Asian Monthly Report



September 2024

Item One: Editor's Review

Hello, Dear Market Practitioner and Market Watcher:

September was a scorcher, and we are not talking about global warming or those planetary worries creasing the faces of well-intended individuals worrying about themselves, their brood but also selfish sods focused on how to make hay out of the taxpayer while the sun is shining, so to speak. September was hot with the war in Ukraine seemingly and increasingly going in favour of Russia while greater mayhem engulfed the Middle East with the US, Israeli, Lebanon, Gaza, Houthis and Iran all vying for something while civilians suffer. We also saw figures released of the US generating \$850 billion of new debt in August, which happens to mean one new trillion of debt generated in as little as 81 days if no corrective action is taken. We saw the US Fed take action to spark economic growth in the US as clearly the diversion of resources to an ever-voracious central government taps out the general public. The underlying economic releases are an unending litany of bearish signals. The Officials felt that the Fed would cut by 50 points and they did. But to be fair, we cannot forecast correctly each single event, but we have not done so badly so far. If you have time, please read some of the nuanced comments in the details section of our reports.



Jorge, back in London from Asia, thanks you for reading The Officials

We also had the opportunity to travel to China as we were very negative on the Chinese outlook on oil demand. We have been very public on our soft price views as we felt the 'direction of travel' on Chinese demand had been misread and misstated by just about any forecaster including some very big names. It is easy to be blinkered or dazed by our dear oil industry and the big names in the Middle East. We stated some early views on the Special Aramco report highlighting the error of Aramco promising to pay high dividends based on growing Chinese demand. Aramco did not disappoint us by going into the market to, yes, you guessed it, to borrow more money. See our special report on Aramco from 9 August.

Our trip to Shanghai highlighted two things from the moment of landing, a) The unusual sight of some shuttered shops in the airport and b) the disturbing but welcome lack of combustion vehicles on the road from the airport. All that one could hear was the swishing of the tyres against the asphalt. Upon close examination, close to 80% of the cars were EVs. The New World is here and we strongly urge ALL forecasters to reset their gasoline consumption numbers because the growth is no more! In August, 54% of the new cars sold were EVs. The future is electric and combustion is edged out of the major cities at some pace and with surety. China is wired and powered electrically, by coal mostly, as it happens!

And diesel consumption is also challenged as we hardly saw any crane operation in Shanghai or even Nanjing. A sort of paralysis has taken over China ion many sectors that frankly scared us. The world needs a healthy China to move forward. Ask any Aussie, Korean or Japanese. Maybe they do not like to admit it, but they need China to buy their things, like the Germans, or even the French wine exporters. A healthy China is good for markets and for inflation. They produce things cheaper than anyone else! (please see our special reports on China, all on LinkedIn and YouTube).



The 'Shucks, China is slowing down' epiphany hit the revellers in Singapore's APPEC. In a proof that traders are immune to alcohol, or maybe because of it, they sold off oil in earnest with Brent markets hitting a low of \$68.98/bbl on 17 September.

But the hedgers came in with airlines spotting an opportunity to lock in cheap jet and bought arresting the slide.

The macros remained terribly negative, with a chorus of analysts finally pointing to Germany's industrial comatose stage. Germany is in a very poor state. The government essentially has done a triple tap on the economic engine by shutting down the nuclear plants, followed by a cut off from cheap feedstocks from Russia plus sanctions, in effect reducing its exports to Russia and even China. Way to go! Down, of course. Naturally, this made us even more bearish on the price of oil.

But just when you think the market is down for the count, here comes mighty Xi, the man with the golden touch, far more powerful than the Fed's Powell. Man, Xi has taken a bazooka or two or three and is just showering the money everywhere. China has lowered interest rates and created incentives to buy stocks, homes and whatever. Buy stocks, buy homes, spend, says the man. And guess what, it is working. The stock market has gone up nearly by 25%, and the stock buying fever has infected Korea and even Japan, before Mr sour puss Ishida won the latest election. He wants higher interest rates and the stock market, of course, fell. Can't have your cake and eat it, so to speak. But in China, things are good now or until inflation kicks in. Iron ore has responded by going up over 20% since the policy announcements.

Now back to the core, the oil price is hemmed on the one side by a sudden burst to goodness coming from China, a possibility of more pain in the Middle East, a Fed cut and on the other hand by bad global bad macros. In fact, awful macros. We were calling for a market starting with a SIX, but Mr. Xi may have put a stop to that. We will be watching very closely but things in the West are not good at all. Refining margins have suffered greatly due to the poor demand and many have reduced runs. Some refineries have gone under, including three from Sinochem in China.

Ending a multi-year fraud saga, Singapore's OK Lim and his children have agreed to pay \$3.5-bil to HSBC and other creditors and since they claim not to have the money they will also claim bankruptcy. They owed money to 23 banks including Singapore and international A1 banks. We knew OK Lim, one of his children and his key managers and traders well. They were actively trading, created a very large physical business including tankage, a terminal and if memory serves right, four VLCCs and at some point close to 100 ships. But it all came crashing as the mirage needed the hard stuff, cash, and the Lima didn't have it. Promissory notes and letters of Credit just get you so far. As another friend once said, 'cash is king, and the rest is just an opinion.'



