30 MARCH 2021 THAILAND / OIL & GAS



PTT OIL AND RETAIL BUSINESS

BUY

TARGET PRICE THB41.00 CLOSE THB32.75 UP/DOWNSIDE +25.2% TP vs CONSENSUS +51.3%

ผู้นำในธุรกิจค้าปลีกเชื้อเพลิงและอาหาร

จากสินค้าโภคภัณฑ์สู่การสร้างมูลค่าโดยมีชุมชนเป็นศูนย์กลาง

OR เป็นผู้ประกอบการสถานีบริการนำมันและธุรกิจค้าปลีกซันนำของไทย บริษัทฯ ดำเนินธุรกิจ ประกอบด้วย ธุรกิจที่ไม่ใช่น้ำมันอย่าง Café Amazon และธุรกิจค้าส่งน้ำมัน ซึ่งขายผลิตภัณฑ์ น้ำมันประกอบด้วย LPG น้ำมันดีเซล น้ำมันอากาศยาน น้ำมันเบนซิน น้ำมันหล่อลื่น และยาง มะตอย ในปี 2020 กำไรสุทธิของ OR อ่อนตัวลงเนื่องจากผลกระทบของการแพร่ระบาด coronavirus อย่างไรก็ดีเรายังคาดว่าบริษัทฯ จะโตในอัตรา 21.8% CAGR ในช่วงปี 2020-23 จาก 3 กลยุทธ์เพื่อการเติบโตของบริษัทฯ ประกอบด้วย 1) การขยายสถานีบริการน้ำมันใน ประเทศไทย; 2) การขยายธุรกิจอาหารและเครื่องดื่ม โดยเฉพาะอย่างยิ่ง Café Amazon และ จำนวนร้านสะดวกซื้อ; และ 3) การขยายธุรกิจในต่างประเทศใน new existing markets ซึ่ง สอดคล้องกับค่านิยมหลักทางธุรกิจของ OR ในการเป็นร้านค้าครบวงจรภายใต้แนวคิดชุมชนมี ชีวิตที่ให้ประสบการณ์ที่มากกว่าสถานีบริการน้ำมันแก่ลูกค้าของบริษัทฯ

Café Amazon: ดับความกระหายสำหรับเชื้อเพลิง อาหารและเครื่องดื่ม

เราเชื่อว่าความแตกต่างสำคัญระหว่าง OR กับคู่แข่งทั้งในและต่างประเทศอยู่ที่ Café Amazon ซึ่งเป็นธุรกิจที่บริษัทฯ ได้พัฒนาขึ้น เราคาดว่าจำนวนเครื่องดื่มที่ Café Amazon ขายได้จะเพิ่ม จาก 295ล้านแก้วในปี 2020 เป็น 519ล้านแก้วในปี 2023 การเติบโตของจำนวนแก้วเครื่องดื่ม ส่วนมากจะอยู่ในประเทศไทยจากศักยภาพในการเติบโตที่มีอยู่สูงกว่าในแง่ของจำนวนร้านทั้งที่ เปิดอยู่เดี๋ยว ๆ และที่เปิดในสถานีบริการฯ เรามองว่า OR จะรายงานการฟื้นตัวของความ ต้องการในช่วงปี 2021-23 และคาดว่าจำนวนแก้วเครื่องดื่มที่ขายได้จะโตเป็น 54.6ล้านในปี 2021 เป็น 82.2ล้านในปี 2022 และ 87.2ล้าน ในปี 2023 ซึ่งจะช่วยหนุนให้ EBITDA โตใน อัตรา 25% CAGR ในช่วงปี 2020-23 มาอยู่ที่ 20.9พัน ลบ. และกำไรสุทธิโตในอัตรา 49% CAGR มาอยู่ที่ 8.6พัน ลบ. ในปี 2023

โอกาสโตในต่างประเทศยังเป็นบวก

ด้วยสถานีบริการนำมันครบวงจรทีพร้อมตอบสนองต่อวิถีชีวิตของผู้บริโภคสมัยใหม่ เราเชื่อว่า OR มีศักยภาพในการเติบโตสูงจากการขยายธุรกิจในต่างประเทศ ไม่เพียงแต่ในฐานะที่เป็น สถานีบริการน้ำมันชั้นนำแต่ในฐานะผู้ประกอบการธุรกิจอาหารและเครื่องดื่ม ซึ่งจะทำให้ สามารถเจาะตลาดใหม่ ๆ และขยายการดำเนินงานในตลาดปัจจุบัน OR ได้ขยายธุรกิจไปยัง อาเชียนและตลาดอื่น ๆ ในเอเชีย โดยใช้ประโยชน์จากรูปแบบธุรกิจของบริษัทฯ ที่ผสมผสาน ธุรกิจทั้งที่เป็นน้ำมันและไม่ใช่น้ำมันในสถานีบริการน้ำมันของตนเอง

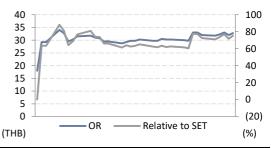
ธุรกิจที่ไม่ใช่น้ำมัน และplatformที่เหนือกว่า สนับสนุนระดับการประเมินมูลค่าที่สูงกว่าคนอื่น

เราเริ่มรายงาน OR ด้วยคำแนะนำชื่อที่ราคาเป้าหมาย 41 บาท (SoTP) ราคาดังกล่าวคิดจาก ค่า forward EV/EBITDA ที่แตกต่างกันในแต่ละธุรกิจเพื่อสะท้อนอัตราส่วนระหว่างความเสี่ยง ต่อผลตอบแทน โดยเราให้ค่า 2022E EV/EBITDA ที่ 9-11x สำหรับธุรกิจน้ำมันและ 20x สำหรับธุรกิจอาหารและเครื่องดื่ม ร้านสะดวกซื้อ ซึ่งสูงกว่าระดับการประเมินมูลค่าของบริษัท ในประเทศที่ทำธุรกิจใกล้เคียงกัน กล่าวคือ PTG สำหรับสถานีบริการน้ำมัน SUSCO สำหรับ การค้าส่งน้ำมัน CBG สำหรับธุรกิจอาหารและเครื่องดื่มและ CPALL สำหรับธุรกิจร้านสะดวก

KEY STOCK DATA

OR TB

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	428,804	613,593	629,451	640,491
Net profit	9,963	11,568	14,207	15,883
EPS (THB)	1.11	0.96	1.18	1.32
vs Consensus (%)	-	(7.7)	1.5	7.4
EBITDA	17,109	19,836	24,537	28,206
Core net profit	9,963	11,568	14,207	15,883
Core EPS (THB)	1.11	0.96	1.18	1.32
Chg. In EPS est. (%)	nm	nm	nm	nm
EPS growth (%)	(8.6)	(12.9)	22.8	11.8
Core P/E (x)	29.6	34.0	27.7	24.7
Dividend yield (%)	1.5	1.2	1.4	1.5
EV/EBITDA (x)	19.1	18.3	14.2	12.2
Price/book (x)	7.8	4.0	3.6	3.3
Net debt/Equity (%)	83.9	(29.5)	(41.5)	(41.7)
ROE (%)	26.2	16.9	13.8	14.1



