AmInvestment Bank

Thematic Report

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PLANTATION

Downstream mitigates CPO price weakness

UNDERWEIGHT

(Maintained)

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Rationale for report : Sector update

Investment Highlights

- **Synergistic benefits from downstream operations.** In this report, we analyse the downstream operations of integrated plantation companies. We find that: (1) downstream earnings follow the trend of CPO prices most of the time; and (2) although this implies that downstream earnings would fall when CPO prices decline, they are still strong enough to sustain companies during periods of downturn.

- **Exception to the downstream earnings and CPO price trend was the 2017 to 2019 period.** Even though CPO prices fell from 2017 to 2019, downstream earnings increased for the 3 big planters. We reckon that global demand for oleochemicals was robust during this period, driven by growth in the cosmetics and personal healthcare industry. In fact, downstream earnings were so strong that they overtook upstream profits when CPO prices languished in FY19. For instance, downstream activities accounted for 70% of Sime Darby Plantation's (SDP) operating profit in FY19.

- **Downstream earnings go up when CPO prices increase.** Looking at historical earnings, we find that most of the time, downstream operations of the integrated companies performed better when palm products' prices increased. We attribute this to companies passing down the higher costs of raw materials to customers in the form of higher selling prices. As such, revenue and EBIT margins expand when feedstock costs increase.

- **The opposite is true when palm products fall.** This would affect selling prices and demand. Downstream companies would reduce selling prices to reflect the lower costs of raw material costs. However at the same time, consumer companies may defer their purchases in anticipation of weaker selling prices in the future. When CPO prices were in the doldrums from 2013 to 2015, downstream EBIT of Kuala Lumpur Kepong (KLK), IOI Corporation and SDP declined by 32% collectively. Combined EBIT margin of the 3 planters fell to 2.8% in FY15 from 4.5% in FY13.

- **How much can companies pass on the higher costs of raw materials?** The issue here is whether demand would be affected by higher selling prices. We believe that at a certain price level, consumer companies would re-formulate their products and use less fatty acids or fatty alcohols in the production process. Also at a certain price point, we reckon that consumers would buy cheaper shampoos and washing detergents or make them last longer by using less.

- **Margins declined in 1Q2022 but recovered in 2Q2022.** We think that the margin recovery in 2Q2022 was largely due to paper trading on CPO futures. The downstream revenue of KLK, IOI and Sime Plant fell by 1% to 15% in 1Q2022 vs. 4Q2021 even as EBIT margins were sustained. However, the combined revenue of the 3 companies recovered by 11% QoQ in 2Q2022 as EBIT margin improved to 5.2% from 4.2%. The recovery was mainly led by IOI. After being affected by margin squeeze since 2Q2021, IOI's manufacturing EBIT margin rebounded in 2Q2022.

- **Demand for high value-added oleochemical products is more stable.** During periods of downturn, we believe that demand for high value-added oleochemical products sold to pharmaceutical industries is more resilient than personal care or surfactant industries. However, the exposure of integrated companies to high value-added industries for oleochemicals is still small, at less than 15% of total sales volume.