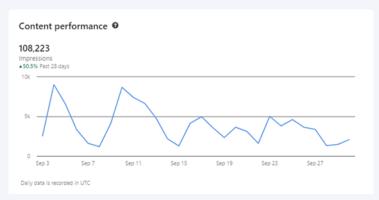
Item two: The Officials

We also wanted to share how we are doing. We think we produce cracking reports that tell you what is really happening and this results in some actors being mightily annoyed. Well, the truth hurts. And sometimes just pointing a light into dark corners makes people uncomfortable. We think, probing and questioning is part of a salutary process that then helps systems regenerate and become better. And of course, we have a goal to only publish facts. So, if you notice anything wrong, we are happy to issue an immediate correction! We are steady as she goes and remain fully committed to transparency. Hey, the industry needs it.

And our readers also appreciate what we do. They pay attention to our numbers and use them in some back-office processes. And we are also extremely proud to note that the Jakarta Futures Exchange announced it will use The Officials Oil Brent Index, OBI, in short. A great name, and you can call it the Officials Brent Index if you like, or the ONYX Brent Index, it really works on so many levels.

Our readers have grown very rapidly and we are sharing some of the public statistics available from LinkedIn. We have other channels of distribution, but let's focus on LinkedIn:

1) Our reports and podcasts were read over 100,000 times during the month of September. See following graph:



2) Over 8% of our readers are CEOs, Managing Directors and Founders. The top leaders in their corporations are reading The Officials. By another measure over 65% of our readers are considered 'senior', not in age but in function.

| Top demographics 9 | |
|--------------------------------|---|
| Job titles 🔻 | |
| Chief Executive Officer · 3.3% | _ |
| Managing Director · 3% | |
| Founder - 2.1% | |
| Oil Trader · 1.7% | |
| Editor · 1.6% | |

We are very happy with your support and if you need direct delivery of our reports or data, we would be extremely pleased to provide it to you.

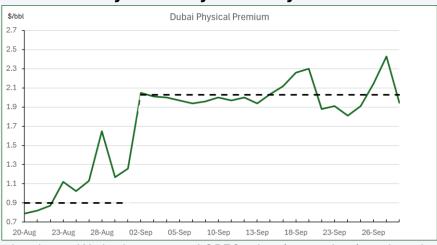
Our emails are <u>jmontepeque@onyxcapitalgroup.com</u> for Jorge, and <u>ehayden-briffett@onyxcapitaladvisory.com</u> and <u>wcunliffe@onyxcapitaladvisory.com</u> for the team.

The Benchmark Publication



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Daily Summary + Monthly Review



What a month September has been. We had rumours of OPEC releasing production, then deciding not to. Libya cut off production, now it's bringing it back to market. We had Middle East flare ups, culminating in the killing of the Hezbollah's leader, but radio silence from Iran. Weak Chinese demand remains a prominent fixture, with three Sinochem bankruptcies so far, but physical markets suggest there's still strong demand there, or perhaps just SPR buying. Flat price was choppy, with APPEC's realisation of poor fundamentals being met by bouts of short covering as money managers panicked about their record short positions. On the 17th, Brent fell to \$68.98/bbl, the lowest in since December 2021. Dubai has been the outperformer, averaging 23.5c over Brent through September. Physical premiums in Dubai have remained very strong all month, averaging \$2.03/bbl.

To end a topsy turvy month, today was chaos. While traders reported quiet paper markets into expiry, the physical window was like a noisy, confused farmers' market with offers and bids being yelled out across the floor and smacked by willing takers. Exxon kept clobbering everything that moved in the window, mercilessly hitting all bids. You want to buy? Go to the Exxon stall and they will give you the best price. Bargains galore! Bid anywhere from \$73.30 to \$73.34, they'll take it. Reliance returned to the sellside, while Trafi disappeared in a puff of smoke. The buyside was choppy as hell: BP, Vitol, Mercuria, North Petroleum, Gunvor, returned to the fold. Mitsui's absence was conspicuous, as the month's big buyer did not make a single bid. The Dubai market closed at \$73.325/bbl and the premiums at \$1.945 The physical premiums rose versus last month leading to expectations that the Saudis will increase prices by about 80c to \$1.00/bbl.

The heavy bombardments and significant losses endured by Hezbollah in the last few days look like a great victory for Netanyahu. Israel's hit list is being steadily ticked off, as the deaths of Nasrallah and Hamas' Lebanon leader Fateh Sherif Abu el-Amin follow Ismael Haniyeh's assassination at the end of July. However, the risk premium from Middle Eastern geopolitical strife seems to have lost much of its potency, as markets appear indifferent as Iran continues its role as regional wet blanket. We like peace, so we hope there's no more escalation.

| Summary | - | | | |
|----------------------|----------|-----------|--------------|--------------|
| Physical and Futures | | 30-Sep-24 | 1-Day Change | 7-Day Change |
| Brent Nov (fut) | (\$/bbl) | 72.690 | +0.760 | -1.780 |
| WTI Nov (fut) | (\$/bbl) | 68.800 | +0.870 | -2.190 |
| Dubai Nov (phys) | (\$/bbl) | 73.325 | +0.615 | -0.925 |
| OBI Continuous | (\$/bbl) | 72.280 | +0.930 | -2.180 |
| Crude Swaps Oct | | | | |
| Brent | (\$/bbl) | 72.260 | +0.940 | -1.410 |
| DFL | (\$/bbl) | 0.200 | -0.060 | -0.410 |
| WTI | (\$/bbl) | 68.660 | +0.890 | -2.060 |
| Dubai | (\$/bbl) | 72.050 | +1.110 | -0.960 |
| Tenor | | Nov-24 | Dec-24 | Jan-25 |
| Crude Futures | | | | |
| Brent (fut) | (\$/bbl) | 72.690 | 72.280 | 71.980 |
| WTI (fut) | (\$/bbl) | 68.800 | 68.340 | 68.040 |



In detail

A turbulent weekend gave Brent, WTI and Dubai a spring in their step, as all three rose into expiry. In terms of daily change, Dubai moved least, gaining 61.5c/bbl. WTI advanced the most, gaining 87c/bbl, while Brent increased by 76c/bbl. Despite daily gains, all are down on a weekly basis: Dubai saw the least downward movement this week, while WTI hurt the most and Brent inhabited the midrange. As the OBI rolls into next month, it stands at \$72.28/bbl. As it has throughout the month, Dubai's physical premium remains high, at \$1.945.