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	11.0	n/a	n/a
Relative to country (%)	5.5	n/a	n/a
Mkt cap (USD m)			12,232
3m avg. daily turnover (USD m)			n/a
Free float (%)			62
Major shareholder		I	PTT (75%)
12m high/low (THB)		3	6.50/22.10
Issued shares (m)			9,000.00

Sources: Bloomberg consensus; FSSIA estimates



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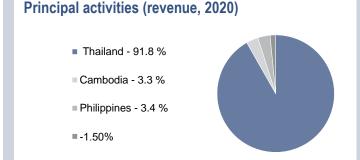
Investment thesis

In 2020, OR's net profit weakened due to the coronavirus impact, resulting in a lower demand for both oil and non-oil products at its retail and wholesale channels. We project OR's net profit to grow at 21.8% CAGR in 2020-23, driven by its three growth strategies: 1) the expansion of its fuel stations in Thailand; 2) growth in its non-oil food and beverage (F&B) businesses, particularly its Café Amazon outlets and the number of convenience store (CVS) outlets; and 3) the expansion of its overseas presence in new and existing markets to leverage OR's core business value of the one-stop shop with a "Living Community" concept.

Company profile

PTTOR is Thailand's leading gas station operators with its station network located in mostly in Thailand and overseas. OR's non-il business has increasingly contributed higher net profit led by its in-house coffee brand Cafe Amazon. It also sells jet fuel, lube, asphalt and other petroleum products.

www.pttor.com



Source: PTT Oil and Retail Business

Major shareholders

■ PTT - 75.0 %

Others - 25.0 %

■ Others - 0.0 %

Source: PTT Oil and Retail Business

Catalysts

Key potential net profit catalysts include 1) higher sales volumes; 2) a higher marketing margin; and 3) improving EBITDA from non-oil businesses, such as the convenience store and food & beverage segments.

Risks to our call

The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) a lower marketing margin; and 3) weaker-than-expected jet demand.

Event calendar

Date	Event
May 2021	1Q21 results announcement

Key assumptions

	2021E	2022E	2023E
Brent oil price (USD/bbl)	55	50	50
Number of oil stations – Thailand (station)	2,045	2,120	2,250
Number of oil stations – Overseas (station)	368	403	424
EBITDA margin – oil (%)	2.3	2.4	2.2
EBITDA margin – non-oil (%)	27.4	29.7	24.4
EBITDA margin – international (%)	3.5	3.7	4.4
Number of Amazon Café outlets (outlet)	4,004	4,432	4,890
Revenue per ticket (THB/ticket)	63.0	64.0	65.0

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in marketing margin, we estimate 2021 earnings will rise by 4.3%, and vice versa, all else being equal.
- For every 1% increase in number of cups sold for Café Amazon, we estimate 2021 earnings will rise by 2.1%, and vice versa, all else being equal.

Source: FSSIA estimates

3

Contents

Executive summary
A retail fuel and food juggernaut
Background
Three growth pillars for OR's stellar net profit growth in 2021-23
Driver #1: Strong sales volume growth
Driver #2: Non-oil business – value creation under the community-driven, customer-centric development plan for fuel stations
Driver #3: Overseas expansion leveraging its community-driven fuel station platform
Pandemic-driven global travel bans and lockdowns have disrupted industry demand
Industry outlook remains promising for retail oil stations and F&B
Oil market in Thailand
Thailand's retail fuel station industry
Thailand retail market
Key assumptions and risks
Sales volume growth
Fuel station assumptions
Price assumptions
Margin assumptions
Key risks
Financials
Net profit growth to resume in 2021-22 after a weak 2020
Strong balance sheet to fund future growth
Initiate with a BUY call and TP of THB41
Corporate Governance - OR
•

Executive summary

OR is Thailand's leading operator of retail fuel stations, which includes non-oil businesses like its flagship, Café Amazon, as well as its wholesale oil business selling oil products. OR has also expanded its business into ASEAN markets, including Cambodia, the Philippines, Laos, Myanmar, Malaysia and Singapore and other Asian markets like China, Japan and Oman.

OR owns and operates an asset portfolio for its three business units: oil, non-oil, and international. It operates a number of retail fuel stations nationwide in Thailand's retail segment. In the commercial oil segment, OR operates a standalone liquefied petroleum gas (LPG) station network and FIT Auto service stations. It also markets and sells oil products, including LPG, diesel, jet fuel, fuel oil, gasoline, lubricants, asphalt and others to wholesale markets.

OR's non-oil assets include its flagship Café Amazon outlets in Thailand and overseas, other food & beverage (F&B) brands, convenience stores (CVS), and space management at its service stations for rental and fee incomes.

As of 2020, OR owns and operates 335 fuel stations in the Philippines, Cambodia and Laos, 4 FIT Auto stations in Cambodia and Laos, 265 Café Amazon outlets in the Philippines, Cambodia, Laos, Singapore and China, and 23 Jiffy CVS outlets in Cambodia.

We project OR's EBITDA from its oil units (retail and commercial) to recover from THB12.1b in 2020 to THB13.3b in 2021, THB14b in 2022, and THB14.1b in 2023, surpassing the THB12b EBITDA in 2019 prior to the COVID-19 outbreak.

We project the EBITDA from its retail segment to rise from THB3.5b in 2020 to THB5.6b in 2021, THB6.4b in 2022, and THB6.5b in 2023, driven mainly by higher gasoline and diesel sales volumes, the increase in the number of fuel stations, and the improving sales volume per station thanks to the higher non-oil business integration at OR's fuel stations.

We expect the EBITDA from its commercial segment to rise from THB3.5b in 2020 to THB7.5b-7.6b in 2021-23, despite the negative impact from COVID-19, thanks to the resilient demand for diesel and gasoline and the higher product margins due to the lower projected oil prices.

We project Café Amazon's EBITDA at 24.7% CAGR and net profit at 49.3% CAGR from 2020-22, driven by two key factors: 1) a higher number of outlets; and 2) a higher number of cups sold. We project its net profit (NP) to grow from THB2.6b in 2020 to THB8.6b in 2023, and its EBITDA to grow from THB10.8b in 2020 to THB20.9b in 2023.

In line with its fuel station numbers, OR has increased its CVS numbers to mostly keep pace with its fuel stations. As of 2020, OR had a total of 1,977 CVS outlets vs 1,999 fuel stations in Thailand.

In 2020, OR's NP weakened due to the coronavirus impact, resulting in a lower demand for both oil and non-oil products at its retail and wholesale channels. However, we project OR's NP to grow at 21.8% CAGR in 2020-23, driven by its three growth strategies: 1) the expansion of its fuel stations in Thailand; 2) growth in its non-oil F&B businesses, particularly its Café Amazon outlets and the number of CVS outlets; and 3) the expansion of its overseas presence in new and existing markets to leverage OR's core business value of the one-stop shop with a "Living Community" concept.