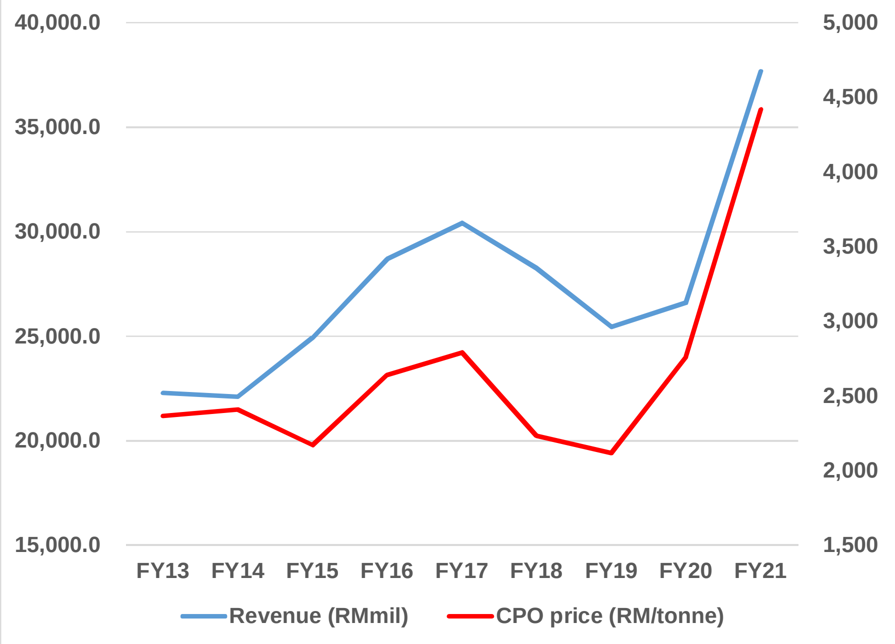
- **Slower growth for oleochemicals**. As prices of palm products are envisaged to be weak going forward, we believe that the EBIT margins and downstream earnings of integrated companies would soften. We think that downstream EBIT margins would normalise to 4% to 6% vs. the highs of 5% to 8% currently. We also reckon that revenue would decline as selling prices fall. Overall, we forecast the FY23F net profit of KLK, IOI and SDP to drop by more than 20%. The decline in profitability is not only due to weaker CPO prices but also weaker oleochemical earnings. Downstream or manufacturing accounts for about 20% to 30% of the companies' group EBIT. We maintain UNDERWEIGHT on the plantation sector.

EXHIBIT 1: VALUATION MATRIX

	Share price (RM)	Basic EPS (sen) FY22F/FY23F	Basic EPS (sen) FY23F/FY24F	Basic PE (x) FY22F/FY23F	Basic PE (x) FY23F/FY24F	Fair values (RM)	Upside	FY22F/FY23F DPS (sen)	FY22F/FY23F Div yield	Rec
IOI Corp	3.92	19.8	20.7	19.8	18.9	3.55	-9.4%	11.5	2.9%	Hold
KLK	21.94	193.8	120.8	11.3	18.2	21.75	-0.9%	100.0	4.6%	Sell
SD Plantation	4.37	37.1	24.3	11.8	18.0	3.65	-16.5%	20.0	4.6%	Sell
Gent Plant	6.33	71.0	36.3	8.9	17.4	6.55	3.5%	30.0	4.7%	Hold
Hap Seng Plant	2.35	34.6	14.5	6.8	16.2	2.15	-8.5%	21.0	8.9%	Hold
TSH Resources	0.99	16.2	5.6	6.1	17.6	0.85	-13.7%	3.0	3.0%	Sell
FGV Holdings	1.45	26.4	7.4	5.5	19.6	1.35	-6.9%	8.5	5.9%	Sell

Source: AmInvestment Bank

EXHIBIT 2: MANUFACTURING REVENUE OF 3 PLANTERS (RM MIL) VS. CPO PRICE (RM/TONNE)



Source: Companies, MPOB, AmInvestment Bank

DOWNSTREAM OPERATIONS ARE PART OF VALUE CHAIN

In this report, we look at whether downstream operations provide a cushion to falling upstream earnings and vice versa. We also compare the downstream operations of Kuala Lumpur Kepong (KLK), IOI Corporation and Sime Darby Plantation (SDP).

During CPO price downturns, we find that manufacturing overtook upstream as the largest earnings contributor for the companies.

When CPO prices were low in 2018 and 2019, downstream accounted for 70% of SDP's operating profit in FY19. Manufacturing made up 53% of KLK's EBIT and 55% of IOI's EBIT in FY19.

On the other hand, during bullish periods of CPO prices, earnings contribution of manufacturing or downstream operations was smaller. Downstream contributed 19% of SDP's operating profit in FY20 (FY19: 70%) and 15% in FY21.

Manufacturing accounted for 34% of IOI's EBIT in FY20 (FY19: 55%) and 20% in FY21. As for KLK, manufacturing made up 38% of EBIT in FY20 (FY19: 53%) and 24% in FY21.

DOWNSTREAM HELPS DURING DOWNTURNS, ALTHOUGH EARNINGS MOSTLY TRACK CPO PRICE TRENDS

Based on the above, we believe that manufacturing helps cushion the impact of falling CPO prices. Hence, integrated companies are more resilient than pure planters during periods of downturn.

This is in spite of the fact that downstream or manufacturing earnings also fall in tandem with palm product prices (Exhibits 2 and 3).