Petroleum product exports from India have leapt up to the highest level in two and half years, as European maintenance season attracts finished oil products. Brokers noted maintenance at the Pernis refinery has driven up European Fuel Oil cracks and supported the East/West spreads. India product exports rose by 39% in September, according to Kpler ship tracking data, the highest since March 2022 at 1.5 mb/d. India's rapid expansion has been slowing, and although the economy has been outperforming relative to almost every other country, their ambitious forecasts for gasoline demand have driven rapid growth in refinery capacity, which is on track to reach 6 mb/d by 2030, whilst the Indian economy is starting to take its foot off the gas. Manufacturing PMIs still remain strong but have slowed to 56.7 in September from 57.5 in August. Our refining sources have reported diesel demand is actually contracting on a y/y basis in India.

Having contracted significantly since February, refining margins globally are feeling a real squeeze, which has helped motivate some refiners to enter maintenance season. Repsol and Eni are reportedly considering cutting runs, and 3 Sinochem refiners have gone bankrupt. Amid moderating domestic demand and reduced foreign supply, India seems to be plugging the gap with its excess.

Also being excessive is the PBoC, which continued with its slew of policy easing. Over the weekend they cut mortgage rates for first and second homes, with all banks required to lower existing mortgage rates by no less than 30 bps below the LPR. Since the collapse of Evergrande, the housing sector in China has been in critical condition. Household wealth got burned, so will the PBoCs life support be enough to rekindle China's demand for housing? In time perhaps. But now this means more money in the pocket of the consumer. More spending, and the circular flow of income will do its job. These things happen with a lag, but the easing can only be a good thing. Property in some parts of China is reportedly down 30% for tier one housing, and up to 60% for other properties, sources in China told The Officials, lower mortgage rates will help to slow this depreciation over time.

PBoC Governor Pan's speech last Tuesday confirmed concerns around aggregate weakness across China. Last week, the PBoC cut several key rates to historic lows. It cut the 14-day reverse repo rate to 1.85% from 1.95% on Monday; the Medium-Term Lending Facility (MLF) was cut from 2.3% to 2% on Wednesday; the 7-day reverse repo rate slashed from 1.7% to 1.5% on Friday, as well as the reserve requirement ratio (RRR) being cut by 50 bps in hopes of boosting liquidity. Cuts to the Loan Prime Rate are expected on 21 Oct. With China seeing deflation, and the Fed cutting aggressively, the PBoC has so much policy headroom it could become a policy headache. Can they cut fast enough?

On first glance, China appears to have turned the tide more successfully than King Canut. Financial sectors have reacted immediately, as expected, but actual economic performance still looks weak. This morning, we got the Caixin and NBS PMIs, which both look frail. The Caixin Manufacturing PMI printed 49.3, down from last month's 50.4 and hugely disappointing expectations of 50.5. Significantly, new orders were their lowest in two years, while employment also hit its seven-month low. Lower raw material costs saw input prices fall, but output prices also tumbled in step. Although the NBS Manufacturing PMI's 49.8 result outperformed last month's 49.1 and market expectations of 49.5, it is still in contraction. Even the most optimistic observer must admit China's manufacturing sector looks fragile, whatever happens in the financial markets. We will wait and see if the stimulus spree, and the resulting surge in equities and commodities, translates into real economic recovery. We're still pessimistic about China's oil demand growth...

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| Front Month Outrig | hts | | | |
|--------------------|----------|-----------|--------------|--------------|
| October Swaps | | 30-Sep-24 | 1-Day Change | 7-Day Change |
| Crude | | | - | |
| Brent | (\$/bbl) | 72.260 | +0.940 | -1.410 |
| WTI | (\$/bbl) | 68.660 | +0.890 | -2.060 |
| Dubai | (\$/bbl) | 72.050 | +1.110 | -0.960 |
| Distillates | | | | |
| Gasoil 0.1 NWE | (\$/mt) | 660.370 | +5.580 | -1.240 |
| NWE Jet | (\$/mt) | 695.870 | +4.150 | -4.240 |
| Singapore 10ppm | (\$/bbl) | 84.780 | +0.560 | -0.130 |
| Sing Kero | (\$/bbl) | 83.960 | +0.590 | -0.600 |
| Gasoline | | | | |
| RBOB | (c/gal) | 194.100 | +0.410 | -6.030 |
| EBOB | (\$/mt) | 676.800 | +6.500 | -9.030 |
| Singapore 92 | (\$/bbl) | 76.210 | +0.060 | -3.170 |
| Singapore 95 | (\$/bbl) | 80.610 | +0.200 | -3.020 |
| Naphtha | | | | |
| US C5 ENT | (c/gal) | 145.780 | +2.300 | -1.010 |
| NWE Naphtha | (\$/mt) | 632.430 | +10.140 | +0.710 |
| MOPJ Naphtha | (\$/mt) | 655.430 | +12.140 | +6.960 |
| Fuel Oil | | | | |
| 3.5% barges | (\$/mt) | 421.390 | +14.860 | +9.720 |
| Singapore 380 | (\$/mt) | 400.640 | +7.930 | -15.530 |
| Singapore 180 | (\$/mt) | 421.140 | +9.430 | -8.470 |
| 0.5% barges | (\$/mt) | 497.140 | +6.540 | -5.780 |
| Singapore 0.5% | (\$/mt) | 549.210 | +8.440 | -10.350 |
| NGLs | | | | |
| US Propane LST | (c/gal) | 69.857 | +2.535 | -1.462 |
| NWE Propane | (\$/mt) | 589.450 | +12.700 | +16.380 |
| Saudi Propane CP | (\$/mt) | 630.950 | +10.200 | +21.380 |
| Asian Propane FEI | (\$/mt) | 659.950 | +13.200 | +24.380 |
| US Butane ENT | (c/gal) | 105.080 | +2.260 | +2.010 |
| Saudi Butane CP | (\$/mt) | 630.870 | +8.120 | +18.300 |