Valuation-wise using the forward EV/EBITDA valuations of its closest local peers – PTG for retail oil, SUSCO for commercial wholesale oil, CBG for F&B, and CPALL for CVS – we apply different EV/EBITDA valuations to each business segment to reflect their different risk-reward characteristics.

We apply the sum-of-the-parts (SoTP) valuation methodology to derive our TP of THB41 for OR, as we think each of OR's business units embraces a different risk-reward ratio at different business cycles. We then subtract the projected net debt at end-2021 to derive our final valuation range for OR.

A retail fuel and food juggernaut

OR is Thailand's leading operator of retail fuel stations, which includes non-oil businesses like its flagship, Café Amazon, as well as its wholesale oil business selling oil products, including LPG, diesel, jet fuel, fuel oil, gasoline, lubricants, asphalt, and others. OR has also expanded its business into ASEAN markets, including Cambodia, the Philippines, Laos, Myanmar, Malaysia, and Singapore and other Asian markets like China, Japan and Oman, leveraging its proven successful business model of integrated oil and non-oil ventures at its fuel stations.

In 2020, OR's NP weakened due to the coronavirus impact, resulting in a lower demand for both oil and non-oil products at its retail and wholesale channels.

However, we project OR's NP to grow at 21.8% CAGR in 2020-23, driven by its three growth strategies: 1) the expansion of its fuel stations in Thailand; 2) growth in its non-oil F&B businesses, particularly its Café Amazon outlets and the number of CVS outlets; and 3) the expansion of its overseas presence in new and existing markets to leverage OR's core business value of the one-stop shop with a "Living Community" concept to offer "more than just a service fuel station" experience for customers.

Background

Following the privatisation of the state enterprise, the "Petroleum Authority of Thailand", PTT Public Company Limited, or PTT (PTT TB, BUY, TP THB60), was registered on October 1, 2001. PTT started to modernise its retail fuel stations and later founded Café Amazon in 2002 to be a coffee shop for its fuel stations.

In 2003, PTT co-operated with CP ALL Public Company Limited (CPALL) to exclusively open 7-Eleven stores in PTT gas stations, further strengthening its non-oil platform with its in-house Café Amazon and CVS'.

In 2007, PTT acquired ConocoPhillips' retail petroleum business in Thailand, from which PTT acquired a retail fuel service station business under the "JET" brand, and a CVS business (Jiffy), which it continues to operate under PTT. Jiffy has since complemented PTT's CVS business. CPALL's 7-Eleven CVS' are located in most of its fuel stations in Thailand, while Jiffy CVS' are mainly the platform for PTT's overseas fuel stations.

In 2012, PTT geared up to expand its Café Amazon branches through franchising in Thailand, leveraging the success of its PTT oil stations in the country. Later, PTT first established its PTT oil stations and Café Amazon in Laos as its first overseas expansion destination, and later successfully expanded into Cambodia, the Philippines, Japan, Myanmar, Oman, Singapore, China and Malaysia by end-2019.

In 2014-16, PTT further strengthened its non-oil business, establishing FIT Auto service to sell lubricants and provide a variety of light maintenance services, including lubricant and vehicle fuel system changes, regular maintenance, and tire and battery changes. In 2015, PTT acquired exclusive franchise rights to operate Texas Chicken and in 2016 it acquired a master franchise right to operate the Hua Seng Hong Dim Sum restaurant business in Thailand.

In 2018, PTT spun off its oil and non-oil businesses to PTT Oil and Retail Business Public Company Limited (OR), hence originating OR. OR launched its "Living Community" concept for its fuel stations, which later became a successful business platform for fuel stations in Thailand.

Exhibit 1: Key milestones of OR

Year	Event
2001	Following the privatisation of the state enterprise "Petroleum Authority of Thailand", PTT Public Company Limited or "PTT" was registered on October 1, 2001.
2002	Café Amazon was first established.
2003	Co-operated with CPALL to exclusively open 7-Eleven stores in PTT gas stations
2004	"Pump in the park" was launched.
2007	PTT acquired ConocoPhillips' retail petroleum business in Thailand, including its retail fuel service station business under the "JET" brand and its CVS business (Jiffy).
	"One Stop Service" retail fuel service station concept was launched.
2009	"PTT Life Station" concept was launched.
2011	Café Amazon Coaching Academy (CACA) was established.
2012	Gearing up to expand Café Amazon branches through franchising.
	PTT oil station and Café Amazon was first established in Laos.
2013	PTT first launched its "Blue Card".
	Café Amazon was first established in Cambodia.
2014	FIT Auto was established in Thailand.
2015	Granted an exclusive franchise right to operate Texas Chicken restaurants in Thailand
	Established Café Amazon roasting plant and Oil Business Academy (OBA).
2016	Established Amazon Inspiring Campus (AICA).
	Operating Café Amazon through franchising in Cambodia and the Philippines and granted master franchise rights to subsidiaries in each country.
	Café Amazon was first established in the Philippines, Japan and Myanmar.
	Granted master franchise right to operate food business under Hua Seng Hong Dim Sum in Thailand.
2017	Operating Café Amazon through franchising in Laos and granted master franchise rights to subsidiaries in Laos.
2018	PTT transferred its oil and non-oil business to OR on July 1, 2018.
	Operating Café Amazon through franchising in Oman and granted master franchise rights to Ahlain International LLC.
	Changed "PTT Life Station" concept to the "PTT Living Community" concept.
2019	Café Amazon was first established in Singapore, China and Malaysia.
	Café Amazon Circular Living Concept was launched.
2020	Established ORC Coffee Passion Group Joint Stock Company ("ORCG"), a joint venture with Central Group, to expand its Café Amazon business into Vietnam

Source: OR

Major shareholder: PTT is a major shareholder of OR, as well as a supplier of oil products to OR, pre-IPO owning a 100% stake in OR. Post IPO, PTT's current stake in OR is 75%, holding 9m shares.

Exhibit 2: Pre- and post-IPO shareholder structure

	Pre-IPC)	Post IP	o
			Overallotment option	is fully exercised
	No. of shares owned	% owned	No. of shares owned	% owned
	(share)	(%)	(share)	(%)
PTT	8,999,999,998	100.0	8,999,999,998	75.0
Other	2	0.0	2	0.0
Public	-	-	3,000,000,000	25.0
Total	9,000,000,000	100.0	12,000,000,000	100.0

Source: OR

Asset portfolio: OR owns and operates an asset portfolio for its three business units: oil, non-oil, and international.

Oil unit: OR operates a number of retail fuel stations nationwide in Thailand's retail segment. In the commercial oil segment, OR operates a standalone LPG station network and FIT Auto service stations, as well as markets and sells oil products, including LPG, diesel, jet fuel, fuel oil, gasoline, lubricants, asphalt and others to wholesale markets.