When prices of palm products fell, downstream or manufacturing selling prices decreased. In addition, demand may be affected as customers defer purchases in anticipation of further declines in selling prices.

Conversely, when prices of palm products rise, oleochemical companies benefit (Exhibits 2 and 3) as companies are able to pass on the higher costs of raw materials to customers in the form of higher selling prices.

In fact, EBIT margins expanded as the companies either raised selling prices higher than the rise in feedstock costs or they managed to lock in raw materials early at lower costs (Exhibits 4 to 6).

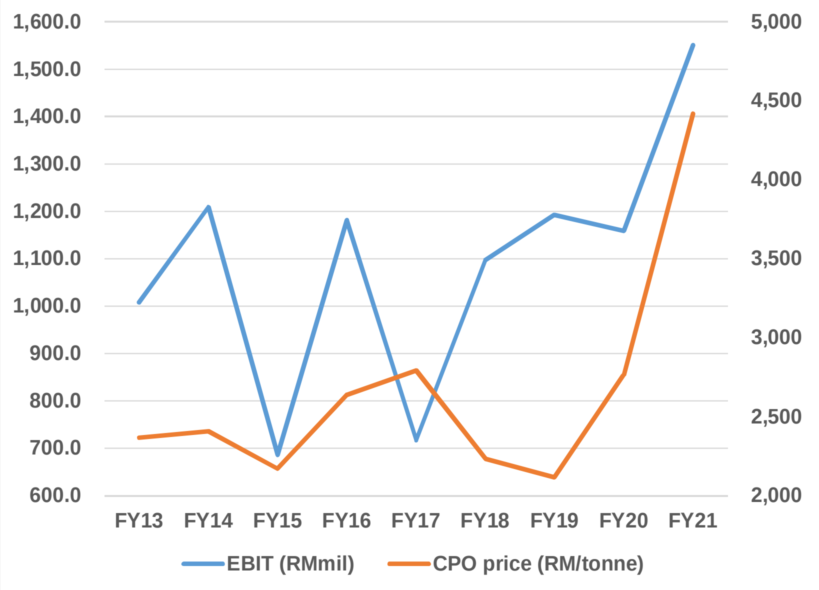
Exception to the downstream earnings and CPO price pattern was the period of 2017 to 2019. Downstream earnings of KLK, IOI and SDP climbed even though CPO prices fell. We think that global demand for oleochemicals back then was robust, driven by the personal healthcare and cosmetics industries.

Oleochemical companies use palm kernel oil or stearin to produce fatty acids or fatty alcohol. Fatty acids are used to make various products such as detergent and shampoo. Fatty alcohols are mainly used in the production of skin care products.

WHAT HAPPENED WHEN CPO PRICES WERE LOW FROM 2013 TO 2015?

There were two periods of troughs since 2010 i.e. 2013 to 2015 and 2017 to 2019.

EXHIBIT 3: MANUFACTURING EBIT OF THE 3 PLANTERS (RMMIL) VS. CPO PRICE (RM/TONNE)



Source: Companies, MPOB, AmInvestment Bank
Note: Manufacturing EBIT in FY17 dropped due to IOI's sale of Loders Croklaan

When CPO prices languished between 2013 and 2015, we found that:

1. IOI's manufacturing revenue dropped by 5% from FY13 to FY16 but KLK's top line climbed by 33%. We attribute the growth in KLK's manufacturing turnover to acquisitions of oleochemical plants in Europe.

2. Both companies recorded lower EBIT. IOI's manufacturing EBIT slid by 31% from FY13 to FY15 while KLK's manufacturing EBIT contracted by 34%.

3. IOI's manufacturing EBIT margin eased from 4.8% in FY13 to 3.5% in FY15 while KLK's EBIT margin dived from 7% to 3.5%.

4. SDP's (before the spin-off in 2017) downstream EBIT plunged from RM103mil in FY13 to RM56mil in FY15. Downstream EBIT margin eased to 0.9% in FY15 from 1.8% in FY13.

SDP's downstream activities comprise trading, bulk products (such as RBD palm oil) and differentiated products (cooking oil and shortening).

Oleochemicals were not included in SDP's downstream unit as SDP's shareholding in the joint venture was only 50%. Emery Oleochemicals was subsequently sold to Edenor Technology for RM38mil in August 2021. The other 50% shareholder of Emery was PTTGC International.

