeit with a different focus. The company is therefore in for a bumpy ride ahead no matter who wins.

For the moment, at least, the election appears to be Lula's to lose. A poll last month by Brazilian polling institute Datafolha put his support at 47% to Bolsonaro's 27%.

Michael Deibert, Washington

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ENERGY AND EQUITY MARKET DATA For the week ended Jul 22, 2022

EIF GLOBAL INDEX COMPONENTS*

	Close Jul 22	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
Equinor (osl)	34.60	+2.44	+7.58	+76.24	+29.18
Saudi Aramco (sse)	10.29	+0.64	+6.58	+10.58	+18.68
CNOOC-H (sehk)	1.26	+0.07	+5.71	+20.25	+34.70
Chevron (nyse)	144.19	+6.54	+4.75	+45.91	+22.87
ONGC (bse)	1.66	+0.07	+4.61	+6.91	-13.24
Reliance Industries (bse)	31.35	+1.24	+4.13	+10.05	-1.41
Sinopec-H (sehk)	0.45	+0.02	+4.11	-4.22	-2.59
PetroChina-H (sehk)	0.46	+0.02	+4.06	+6.72	+3.05
BP (lse)	4.60	+0.18	+4.03	+17.70	+2.89
Shell (lse)	24.48	+0.90	+3.81	+30.33	+11.56
Petrobras-3 (spse)	5.81	+0.20	+3.65	+28.90	+26.09
TotalEnergies (par)	49.56	1.61	+3.36	+18.14	-2.32
Petrobras-4 (spse)	5.34	0.17	+3.21	+18.40	+26.93
Sinopec-S (sesh)	0.46	0.01	+3.08	-13.60	-29.82
Exxon Mobil (nyse)	87.08	+2.54	+3.00	+52.48	+42.31
Eni (mise)	11.20	+0.27	+2.45	-1.33	-19.37
Suncor (tse)	30.80	+0.63	+2.08	+47.27	+22.96
Rosneft (mos)	6.11	+0.05	+0.79	-18.79	-24.03
Lukoil (mos)	66.30	-1.75	-2.58	-24.34	-24.76
Ecopetrol (bvc)	0.46	-0.02	-4.10	-29.87	-30.09
EIF Global Index	**331.30**	**+16.11**	**+5.11**	**+22.22**	**+13.85**

*Converted US$/share.

INDEXES

Equity Indexes	Close Jul 22	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
DJIA	31,899.29	+611.03	+1.95	-8.40	-12.22
S&P 500	3,961.63	+98.47	+2.55	-9.29	-16.88
FTSE 100	7,276.37	+117.36	+1.64	+4.42	-1.46
FTSE All-World	736.04	+22.92	+3.21	-13.71	-18.04
EIF Global	331.30	+16.11	+5.11	+22.22	+13.85
S&P Global Oil	1,605.39	+62.29	+4.04	+16.21	+3.42
FT Oil, Gas & Coal	6,971.10	+179.21	+2.64	+44.11	+21.70
TSE Oil & Gas	2,749.74	+108.97	+4.13	+35.14	+20.68
Emerging Markets					
Hang Seng Energy (HK)	20,893.78	+484.57	+2.37	+33.83	+24.32
BSE Oil & Gas (India)	18,505.20	+446.87	+2.47	+17.75	+5.70
RTS Oil & Gas (Russia)	+198.83	-0.76	-0.38	-9.96	-16.41