Non-oil: OR's assets include a portfolio of non-oil assets, including its flagship Café Amazon outlets in Thailand and overseas, other F&B brands, CVS', and space management at its service stations for rental and fee incomes.

International: As of 4Q20, OR owns and operates 335 stations in the Philippines, Cambodia and Laos, 4 FIT Auto stations in Cambodia and Laos, 265 Café Amazon

outlets in the Philippines, Cambodia, Laos, Singapore and China and 23 Jiffy CVS outlets in Cambodia.

Exhibit 3: Key assets of OR as of 2020

Oil Business	Description		
Domestic			
Retail oil stations	#1 market share in Thailand	1,999	stations
LPG stations	Standalone station offering only LPG	228	stations
LPG gas shops	Selling cooking gas	1,052	stores
Commercial	Aviation and marine, industrial use and LPG	11.8	bn litres/year
Supply sales	Sales to dealers	1.12	bn litres/year
International			
Retail oil stations	Gas stations in four countries	333	stations
Philippines		180	stations
Cambodia		100	stations
Laos		50	stations
Commercial	Fuel sale volume	1.6	bn litres/year
Oil station format		Station	%
Thailand		1,999	100.0
DODO		1,627	81.0
COCO		372	19.0
Overseas stations		333	100.0
DODO		243	73
COCO		90	27
Lubricant business			
Domestic/International	#1 market share in Thailand	185	m litres/year
Service station	"FIT" Auto brand	61	stations
Non-oil business			
Domestic			
Café Amazon	Own brand	3,290	stores
Jiffy stores	100% owned post acquisition from ConocoPhillips Group	130	stores
7-Eleven stores	Master collaboration	1,824	stores
Space management	Lease space by brands and business operators (e.g. McDonalds and KFC) at service stations and other locations under OR's management	4,935	No. of tenants
Other F&B brands	Texas Chicken (under exclusive license), Hua Seng Hong Dim Sum (under master franchise) and Pearly Tea (own brand)	317	branches
International			
Café Amazon	Own brand	285	stores
Jiffy stores	100% owned post acquisition from ConocoPhillips	23	stores

Note that number of stations/outlets are as of 30 December 2020

Sources: OR; CPALL; FSSIA estimates

Exhibit 4: OR's assets at a glance

	2017	2018	2019	2020
Total oil stations (station)	1,828	2,024	2,213	2,334
LPG stations* (station)	299	265	247	228
LPG gas shops (station)	1,174	999	1,046	1,052
FIT Auto (station)	34	44	54	61
Café Amazon (outlet)	2,121	2,633	3,150	3,575
Other F&B (outlet)	226	262	281	317
Convenience stores (store)	1,626	1,745	1,880	1,977
Space management (no. of tenants)	4,233	4,386	4,815	4,935

*Note that the number of LPG stations excludes those which are co-located within retail fuel stations; Source: OR

OR's operations and revenue: In 2020, most of OR's revenue came from the domestic oil business, accounting for over 90%, with the remaining 10% of revenue from non-oil, international, and other businesses. Revenue from the domestic oil business can be divided into two groups: 57% retail and 43% commercial. OR's main gross profit (GP) is from the oil business, which accounted for 70% in 2019; non-oil businesses accounted for 25% of total GP in 2019.

Exhibit 5: Revenue breakdown by segment

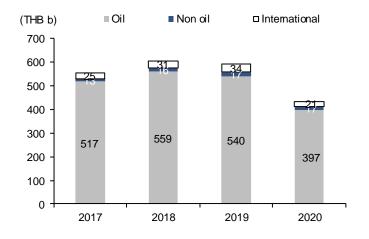
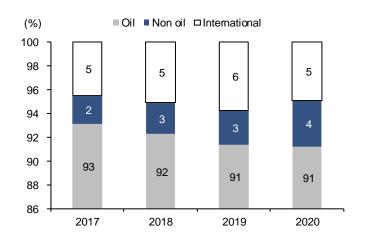


Exhibit 6: Revenue breakdown by segment (%)



Source: OR Source: OR

Oil revenue is divided into two units – retail and commercial. The retail unit mainly includes the operations of retail fuel stations, while the commercial unit covers mostly the wholesale of oil products, including LPG, diesel, jet fuel, fuel oil, gasoline, lubricants, asphalt and others.

Exhibit 7: Oil segment revenue breakdown

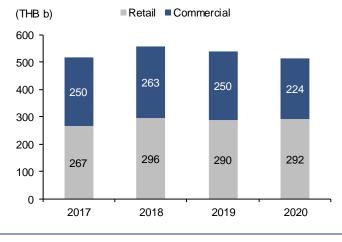
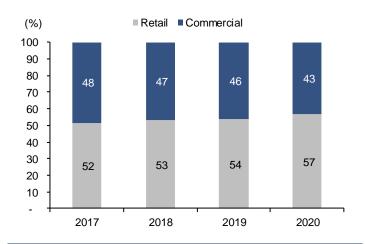


Exhibit 8: Oil segment revenue breakdown (%)



Source: OR Source: OR

International presence: For its international business revenue in 2020, most came from the Philippines (accounting for 52%) and Cambodia (accounting for 29%). In contrast, Cambodia accounted for 66% of total international EBITDA and the Philippines contributed only 30%.

Exhibit 9: EBITDA breakdown by segment (2017)

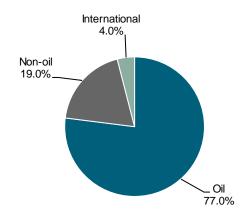
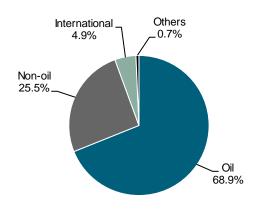


Exhibit 10: EBITDA breakdown by segment (2020)



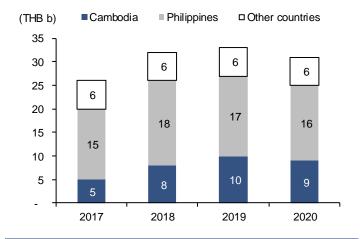
Source: OR Source: OR

Cambodia is a major market for OR's non-oil business, mainly for its Café Amazon outlets, which have been highly successful in gaining market share for the coffee sold both in-station and through standalone outlets.

The Philippines is the main market for OR's overseas fuel station venture, with 181 fuel stations operating in the country as of 2020.

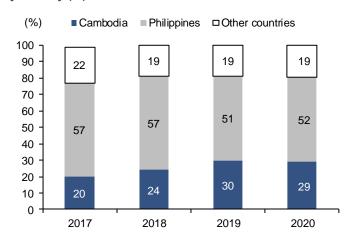
The other markets, including Oman, Singapore, Malaysia, Japan, China, Myanmar, and Laos, remain small markets for OR, with the presence of Café Amazon outlets and a few fuel stations.