2017 TO 2019: WHEN CPO PRICES LANGUISHED

When CPO prices fell from 2017 to 2019:

1. IOI's manufacturing revenue shrank by 24% to RM7.2bil from FY17 to FY19 while KLK's turnover slid by 12%. SDP's downstream revenue dived by 14% to RM9.5bil from FY17 to FY19.

2. In spite of the decline in revenue, the 3 companies recorded higher earnings during the period. IOI's manufacturing EBIT jumped by 62% and KLK by 2.1x while SDP's downstream profits climbed by 22%.

3. EBIT margins were also higher. IOI's EBIT margin expanded from 3.1% in FY17 to 6.6% in FY19 while KLK increased from 1.9% to 5%. SDP's downstream EBIT margin inched up from 2.1% in FY17 to 3% in FY19.

We attribute the growth in manufacturing earnings from FY17 to FY19 to robust global demand for cosmetics and personal care products. Also, there were expansions in KLK's oleochemical production capacity and increased trading profits in SDP.

SDP's trading profits surged to RM84mil in FYE12/19 from RM30mil in FYE6/17. Trading accounted for 29% of SDP's downstream earnings in FY19.

We think that IOI may have also benefited from higher trading profits and increased sales of high value-added oleochemical products.

2015 TO 2017: WHEN CPO PRICES ROSE

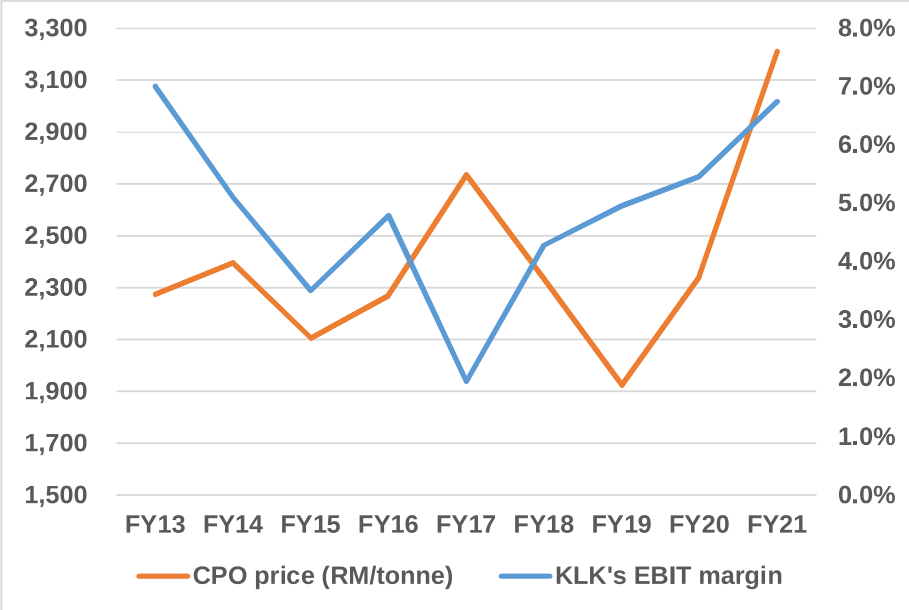
On the other hand when CPO prices rose from 2015 to 2017:

1. KLK's manufacturing revenue climbed by 59% while EBIT rose by 30% (excluding impairments in FY17). However, KLK's EBIT margin edged down from 3.5% in FY15 to 2.9% in FY17 (Exhibit 4).

2. SDP's downstream revenue expanded by 51% while EBIT surged by more than 2x. EBIT margin inched up from 0.9% in FY15 to 2.1% in FY17 (Exhibit 6).

It is difficult to make comparisons for IOI from FY15 to FY17 as the group sold 70% of Loders Croklaan for RM3.4bil in 2018. Hence, its manufacturing earnings fell as contribution

EXHIBIT 4: KLK'S MANUFACTURING EBIT MARGIN (%) VS. AVERAGE CPO PRICE REALISED (RM/TONNE)



Source: Company, AmInvestment Bank

from the specialty fats division were excluded in FY17 and FY18.