| Long Tenor S | Swaps | | | | | | | |
|-------------------|----------|---------|---------|---------|---------|---------|---------|---------|
| | | Balmo | Oct-24 | Nov-24 | Dec-24 | Jan-25 | Q4-24 | Q1-25 |
| Crude | | | | - | | | ~ | ~ - |
| Brent | (\$/bbl) | 72.270 | 72.260 | 71.960 | 71.780 | 71.680 | 72.000 | 71.617 |
| WTI | (\$/bbl) | 68.800 | 68.660 | 68.250 | 67.960 | 67.770 | 68.290 | 67.657 |
| Dubai | (\$/bbl) | 0.000 | 72.050 | 71.380 | 70.980 | 70.750 | 71.470 | 70.660 |
| Distillates | | | | | | | | |
| Gasoil 0.1 NWE | (\$/mt) | 663.500 | 660.370 | 656.830 | 655.900 | 656.550 | 657.700 | 656.597 |
| NWE Jet | (\$/mt) | 693.750 | 695.870 | 696.330 | 699.900 | 702.300 | 697.367 | 703.347 |
| Singapore 10ppm | (\$/bbl) | 0.000 | 84.780 | 84.530 | 84.390 | 84.650 | 84.567 | 84.900 |
| Sing Kero | (\$/bbl) | 0.000 | 83.960 | 84.210 | 84.350 | 84.530 | 84.173 | 84.667 |
| Gasoline | | | | | | | | |
| RBOB | (c/gal) | 196.770 | 194.100 | 191.430 | 190.680 | 191.470 | 192.070 | 198.907 |
| EBOB | (\$/mt) | 696.800 | 676.800 | 652.800 | 640.050 | 639.800 | 656.550 | 644.383 |
| Singapore 92 | (\$/bbl) | 0.000 | 76.210 | 76.060 | 76.140 | 76.340 | 76.137 | 76.690 |
| Singapore 95 | (\$/bbl) | 0.000 | 80.610 | 80.060 | 79.840 | 80.040 | 80.170 | 80.457 |
| Naphtha | | | | | | | | |
| US C5 ENT | (c/gal) | 144.280 | 145.780 | 146.160 | 146.410 | 147.030 | 146.117 | 146.200 |
| NWE Naphtha | (\$/mt) | 635.430 | 632.430 | 628.680 | 623.680 | 620.180 | 628.263 | 615.680 |
| MOP-Japan Naphtha | (\$/mt) | 0.000 | 655.430 | 650.430 | 645.430 | 640.180 | 650.430 | 634.930 |
| Fuel Oil | | | | | | | | |
| 3.5% barges | (\$/mt) | 432.890 | 421.390 | 397.890 | 388.390 | 383.890 | 402.557 | 384.723 |
| Singapore 380 | (\$/mt) | 0.000 | 400.640 | 393.140 | 390.640 | 388.890 | 394.807 | 390.307 |
| Singapore 180 | (\$/mt) | 0.000 | 421.140 | 407.640 | 404.640 | 402.640 | 411.140 | 404.057 |
| 0.5% barges | (\$/mt) | 503.760 | 497.140 | 485.260 | 478.390 | 474.260 | 486.930 | 472.347 |
| Singapore 0.5% | (\$/mt) | 0.000 | 549.210 | 538.460 | 528.460 | 520.710 | 538.710 | 516.127 |
| NGLs | | | | | | | | |
| US Propane LST | (c/gal) | 56.107 | 69.857 | 73.357 | 74.477 | 75.477 | 72.564 | 74.477 |
| NWE Propane | (\$/mt) | 592.450 | 589.450 | 582.950 | 573.950 | 564.450 | 582.117 | 548.950 |
| Saudi Propane CP | (\$/mt) | 0.000 | 630.950 | 630.950 | 627.950 | 621.450 | 629.950 | 610.950 |
| Asian Propane FEI | (\$/mt) | 0.000 | 659.950 | 654.450 | 648.700 | 639.200 | 654.367 | 621.700 |
| US Butane ENT | (c/gal) | 104.080 | 105.080 | 104.080 | 102.200 | 100.950 | 103.787 | 97.450 |
| Saudi Butane CP | (\$/mt) | 0.000 | 630.870 | 630.870 | 628.870 | 622.370 | 630.203 | 608.870 |