Exhibit 11: Revenue for international segment – breakdown by country



Note that 'Other countries' includes Laos, Myanmar, China and Singapore Source: $\ensuremath{\mathsf{OR}}$

Exhibit 12: Revenue for international segment – breakdown by country (%)



Note that 'Other countries' includes Laos, Myanmar, China and Singapore Source: $\ensuremath{\mathsf{OR}}$

Exhibit 13: Number of convenience stores overseas (4Q20)

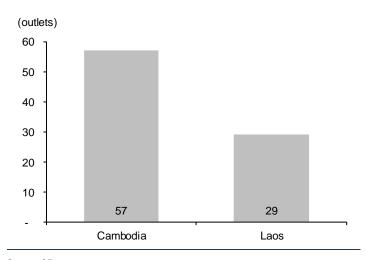
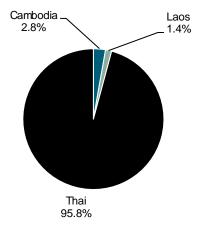


Exhibit 14: Number of convenience stores in Thailand and overseas (4Q20)



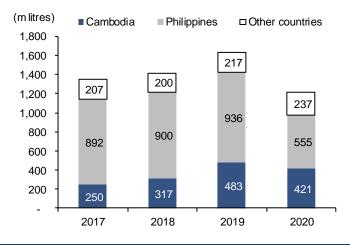
Source: OR

Exhibit 15: Fuel sales volume overseas by country (%)

(%) ■ Cambodia Philippines □ Other countries

Source: OR

Exhibit 16: Fuel sales volume overseas – breakdown by country

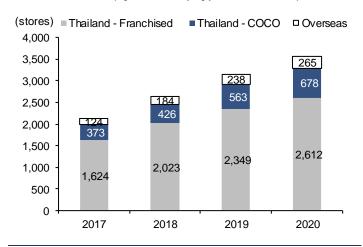


Note that 'Other countries' includes Laos, China, and Singapore Source: OR

Note that 'Other countries' includes Laos, China, and Singapore Source: OR

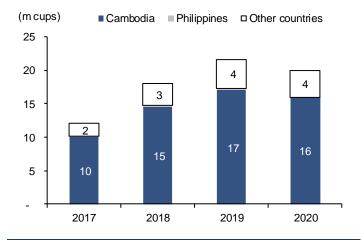
Non-oil business: In terms of EBITDA, the oil business generated 69% of OR's EBITDA in 2020, with 26% of EBITDA from its non-oil businesses, and 5% from its international business. In 2020, OR had a higher EBITDA contribution from its non-oil and international businesses, with lower domestic oil business contributions. We believe the increasing proportion of its non-oil business to its oil business is due to the higher EBITDA margin of the non-oil business at 26.6%, compared to the 3.1% EBITDA margin of the oil business.

Exhibit 17: Number of Café Amazon outlets under non-oil business division (by ownership type and location)



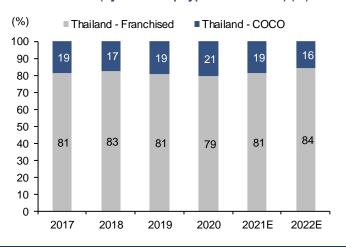
Note that 'Overseas' includes Myanmar, Japan, Oman and Malaysia Source: OR

Exhibit 19: Number of cups sold for Café Amazon under international business division – breakdown by country



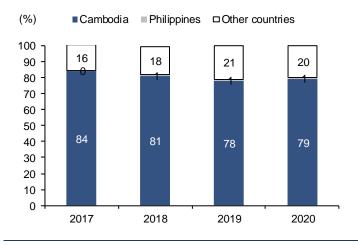
Note that 'Other countries' includes Laos, China and Singapore Source: OR

Exhibit 18: Number of Café Amazon outlets under non-oil business division (by ownership type and location) (%)



Source: OR

Exhibit 20: Number of cups sold for Café Amazon under international business division – breakdown by country (%)



Note that 'Other countries' includes Laos, China and Singapore Source: OR

Three growth pillars for OR's stellar net profit growth in 2021-23

The oil business is all about how much volume OR can sell, how well OR can capture resources to enhance, develop, and sustain its margin, and how far OR can expand its business both geographically and through product diversity. Perhaps most importantly, it is about how well OR can adapt itself to grow in today's fast-changing business environment.

Exhibit 21: Revenue breakdown by business unit

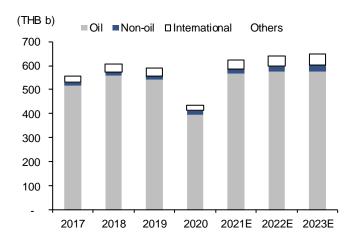
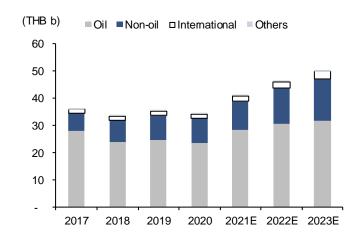


Exhibit 22: Gross profit breakdown by unit



Sources: OR; FSSIA estimates

Sources: OR: FSSIA estimates

With these simple but vital strategies underpinning OR's future revenue, gross profit, and NP growth outlook in 2021-23, we project OR's NP to accelerate during that period via three key drivers.

The first driver would be the strong sales volume growth driven by OR's plan to increase the number of fuel stations (NFS) in both domestic and ASEAN markets, despite the projected weak industry demand growth in the wake of the COVID-19 crisis.

The second would be the margin expansion underpinned by its NP growth from its F&B, CVS, and other non-oil businesses. The key non-oil growth will likely be driven by OR's flagship, the in-house developed Café Amazon coffee chain, which we project to drive up OR's net profit growth in 2021-23.

The third driver would be OR's expansion into new ASEAN markets via its Café Amazon and F&B unit and its proven successful business model of its community-like oil station integration with F&B and services as a key customer-centric growth strategy.

Exhibit 23: EBITDA breakdown by unit

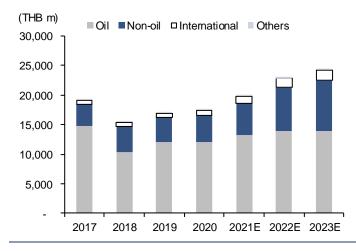
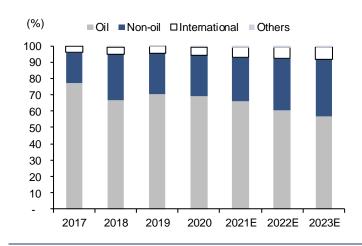


Exhibit 24: EBITDA breakdown by unit (%)



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Overcoming the labour of Hercules. After suffering weaker revenues from both domestic and international markets, we project OR to experience revenue and NP growth in 2021-23. We believe OR's three key growth pillars – rising sales volumes, margin expansion (mainly from its crown jewel, the in-house developed Café Amazon coffee chain) and growth opportunities in ASEAN retail oil and consumer markets – could allow OR to seek growth amid the weak global economic outlook, overcoming a labour of Hercules to continue along its NP growth path in 2021-23.