2020 TO 2Q2022: WHEN CPO PRICES SURGED

When CPO prices surged from 2020 to 2Q2022:

1. IOI's manufacturing revenue jumped by 85% from 1Q2020 to 2Q2022. Oleochemical and refining EBIT (including associates and fair value changes) more than doubled to RM293mil.

2. In terms of margins however, IOI did not benefit from higher CPO prices unlike KLK and SDP. Disregarding the recovery in 2Q2022, IOI's EBIT margin shrank from 6.1% in 1Q2020 to 1.2% in 1Q2022 (Exhibit 5). We attribute this to unrealised fair value losses on derivatives. Also, we believe that not all of the increase in raw material costs was completely passed through to customers.

3. KLK's revenue shot up to RM5.9bil in 2Q2022 from RM2bil in 1Q2020. Manufacturing EBIT surged to RM229mil from RM108mil. EBIT margin improved from 5.5% in 1Q2020 to 7.1% in 1Q2022 (Exhibit 4). KLK's manufacturing EBIT margin shrank in 2Q2022 as the fall in palm product prices resulted in inventory write-downs.

4. SDP's downstream turnover more than doubled to RM5.3bil from 1Q2020 to 2Q2022. Downstream EBIT also more than doubled to RM243mil. EBIT margin however slid from 7% in 1Q2020 to 4.6% in 2Q2022 (Exhibit 6).

Apart from the inclusion of refining turnover and earnings from 4Q2021 onwards, we believe that the sharp growth in KLK's EBIT was due to higher selling prices. Previously, KLK's refining and palm kernel crushing units were classified under the plantation division.

Among the 3 companies, KLK's downstream operations performed the best during the recent rally in CPO prices. The group's EBIT margin was the highest among the 3 planters.

KLK's manufacturing division recorded a high EBIT margin of 7.1% in 1Q2022. In the same quarter, however, IOI and SDP's downstream divisions experienced margin erosions. We believe that KLK's manufacturing division would exhibit the same trend going forward after peaking in 1Q2022.

COMPARISONS AMONG THE 3 INTEGRATED PLANTERS

- ***KLK has largest downstream production capacity***

KLK's downstream capacity (refining and oleochemicals) is expected to increase to 5.1mil tonnes from 4.5mil tonnes after the completion of its refinery in East Kalimantan. In comparison, IOI has about 2.7mil tonnes of downstream capacity and SDP, 4mil tonnes.

IOI's downstream capacity of 2.7mil tonnes comprise 1.8mil tonnes of palm refining capacity and 890,000 tonnes of oleochemical manufacturing capacity.

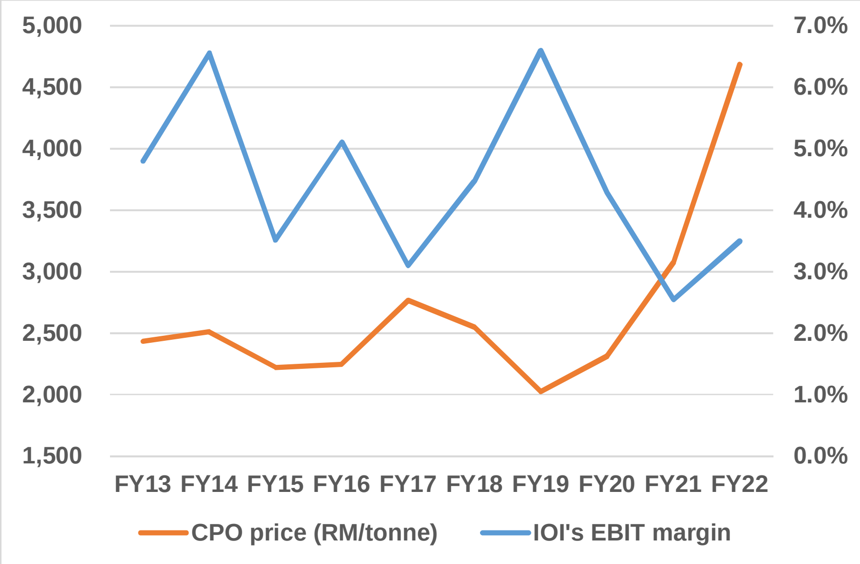
SDP's annual downstream capacity of 4mil tonnes is in palm refining. SDP does not have oleochemical operations.