| Front Month Sp | reads | | | |
|-------------------|----------|-----------|--------------|--------------|
| Oct/Nov | | 30-Sep-24 | 1-Day Change | 7-Day Change |
| Crude | | | | |
| Brent | (\$/bbl) | 0.300 | -0.040 | -0.180 |
| WTI | (\$/bbl) | 0.410 | -0.050 | -0.380 |
| Dubai | (\$/bbl) | 0.670 | +0.010 | +0.000 |
| Distillates | | | | |
| Gasoil 0.1 NWE | (\$/mt) | 3.540 | -0.250 | +0.930 |
| NWE Jet | (\$/mt) | -0.460 | -0.350 | +0.930 |
| Singapore 10ppm | (\$/bbl) | 0.250 | +0.030 | +0.280 |
| Sing Kero | (\$/bbl) | -0.250 | +0.020 | -0.170 |
| Gasoline | | | | |
| RBOB | (c/gal) | 2.670 | +0.070 | -0.290 |
| EBOB | (\$/mt) | 24.000 | +0.500 | +5.500 |
| Singapore 92 | (\$/bbl) | 0.150 | -0.550 | -1.130 |
| Singapore 95 | (\$/bbl) | 0.550 | -0.500 | -1.080 |
| Naphtha | | | | |
| US C5 ENT | (c/gal) | -0.380 | +0.000 | -0.630 |
| NWE Naphtha | (\$/mt) | 3.750 | -0.750 | -2.250 |
| MOP-Japan Naphtha | (\$/mt) | 5.000 | +0.500 | +0.750 |
| Fuel Oil | | | | |
| 3.5% barges | (\$/mt) | 23.500 | +4.250 | +8.250 |
| Singapore 380 | (\$/mt) | 7.500 | -0.250 | -4.000 |
| Singapore 180 | (\$/mt) | 13.500 | +0.750 | +1.000 |
| 0.5% barges | (\$/mt) | 11.880 | -0.370 | -0.620 |
| Singapore 0.5% | (\$/mt) | 10.750 | -0.250 | -5.500 |
| NGLs | | | | |
| US Propane LST | (c/gal) | -3.500 | -0.250 | -1.880 |
| NWE Propane | (\$/mt) | 6.500 | +0.000 | -0.500 |
| Saudi Propane CP | (\$/mt) | 0.000 | +0.000 | -3.000 |
| Asian Propane FEI | (\$/mt) | 5.500 | +0.500 | +2.500 |
| US Butane ENT | (c/gal) | 1.000 | -0.380 | -0.620 |
| Saudi Butane CP | (\$/mt) | 0.000 | +0.000 | -1.000 |



| Front Month Cracks and Diffs | | | |
|-------------------------------------------------------|-----------|--------------|--------------|
| October | 30-Sep-24 | 1-Day Change | 7-Day Change |
| Crude | | | |
| Brent/Dubai (\$/bbl) | 0.210 | -0.180 | -0.440 |
| WTI/Brent (\$/bbl) | -3.600 | -0.060 | -0.650 |
| Distillates | | | |
| Gasoil 0.1 NWE crack (\$/bbl) | 16.370 | -0.220 | +1.220 |
| NWE Jet crack (\$/bbl) | 16.040 | -0.410 | +0.850 |
| NWE Jet Diff (\$/mt) | 35.500 | -1.250 | -3.000 |
| Gasoil E/W (\$/bbl) | -28.750 | -1.250 | +0.250 |
| Regrade (Sing Kero vs Sing 10ppm) (\$/bbl) | -0.820 | +0.030 | -0.470 |
| Gasoline | | | |
| TA Arb (RBOB vs EBOB) (c/gal) | 0.650 | -1.450 | -3.450 |
| EBOB crack (\$/bbl) | 8.980 | -0.160 | +0.340 |
| Singapore 92 crack (\$/bbl) | 3.950 | -0.870 | -1.750 |
| Gasoline E/W (Sing 92 vs EBOB) (\$/bbl) | -5.040 | -0.720 | -2.090 |
| European Gasnaph (EBOB vs Naphtha) (\$/mt) | 44.480 | -3.470 | -9.560 |
| Asian Gasnaph (Sing 92 vs MOPJ) (\$/mt) | -20.500 | -11.440 | -33.270 |
| Naphtha | | | |
| US C5 ENT vs WTI Crack | -7.450 | +0.070 | +1.630 |
| NWE Naphtha Crack (\$/bbl) | -1.200 | +0.200 | +1.500 |
| MOPJ Naphtha Crack (\$/bbl) | 1.380 | +0.420 | +2.200 |
| Naphtha E/W (NWE vs MOPJ) (\$/mt) | 23.000 | +2.000 | +6.250 |
| Fuel Oil | | | |
| 3.5% barges crack (\$/bbl) | -5.900 | +1.400 | +2.950 |
| Singapore 380 crack (\$/bbl) | -9.170 | +0.300 | -1.030 |
| Singapore 180 crack (\$/bbl) | -5.940 | +0.530 | +0.070 |
| Visco (180-380) (\$/mt) | 20.500 | +1.500 | +7.000 |
| HSFO E/W (380 vs 3.5% barges) (\$/mt) | -20.750 | -7.000 | -25.250 |
| 0.5% barges crack (\$/bbl) | 6.030 | +0.080 | +0.500 |
| Singapore 0.5% crack (\$/bbl) | 14.250 | +0.400 | -0.200 |
| VLSFO E/W (Sing 0.5% vs 0.5% barges) (\$/mt) | 52.200 | +2.030 | -4.440 |
| European Hi5 (0.5% barges vs 3.5% barges) (\$/mt) | 75.750 | -8.390 | -15.560 |
| Asian Hi5 (Sing 0.5% vs 380) (\$/mt) | 148.700 | +0.650 | +5.250 |
| 0.5% barges/gasoil (\$/mt) | -163.230 | +1.080 | -4.620 |
| Sing 0.5% vs Sing 10ppm (\$/mt) | -82.330 | +4.290 | -9.380 |
| NGLs | | | |
| US Propane LST vs NWE Propane (\$/mt) | -225.500 | +0.500 | -24.000 |
| US Propane LST vs Asian Propane FEI (\$/mt) | -296.000 | +0.000 | -32.000 |
| Asian Propane FEI vs NWE Propane (\$/mt) | 70.500 | +0.500 | +8.000 |
| Asian Propane FEI vs Saudi Propane CP (\$/mt) | 29.000 | +3.000 | +3.000 |
| European Pronap (NWE Propane vs NWE Naphtha) (\$/mt) | -42.810 | +2.820 | +15.840 |
| Asian Pronap (FEI vs MOPJ) (\$/mt) | -24.310 | -1.680 | +14.590 |