Exhibit 25: Gross profit margin by segment

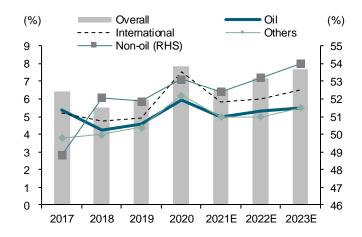
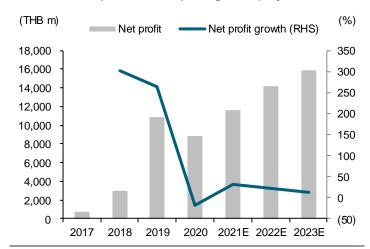


Exhibit 26: Net profit and net profit growth projections



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Driver #1: Strong sales volume growth

For the oil business, while we think that revenue is less relevant than sales volume growth, given the highly volatile oil price, we still project OR's revenue to grow at 14.2% CAGR from 2020-23, rising from THB436.5b in 2020 to THB650.1b in 2023. In 2020, revenue declined by 26.3% y-y, mainly due to the weaker sales volumes as a result of the COVID-19 pandemic.

Exhibit 27: Sales volume breakdown in retail oil marketing unit (2020)

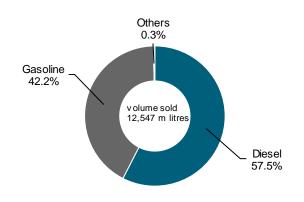
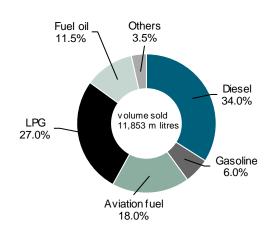


Exhibit 28: Sales volume breakdown in commercial oil marketing unit (2020)

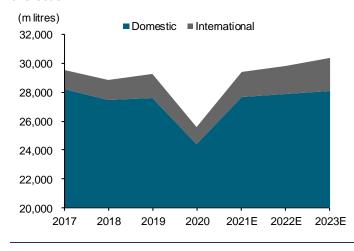


Source: OR Source: OR

OR classifies its business units in two different ways. First, by revenue and product: there are three major business units – oil, non-oil, and the international unit – which cover both oil and non-oil businesses, but have a market presence outside Thailand, mainly in the ASEAN market.

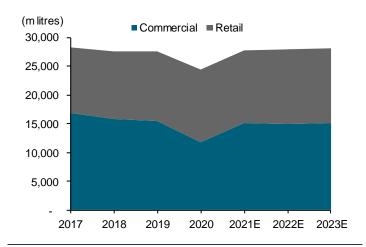
Second, by sales volume and customer group: there are three business units – retail, commercial, and the international unit. Retail and commercial units combined become OR's domestic division, while the international unit remains relatively unchanged on a revenue and sales volume basis.

Exhibit 29: Sales volume – breakdown by domestic vs overseas



15

Exhibit 30: Domestic oil unit sales volume breakdown



Sources: OR; FSSIA estimates Sources: OR; FSSIA estimates

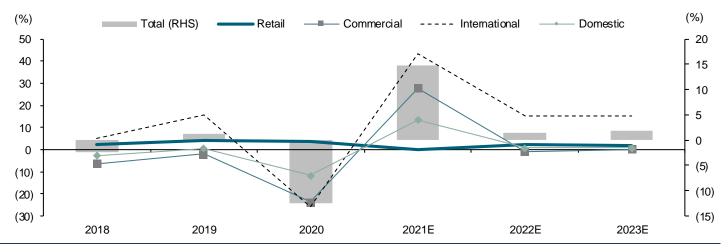
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While OR's total sales volume dropped by 12.5% y-y from 29.3b litres in 2019 to 25.6b litres in 2020, due to the COVID-19 outbreak, we project OR's sales volume to recover in 2021-23, rising by 14.8% y-y to 29.4b in 2021, 1.5% y-y to 29.9b litres in 2022, and 1.8% y-y to 30.4b litres in 2023.

Within OR's oil unit, we project retail sales volume growth (49% of OR's sales volume in 2020) of 0.1% y-y and commercial sales volume growth (46.3%) to rise 27.7% y-y in 2021, down from 3.9% y-y for retail but up from -23.8% y-y for commercial in 2020 due to the COVID-19 outbreak.

For OR's international unit (4.7%), we believe its sales volume recovery will be at its strongest level in 2021, as we think the that the reopening of ASEAN countries' economies in 2021 will be highly likely, as we expect a successful vaccine to be implemented globally by 2H21.

Exhibit 31: Sales volume growth by segment



Sources: OR; FSSIA estimates

Domestic sales volume growth outlook. We think the retail and commercial segments under OR's oil unit will likely experience sales volume growth in 2021-23, driven by its growth strategy to expand the oil sales volume for its retail segment via expanding NFS, and for its commercial segment via the oil demand improvements in Thailand and ASEAN markets.

Exhibit 32: Oil segment (retail and commercial) sales volume (domestic) – breakdown by product

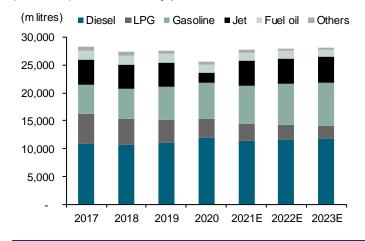
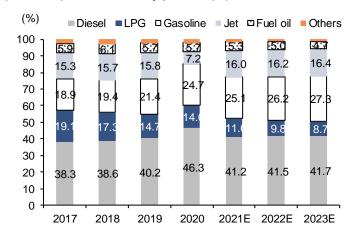


Exhibit 33: Oil segment (retail and commercial) sales volume (domestic) – breakdown by product (%)



Sources: OR; FSSIA estimates

Commercial: sales volume growth from jet fuel recovery. We project OR's sales volume growth for the commercial segment to reach 15b litres in 2021-23, mainly driven by the demand recovery for jet fuel and diesel, based on our projection for the return of tourism and international flights into Thailand and ASEAN markets.

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Sources: OR; FSSIA estimates

As one of the flagship subsidiaries under its PTT parent company, OR has long dominated Thailand's fuel market in both the retail and commercial sectors. For the commercial sector, OR ranks number one in term of sales volume market share for most fuel markets, including jet, marine & industrial fuel oil, household & industrial LPG, and lubricants, and ranks number two for asphalt with a market share of 18% in 2019.