COMMODITY PRICES

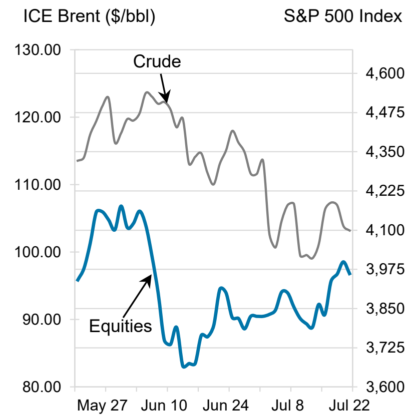
	Close Jul 22	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
Dated Brent	107.20	-5.01	-4.46	+44.45	+38.61
Brent 1st ICE	103.20	+2.04	+2.02	+39.86	+32.68
WTI 1st (Nymex)	94.70	-2.89	-2.96	+31.69	+25.91
Oman 1st (DME)	101.87	+1.31	+1.30	+39.64	+32.83
RBOB (Nymex)	3.22	+0.01	+0.30	+41.77	+44.62
Heating Oil (Nymex)	3.46	-0.24	-6.58	+62.04	+48.30
Gas Oil (ICE)	1,067.50	-45.00	-4.04	+80.17	+60.04
Henry Hub (Nymex)	8.30	+1.28	+18.29	+107.32	+122.49
Henry Hub (Cash)	8.25	+1.65	+25.02	+105.12	+115.64
UK NBP (Cash)	263.00	+90.00	+52.02	+192.22	+102.31

SHARE PRICES IN LOCAL CURRENCY†

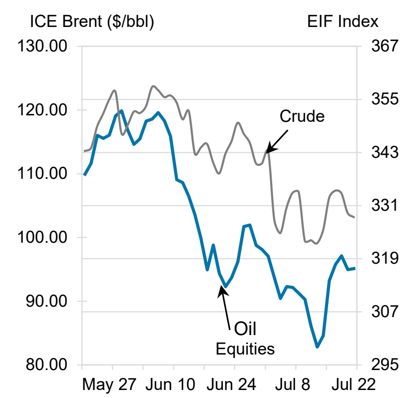
NOCs	Close Jul 22	1-Wk Chg.	% Chg. 1-Wk	% Chg. 52-Wk	% Chg. YTD
Saudi Aramco (sse)	38.65	+2.00	+5.46	+10.74	+18.76
Petrobras-3 (spse)	31.93	+1.62	+5.34	+36.24	+24.42
Equinor (osl)	342.90	+16.25	+4.97	+97.55	+45.36
Petrobras-4 (spse)	29.33	+1.37	+4.90	+25.15	+25.25
CNOOC-H (sehk)	9.85	+0.38	+4.01	+21.45	+35.61
PTTEP (set)	160.00	+6.00	+3.90	+47.47	+35.59
PetroChina-S (sesh)	5.20	+0.19	+3.79	+9.70	+5.91
Sinopec-H (sehk)	3.56	+0.12	+3.49	-3.26	-1.93
Sinopec-S (sesh)	3.11	+0.09	+2.98	-9.86	-25.42
Rosneft (mos)	340.00	+9.50	+2.87	-38.58	-43.32
PetroChina-H (sehk)	3.60	+0.09	+2.56	+7.78	+3.75
Gazprom (micex)	192.25	+4.64	+2.47	-32.12	-44.00
CNOOC-S (sesh)	15.15	+0.27	+1.81	NA	NA
Ecopetrol (bvc)	2,060.00	-38.00	-1.81	-19.22	-23.42
Majors					
Chevron (nyse)	144.19	+6.54	+4.75	+45.91	+22.87
Exxon Mobil (nyse)	87.08	+2.54	+3.00	+52.48	+42.31
BP (lse)	383.30	+10.20	+2.73	+34.96	+15.98
Shell (lse)	2,039.50	+49.90	+2.51	+49.46	+25.76
TotalEnergies (par)	48.54	+1.01	+2.11	+36.20	+8.76
Regional Integrateds					
OMV (vse)	41.38	+1.22	+3.04	-9.45	-17.16
Repsol (bme)	12.03	+0.15	+1.22	+30.89	+15.27
Eni (mise)	10.97	+0.13	+1.22	+13.75	-10.23
Lukoil (mos)	3,688.00	-21.00	-0.57	-42.78	-43.87
Global Independents					
Hess (nyse)	101.39	+6.18	+6.49	+35.20	+36.96
ConocoPhillips (nyse)	88.13	+5.24	+6.32	+55.51	+22.10
Occidental (nyse)	61.06	+2.35	+4.00	+126.06	+110.62
EOG Resources (nyse)	101.00	+3.72	+3.82	+41.44	+16.26
APA (nyse)	32.41	+0.42	+1.31	+77.59	+20.53
Woodside Petroleum (asx)	30.97	+0.34	+1.11	+37.16	+41.22
Kosmos Energy (nyse)	5.33	+0.02	+0.38	+134.80	+54.05
Refiners					
Reliance Industries (bse)	2,502.90	+101.35	+4.22	+18.01	+5.69
Phillips66 (nyse)	84.53	+2.89	+3.54	+16.90	+16.66
Marathon Petroleum (nyse)	85.65	+1.23	+1.46	+60.42	+33.85
Eneos (tyo)	499.40	+6.30	+1.28	+10.88	+16.06
Valero (nyse)	104.02	-0.57	-0.54	+63.86	+38.49
HollyFrontier (nyse)	43.44	-0.72	-1.63	+55.31	+32.52
PBF Energy (nyse)	26.41	-1.08	-3.93	+182.76	+103.62
Oil-Field Services, EPC					
Schlumberger (nyse)	35.07	+2.77	+8.58	+25.34	+17.10
Wood Group (lse)	152.35	+9.80	+6.87	-28.87	-20.28
Worley (asx)	13.91	+0.74	+5.62	+22.56	+30.86
TechnipFMC (nyse)	6.22	+0.28	+4.71	-14.09	+5.07
Petrofac (lse)	107.30	+4.20	+4.07	+10.53	-6.94
Fluor (nyse)	24.59	+0.91	+3.84	+50.21	-0.73
Transocean (nyse)	2.59	+0.05	+1.97	-30.93	-6.16
Halliburton (nyse)	27.46	-0.40	-1.44	+33.63	+20.07
Baker Hughes (nyse)	24.10	-2.60	-9.72	+21.23	+0.21
Saipem (mise)	0.71	-0.11	-13.00	-62.91	-84.60
Midstream					
Kinder Morgan (nyse)	17.65	+0.89	+5.31	+1.03	+11.29
Enterprise Products (nyse)	25.57	+1.05	+4.28	+8.72	+16.44
Plains All-American (nyse)	10.51	+0.39	+3.85	+2.44	+12.53
TC Energy (tsx)	68.63	+2.35	+3.55	+12.45	+16.66
Williams (nyse)	32.34	+0.96	+3.06	+28.03	+24.19
Enbridge (tsx)	55.41	+1.56	+2.90	+13.99	+12.14