We estimate KLK's palm refining capacity to be almost 1.8mil tonnes per year after the completion of the refinery in East Kalimantan. The group's oleochemical production capacity is about 3.3mil tonnes annually.

- ***SDP's downstream operations have highest overseas exposure***

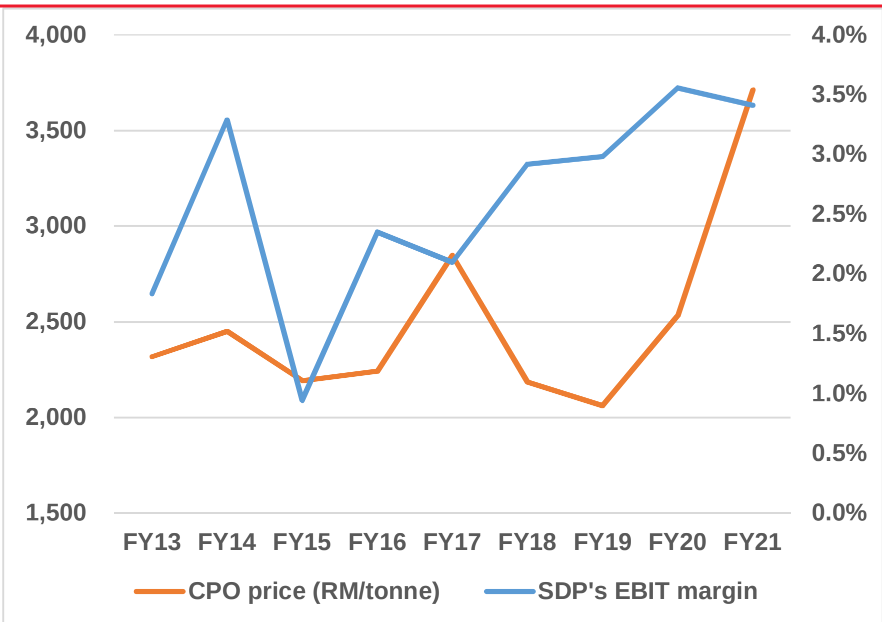
Companies with overseas exposure face regulatory risks in the country of operations. Indonesia's ban on CPO exports in May affected the Indonesia operations of KLK, SDP and TSH Resources for almost 2 months.

EXHIBIT 5: IOI'S MANUFACTURING EBIT MARGIN (%) VS. AVERAGE CPO PRICE REALISED (RM/TONNE)



Source: Company, AmInvestment Bank
Note: IOI's manufacturing EBIT in FY17 and FY18 excluded Loders Croklaan

EXHIBIT 6: SDP'S MANUFACTURING EBIT MARGIN (%) VS. AVERAGE CPO PRICE REALISED (RM/TONNE)



Source: Company, AmInvestment Bank

Among the 3 large planters, SDP's downstream operations have the largest overseas exposure. We estimate that 58% of SDP's palm refining capacity are located outside Malaysia.

About 20% of SDP's palm refining capacity of 4.0mil tonnes are located in Indonesia while another 11% in the Netherlands.

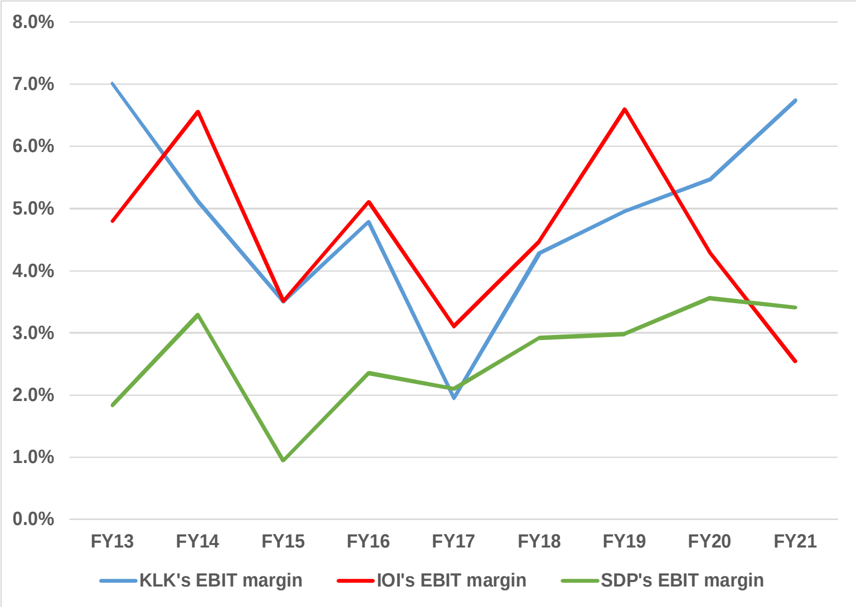
KLK has the second largest overseas downstream exposure. We estimate that 55.9% of the group's downstream capacity is located overseas.