Exhibit 34: Thailand's aviation fuel (jet) market share (2019)

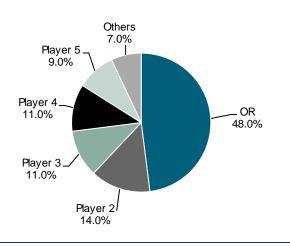
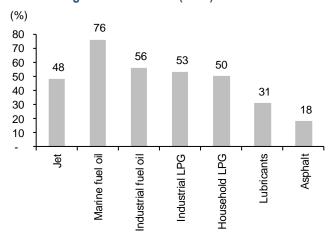


Exhibit 35: OR's market share for key products in the commercial segment in Thailand (2019)



Source: Department of Energy Business (DOEB)

Source: DOEB

Commercial oil sales volume to recover in 2021. We project OR's commercial oil sales volume to rise by 27.7% y-y in 2021 after a 23.8% y-y decline in 2020 due to the COVID-19 impact. Within OR's commercial segment, LPG and diesel had the biggest sales volumes, contributing 27% for LPG and 34% for diesel out of OR's total commercial sales volume in 2020. However, the COVID-19 pandemic has resulted in a sharp drop in global jet demand, particularly for Thailand as one of top global tourism destinations, resulting in its jet sales proportionally dropping from 28% in 2019 to only 18% in 2020.

Exhibit 36: Commercial sales volume – breakdown by product

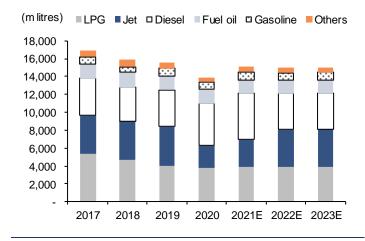
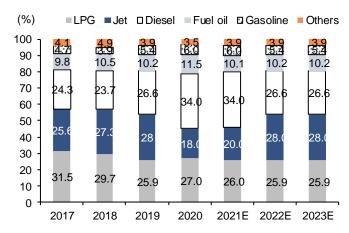


Exhibit 37: Commercial sales volume – breakdown by product (%)



Source: OR; FSSIA estimates

Source: OR; FSSIA estimates

In 2020, due to the COVID-19 outbreak, the LPG sales volume (27% of total commercial sales volume in 2020) declined by 6.9% y-y. However, the most significant drop was for the jet sales volume at 42.6% y-y, followed by asphalt under the 'Others' category (3.9%) at 20% y-y, and gasoline at a 0.8% y-y drop. The two products under the commercial segment that still saw positive sales volume growth in 2020 were diesel at 14.2% y-y (34%) and fuel oil at 0.7% y-y (11.5%), thanks to the strong export volumes for diesel and the higher demand from the marine and power sectors for fuel oil.

Exhibit 38: Sales volume growth projections for OR's commercial oil products (LPG, jet, and diesel)

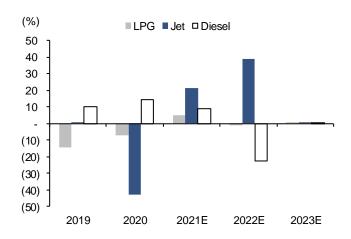
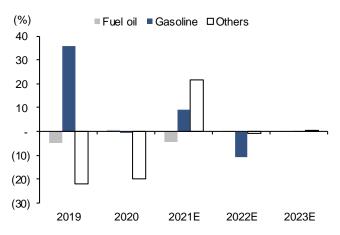


Exhibit 39: Sales volume growth projections for OR's commercial oil products (fuel oil, gasoline, and others (mostly asphalt))



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Jet demand collapse should continue into 2021. According to the Department of Energy Business, Ministry of Energy (DOEB), Thailand's jet fuel demand remained at a depressed level, recovering to only 5.6m litres per day (mlpd), down 73% y-y, in Dec-20 from 21mlpd in Dec-19, as a result of the ban on international flights to prevent the further spread of the coronavirus in Thailand.

With a 48% market share in 2019 at 4.36b litres of sales annually (11.6mlpd), according to the DOEB, OR has suffered from a sharp drop in jet sales volume in 2020. According to the Civil Aviation Authority of Thailand (CAAT), the outbound and inbound flight numbers at Thailand's airports have sharply plunged since 2Q20 after the country's lockdown in Apr-20.

Exhibit 40: Thailand's jet fuel demand

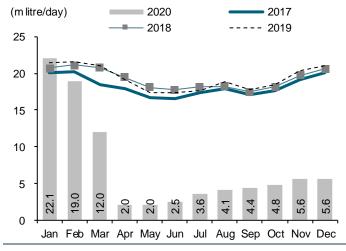
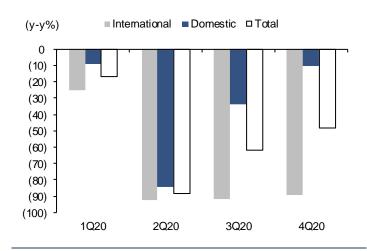


Exhibit 41: Thailand's flight numbers



Source: DOEB

Source: CAAT

Despite the successful containment of the COVID-19 outbreak in Thailand, which allowed the resumption of domestic travel since Aug-20 to drive up the number of domestic flights, the total number of flights in Thailand has still dropped by 48.5% y-y in 4Q20, led by the sharp 59% y-y drop in international flights vs the 10% y-y drop for domestic flights.

In terms of passengers, the situation has been even worse than the number of flights. According to CAAT, Thailand's total passenger numbers have continued to drop, by 95.7% y-y in 3Q20, and continued to drop by 78% y-y in 4Q20, given that the ban on international flights is slated to remain in effect into 2021.

Exhibit 42: Number of passengers at airports in Thailand

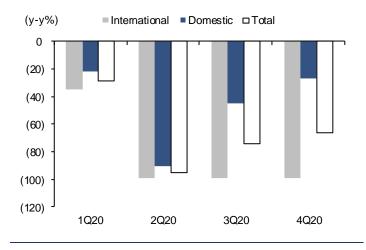
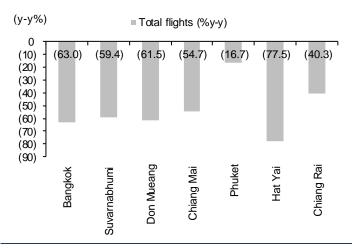


Exhibit 43: Number of flights – breakdown by major airports (1 Oct 2020 – 20 Mar 2021)



Source: CAAT Source: CAAT

During 1 Oct 2020 - 20 Mar 2021, the flight numbers at many tourism-focused airports have continued to remain depressed at over 60% y-y, including Bangkok's Suvarnabhumi (-59.4% y-y) and Don Mueang (-61.5% y-y), as well as the airports in Chiang Mai (-54.7% y-y) and Phuket (-16.7% y-y). The flight number drops are more severe for international flights than for domestic flights, due to the ban on international flights in an effort to effectively keep the COVID-19 pandemic in check.