*set=Bangkok; bme=Madrid; sehk=Hong Kong; osl=Oslo; bvc=Bogota; micex=Moscow; bse=Mumbai; par=Paris; nyse=New York; lse=London; mise=Milan; tyo=Tokyo; tsx=Toronto; asx=Sydney; spse=Sao Paulo; sse=Riyadh

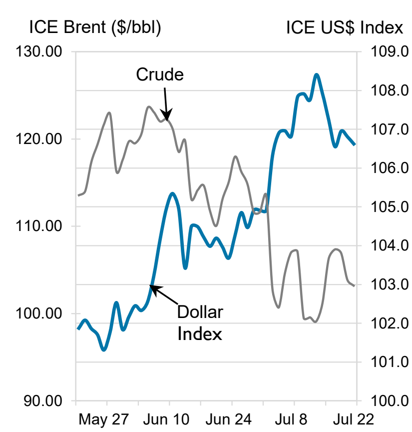
CRUDE VS. EQUITIES



CRUDE VS. OIL EQUITIES



CRUDE VS. CURRENCY



EIF Index based on share prices of the 22 equities listed under EIF components, adjusted for US$ market capitalization. All equities listed are ordered by percentage change over the previous week. Local share prices are shown in local currency. Crude prices in $/bbl; Nymex oil products prices in $/gallon; ICE gas oil in $/ton; Henry Hub natural gas prices in $/MMBtu; UK NBP natural gas prices in pence/therm.