| Long Tenor Cracks / Diffs | | | | | | | |
|----------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| Long Tenor Ordons / Dins | | | | | | | |
| | Balmo | Oct-24 | Nov-24 | Dec-24 | Jan-25 | Q4-24 | Q1-25 |
| Crude | | | | | | | |
| Brent/Dubai (\$/bbl) | -0.880 | 0.210 | 0.590 | 0.800 | 0.930 | 0.533 | 0.963 |
| WTI/Brent (\$/bbl) | -3.470 | -3.600 | -3.720 | -3.820 | -3.910 | -3.713 | -3.963 |
| Distillates | | | | | | | |
| Gasoil 0.1 NWE crack (\$/bbl) | 16.80 | 16.37 | 16.20 | 16.28 | 16.43 | 16.28 | 16.50 |
| NWE Jet crack (\$/bbl) | 15.78 | 16.04 | 16.41 | 17.06 | 17.44 | 16.50 | 17.63 |
| NWE Jet Diff (\$/mt) | 30.25 | 35.50 | 39.50 | 44.00 | 45.75 | 39.67 | 46.75 |
| Gasoil E/W (\$/bbl) | -33.35 | -28.75 | -27.13 | -27.17 | -25.90 | -27.68 | -24.07 |
| Regrade (Sing Kero vs Sing 10ppm) (\$/bbl) | 0.00 | -0.82 | -0.32 | -0.04 | -0.12 | -0.39 | -0.23 |
| Gasoline | | | | | | | |
| TA Arb (RBOB vs EBOB) (c/gal) | -2.420 | 0.650 | 4.820 | 7.730 | 8.580 | 4.400 | 14.713 |
| EBOB crack (\$/bbl) | 11.380 | 8.980 | 6.400 | 5.050 | 5.110 | 6.810 | 5.730 |
| Singapore 92 crack (\$/bbl) | 0.000 | 3.950 | 4.090 | 4.350 | 4.650 | 4.130 | 5.063 |
| Gasoline E/W (Sing 92 vs EBOB) (\$/bbl) | 0.000 | -5.040 | -2.310 | -0.700 | -0.470 | -2.683 | -0.667 |
| European Gasnaph (EBOB vs Naphtha) (\$/mt) | 61.480 | 44.480 | 24.230 | 16.480 | 19.730 | 28.397 | 28.813 |
| Asian Gasnaph (Sing 92 vs MOPJ) (\$/mt) | 0.000 | -20.500 | -16.750 | -11.080 | -4.170 | -16.110 | 3.997 |
| Naphtha | | | | | | | |
| US C5 ENT vs WTI Crack | -8.220 | -7.450 | -6.870 | -6.490 | -6.030 | -6.937 | -6.260 |
| NWE Naphtha Crack (\$/bbl) | -0.870 | -1.200 | -1.330 | -1.700 | -2.010 | -1.410 | -2.457 |
| MOPJ Naphtha Crack (\$/bbl) | 0.000 | 1.380 | 1.110 | 0.740 | 0.240 | 1.077 | -0.293 |
| Naphtha E/W (NWE vs MOPJ) (\$/mt) | 0.000 | 23.000 | 21.750 | 21.750 | 20.000 | 22.167 | 19.250 |
| Fuel Oil | | | | | | | |
| 3.5% bgs crack (\$/bbl) | -4.100 | -5.900 | -9.310 | -10.620 | -11.230 | -8.610 | -11.047 |
| Singapore 380 crack (\$/bbl) | 0.000 | -9.170 | -10.060 | -10.260 | -10.440 | -9.830 | -10.167 |
| Singapore 180 crack (\$/bbl) | 0.000 | -5.940 | -7.780 | -8.060 | -8.270 | -7.260 | -7.997 |
| Visco (180-380) (\$/mt) | 0.000 | 20.500 | 14.500 | 14.000 | 13.750 | 16.333 | 13.750 |
| HSFO E/W (380 vs 3.5% bgs) (\$/mt) | 0.000 | -20.750 | -4.750 | 2.250 | 5.000 | -7.750 | 5.583 |
| 0.5% bgs crack (\$/bbl) | 7.080 | 6.030 | 4.470 | 3.560 | 3.030 | 4.687 | 2.763 |
| Singapore 0.5% crack (\$/bbl) | 0.000 | 14.250 | 12.850 | 11.460 | 10.340 | 12.853 | 9.667 |
| VLSFO E/W (Sing 0.5% vs 0.5% bgs) (\$/mt) | 0.000 | 52.200 | 53.200 | 50.200 | 46.450 | 51.867 | 43.867 |
| European Hi5 (0.5% bgs vs 3.5% bgs) ($\$/mt$) | 71.000 | 75.750 | 87.500 | 90.000 | 90.500 | 84.417 | 87.667 |
| Asian Hi5 (Sing 0.5% vs 380) (\$/mt) | 0.000 | 148.700 | 145.450 | 137.950 | 131.950 | 144.033 | 125.950 |
| 0.5% bgs/gasoil (\$/mt) | -159.610 | -163.230 | -171.440 | -177.890 | -182.220 | -170.853 | -184.227 |
| Sing 0.5% vs Sing 10ppm (\$/mt) | 0.000 | -82.330 | -91.210 | -100.540 | -109.590 | -91.360 | -116.120 |
| NGLs | | | | | | | |
| US Propane LST vs NWE Propane (\$/mt) | -300.14 | -225.5 | -200.76 | -185.92 | -171.22 | -204.06 | -160.93 |
| US Propane LST vs Asian Propane FEI (\$/mt) | 0 | -296 | -272.26 | -260.67 | -245.97 | -276.31 | -233.68 |
| Asian Propane FEI vs NWE Propane (\$/mt) | 0 | 70.5 | 71.5 | 74.75 | 74.75 | 72.25 | 72.75 |
| Asian Propane FEI vs Saudi Propane CP (\$/mt) | 0 | 29 | 23.5 | 20.75 | 17.75 | 24.417 | 10.75 |
| European Pronap (\$/mt) | -42.93 | -42.81 | -45.68 | -49.56 | -55.68 | -46.017 | -66.68 |
| Asian Pronap (FEI vs MOPJ) (\$/mt) | 0 | -24.31 | -19.31 | -17.43 | -18.68 | -20.35 | -23.93 |