Out of KLK's refining capacity of 1.8mil tonnes, we believe that 67% are located in Indonesia and another 33% in Malaysia. KLK's Indonesian palm refineries are located in Belitung, Dumai (50% shareholding) and East Kalimantan. KLK's palm refinery in Dumai is jointly held with Astra Agro Lestari.

KLK has oleochemical plants in Malaysia, Europe, China and Indonesia. We estimate that about 50% of the oleochemical capacity are located in Malaysia, 35% in Europe and 15% in China and Indonesia.

All of IOI's palm refineries are located in Malaysia. As for oleochemicals, we believe that about 96% of IOI's installed capacity are in Malaysia while the balance 4% are in Europe.

EXHIBIT 7: EBIT MARGIN COMPARISONS



Source: Company, AmInvestment Bank

- ***KLK's downstream revenue expected to be largest in FY22E***

Due to the scale of KLK's downstream capacity, it is not surprising that the group's FY22E downstream revenue is expected to be the largest among the 3 planters. We estimate KLK's FY22E manufacturing revenue to be RM18bil vs. IOI's RM15bil and SDP's RM16bil.

The growth in KLK's oleochemical operations over the past 10 years was driven by acquisitions. The acquisitions took place mainly in Europe. We believe that KLK has spent €156.2mil (RM674mil) on acquisitions of oleochemical companies in Europe since 2010.

We estimate KLK's oleochemical production capacity to be 1.2mil tonnes in Europe. We believe that Europe accounts for 20% to 30% of the group's oleochemical EBIT. The region is the second largest oleochemical earnings generator after Malaysia (60% to 70% of oleochemical EBIT).

- ***KLK's EBIT margin was highest in past few years but IOI is more resilient during downturns***

KLK's manufacturing EBIT is the biggest among the 3 companies. KLK's FY22E manufacturing EBIT is forecast to be RM1.4bil compared with IOI's RM450mil and SDP's RM550mil.

KLK's manufacturing EBIT margin is also the highest among the 3 planters. However, IOI's EBIT margin is more resilient during periods of trough (Exhibit 7).

KLK's manufacturing EBIT margin tends to be affected by inventory write-downs when CPO prices fall.

From FY19 to FY21, KLK's manufacturing EBIT margins ranged from 5.0% to 6.7%. IOI's manufacturing EBIT margins were between 2.5% and 6.6% while SDP's downstream unit recorded EBIT margins of 3.0% to 3.4% from FY19 to FY21 (Exhibit 7).

However when CPO prices were languishing in FY17 and FY18, KLK's manufacturing EBIT margin plunged to a low of 1.9% and 4.3% respectively (Exhibit 7).

In comparison, IOI's EBIT margins were 3.1% in FY17 and 4.5% in FY18 (Exhibit 7). SDP's downstream division recorded EBIT margins of 2.1% in FYE6/17 and 2.9% in FYE12/18.

We attribute KLK's manufacturing EBIT margin to economies of scale. Due to the group's large production capacity, production cost is lower on a per tonne basis. Also, as KLK's oleochemical plants are located in Germany and Belgium, it is easier to transport end products to customers in Europe.

- ***Exposure to high value-added industries still small***

We believe that about 10% to 15% of KLK and IOI's production volume are sold to high value-added customers. Also, we reckon that IOI has significant exposure to Japan as IOI has a 30% stake in Kao Corporation of Japan.

Roughly 39% of SDP's downstream EBIT are from sales of differentiated and higher value-added products. The balance 61% of SDP's downstream EBIT are from trading and bulk products (e.g. RBD palm oil). SDP's differentiated palm products include tocotrienol, shortening and frying oil.

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