| Inter-month Crack Spreads | | | |
|-------------------------------------------------------|-----------|--------------|--------------|
| Oct/Nov | 30-Sep-24 | 1-Day Change | 7-Day Change |
| Crude | | | |
| Brent/Dubai (\$/bbl) | -0.380 | -0.050 | -0.190 |
| WTI/Brent (\$/bbl) | 0.120 | -0.010 | -0.200 |
| Distillates | | | |
| Gasoil 0.1 NWE crack (\$/bbl) | 0.170 | +0.000 | +0.300 |
| NWE Jet crack (\$/bbl) | -0.370 | +0.010 | +0.310 |
| NWE Jet Diff (\$/mt) | -4.000 | +0.000 | +0.000 |
| Gasoil E/W (\$/bbl) | -1.620 | +0.440 | +1.260 |
| Regrade (Sing Kero vs Sing 10ppm) (\$/bbl) | -0.500 | -0.010 | -0.450 |
| Gasoline | | | |
| TA Arb (RBOB vs EBOB) (c/gal) | -4.170 | -0.050 | -1.820 |
| EBOB crack (\$/bbl) | 2.580 | +0.100 | +0.850 |
| Singapore 92 crack (\$/bbl) | -0.140 | -0.500 | -0.940 |
| Gasoline E/W (Sing 92 vs EBOB) (\$/bbl) | -2.730 | -0.610 | -1.790 |
| European Gasnaph (EBOB vs Naphtha) (\$/mt) | 20.250 | +1.250 | +7.750 |
| Asian Gasnaph (Sing 92 vs MOPJ) (\$/mt) | -3.750 | -5.080 | -10.160 |
| Naphtha | | | |
| US C5 ENT vs WTI Crack | -0.580 | +0.060 | +0.120 |
| NWE Naphtha Crack (\$/bbl) | 0.130 | -0.040 | -0.060 |
| MOPJ Naphtha Crack (\$/bbl) | 0.270 | +0.100 | +0.270 |
| Naphtha E/W (NWE vs MOPJ) (\$/mt) | 1.250 | +1.250 | +3.000 |
| Fuel Oil | | | |
| 3.5% barges crack (\$/bbl) | 3.410 | +0.720 | +1.490 |
| Singapore 380 crack (\$/bbl) | 0.890 | +0.010 | -0.440 |
| Singapore 180 crack (\$/bbl) | 1.840 | +0.170 | +0.350 |
| Visco (180-380) (\$/mt) | 6.000 | +1.000 | +5.000 |
| HSFO E/W (380 vs 3.5% barges) (\$/mt) | -16.000 | -4.500 | -12.250 |
| 0.5% barges crack (\$/bbl) | 1.560 | -0.030 | +0.070 |
| Singapore 0.5% crack (\$/bbl) | 1.400 | +0.010 | -0.680 |
| VLSFO E/W (Sing 0.5% vs 0.5% barges) (\$/mt) | -1.000 | +0.250 | -4.750 |
| European Hi5 (0.5% barges vs 3.5% barges) (\$/mt) | -11.750 | -4.750 | -9.000 |
| Asian Hi5 (Sing 0.5% vs 380) (\$/mt) | 3.250 | +0.000 | -1.500 |
| 0.5% barges/gasoil (\$/mt) | 8.210 | -0.250 | -1.780 |
| Sing 0.5% vs Sing 10ppm (\$/mt) | 8.880 | -0.480 | -7.590 |
| NGLs | | | |
| US Propane LST vs NWE Propane (\$/mt) | -24.740 | -1.310 | -9.300 |
| US Propane LST vs Asian Propane FEI (\$/mt) | -23.740 | -1.810 | -12.300 |
| Asian Propane FEI vs NWE Propane (\$/mt) | -1.000 | +0.500 | +3.000 |
| Asian Propane FEI vs Saudi Propane CP (\$/mt) | 5.500 | +0.500 | +5.500 |
| European Pronap (NWE Propane vs NWE Naphtha) (\$/mt) | 2.870 | +0.870 | +1.870 |



Monthly Summary

As we close the final Asian session for September, Dubai stands just over \$5/bbl down from the end of August, while Brent has lost almost \$8/bbl. Just one step on the downhill road towards the 60s. Dubai was the outperformer through September, averaging a 23.6c premium over Brent and closing today 63.5c higher than Brent. The Dubai physical premium was also very strong this month, averaging \$2.03/bbl, up from 90c/bbl average in August. The Arab Gulf 3-2-1 crack has further tightened throughout September to \$5.62/bbl down from \$8.44/bbl at the start of the month, as product cracks close below their monthly averages. The front month Sing 92 crack averaged \$5.05/bbl through September, but closed much lower at \$3.95/bbl. But we are seeing a bottom to the deterioration in margins; the tide is beginning to turn. The kick-off of refinery maintenance season should continue to provide support for product cracks.

| Asian Benchmark Monthly Summary Average of Closing Values on Trading Days for September | | | | | | | | |
|------------------------------------------------------------------------------------------|------------------|-----------|---------|----------|----------|--|--|--|
| | Average of Closi | | | | | | | |
| Calendar Months | | September | October | November | December | | | |
| Crude Futures / Physi | | | | | | | | |
| Brent (fut) | (\$/bbl) | 73.360 | 72.760 | 72.360 | 72.100 | | | |
| Dubai (phys) | (\$/bbl) | 73.510 | 73.200 | 72.940 | 72.810 | | | |
| WTI (fut) cont. | (\$/bbl) | 69.450 | 68.790 | 68.360 | 68.060 | | | |
| OBI Continuous | (\$/bbl) | 73.260 | N/A | N/A | N/A | | | |
| Crude Swaps | | | | | | | | |
| Brent | (\$/bbl) | 73.260 | 72.740 | 72.340 | 72.090 | | | |
| Dubai | (\$/bbl) | 73.520 | 72.220 | 71.560 | 71.170 | | | |
| WTI | (\$/bbl) | 69.770 | 69.240 | 68.660 | 68.260 | | | |
| Gasoline Swaps | | | | | | | | |
| RBOB | (c/gal) | 198.070 | 195.420 | 192.900 | 191.850 | | | |
| EBOB | (\$/mt) | 688.450 | 667.740 | 652.900 | 643.470 | | | |
| Singapore 92 | (\$/bbl) | 78.390 | 77.890 | 77.200 | 77.020 | | | |
| Singapore 95 | (\$/bbl) | 82.080 | 81.610 | 80.670 | 80.330 | | | |
| Distillates Swaps | | | | | | | | |
| Gasoil 0.1 NWE | (\$/mt) | 661.960 | 660.950 | 658.760 | 658.360 | | | |
| NWE Jet | (\$/mt) | 700.630 | 702.980 | 703.510 | 705.530 | | | |
| Singapore 10ppm | (\$/bbl) | 84.690 | 85.070 | 85.150 | 85.200 | | | |
| Sing Kero | (\$/bbl) | 84.660 | 84.830 | 84.950 | 85.060 | | | |
| Naphtha Swaps | | | | | | | | |
| US C5 ENT | (c/gal) | 144.390 | 145.230 | 145.140 | 145.020 | | | |
| NWE Naphtha | (\$/mt) | 628.330 | 624.470 | 619.010 | 613.940 | | | |
| MOPJ Naphtha | (\$/mt) | 647.410 | 643.590 | 638.730 | 633.670 | | | |
| Fuel Oil Swaps | | | | | | | | |
| 3.5% barges | (\$/mt) | 404.120 | 394.240 | 384.520 | 380.140 | | | |
| Singapore 380 | (\$/mt) | 413.660 | 399.700 | 392.170 | 389.550 | | | |
| Singapore 180 | (\$/mt) | 421.840 | 411.220 | 403.550 | 401.400 | | | |
| 0.5% barges | (\$/mt) | 500.050 | 490.970 | 481.170 | 475.530 | | | |
| Singapore 0.5% | (\$/mt) | 561.880 | 542.940 | 530.280 | 522.240 | | | |
| NGLs Swaps | | | | | | | | |
| US Propane LST | (c/gal) | 66.650 | 71.350 | 72.920 | 73.600 | | | |
| NWE Propane | (\$/mt) | 569.390 | 564.790 | 558.210 | 551.840 | | | |
| Saudi Propane CP | (\$/mt) | 607.160 | 607.160 | 605.790 | 606.260 | | | |
| Asian Propane FEI | (\$/mt) | 642.830 | 639.200 | 635.960 | 632.360 | | | |
| US Butane ENT | (c/gal) | 98.680 | 99.310 | 98.570 | 97.710 | | | |
| Saudi Butane CP | (\$/mt) | 607.540 | 607.540 | 607.090 | 608.910 | | | |