Exhibit 44: Number of international flights – breakdown by major airports (1 Oct 2020 – 20 Mar 2021)

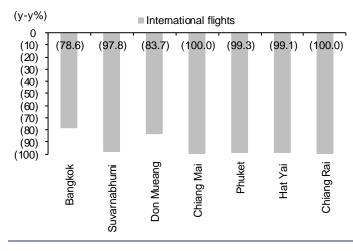
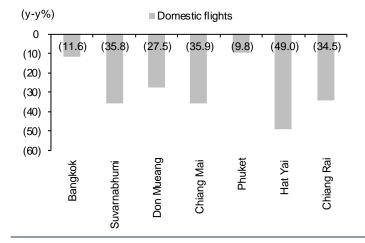


Exhibit 45: Number of domestic flights – breakdown by major airports (1 Oct 2020 – 20 Mar 2021)



Source: CAAT Source: CAAT

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According to Airports of Thailand (AOT TB, BUY TP THB85), the number of passengers and flights at the six major airports under its management are projected to remain depressed until 2023, when AOT expects the number of flights and passengers to return to pre-COVID-19 levels.

Exhibit 46: Thailand's passenger numbers – projections by AOT

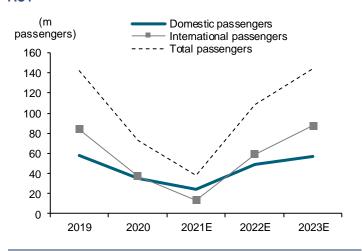
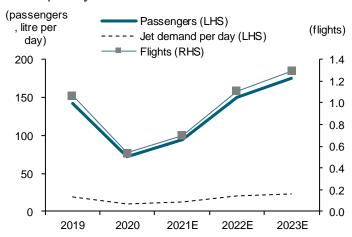


Exhibit 47: Thailand's passenger numbers – flights and jet demand per day



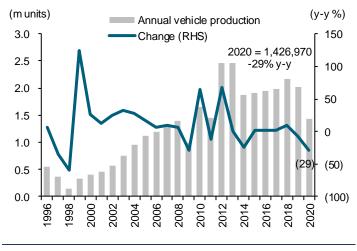
Source: AOT Sources: AOT; FSSIA estimates

As a result, the jet sales volume for OR declined by 42.6% y-y in 2020 but we project it to recover by 21.5% y-y in 2021 and 39.8% y-y in 2022, gradually driven by the recovery of the number of flights into Thailand, based on AOT's projections.

Lubricant demand recovery is on the horizon. After a demand collapse in 2020 due to the nation's lockdown, we think OR's sales volume for lubricants will recover markedly in 2021 onward, based on the sharp recovery of Thailand's vehicle production volume since it bottomed in Apr-20; the period when lockdowns were implemented in Thailand and globally.

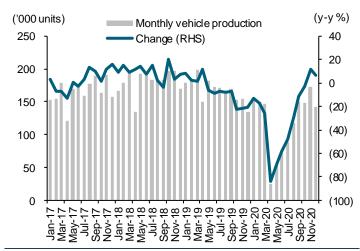
According to the Federation of Thai Industries (FTI), Thailand's vehicle production has rebounded from 25k in Apr-20 to 148k in Dec-20. The FTI projects that monthly vehicle production will continue to recover to 200k by Jun-21.

Exhibit 48: Thailand's annual vehicle production



Source: The Federation of Thai Industries

Exhibit 49: Thailand's monthly vehicle production



Source: The Federation of Thai Industries

With a 31% market share in the lubricant market in Thailand, we project OR's lubricant sales volume to recover along with its asphalt sales volume under the 'Others' product category, as classified by OR. We project OR's sales volume for its combined lubricant and asphalt products to grow by 21.9% y-y in 2021, remaining at a flat growth rate in 2022 after dropping by 19.8% y-y in 2020.

Exhibit 50: Thailand's lubricant market share (2019)

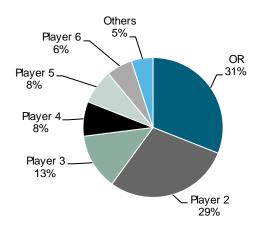
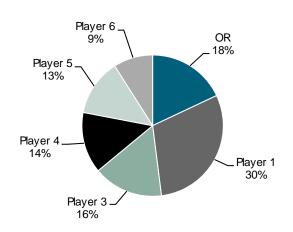


Exhibit 51: Thailand's asphalt market share (2019)



Source: DOEB Source: DOEB

Asphalt could be a key growth driver in 2021-23. While OR's sales volume for asphalt may weaken in 2020 due to the 1H20 lockdown, we think the sales volume, margin and NP generated from asphalt for OR will be strong in 2021-23, given 1) OR's market share of 18%; and 2) the sustained high margin of asphalt-Dubai in Thailand, which recently hit a 9-year record high at USD500/t due to the tight supply globally, caused by the lower utilisation rates of global refiners to optimise their profitability, including Thai refiners.

Exhibit 52: Margins of asphalt-Dubai (Thailand and Singapore)

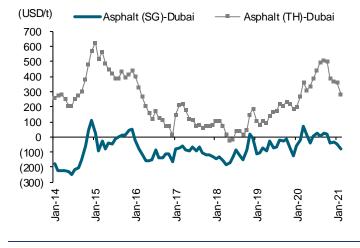
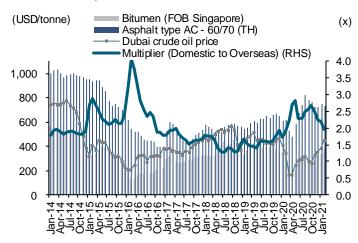


Exhibit 53: Bitumen (asphalt) SG and Thailand's prices vs Dubai crude oil price



Source: Bloomberg; TOP Source: Bloomberg

LPG market competition is starting to intensify. The demand for LPG in Thailand has continued its downtrend since 2019, declining from a peak of 567m kg/month in Jul-19 to 495m kg/month in Dec-20. The key reason is the sharp decline in the LPG demand for transportation, given the lower price competitiveness of LPG vs other alternative fuels such as gasoline and diesel, due to the globally lower oil price.

Exhibit 54: Thailand's LPG demand

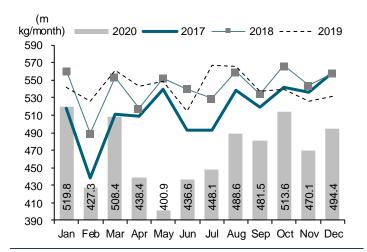
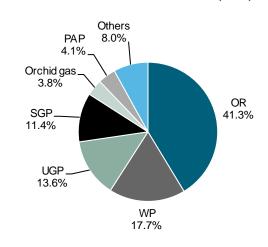


Exhibit 55: Thailand's LPG market share (2019)



Source: DOEB Source: DOEB

Given OR's number one position in terms of sales volume for the LPG market, with a 41.3% market share as of 2019, the decline in LPG demand led by the transportation segment should continue to provide a downside to OR's overall LPG sales volumes in 2021-23.

We project OR's LPG sales volumes to recover by 5% y-y in 2021 after declining by 6.9% y-y in 2020 to 3.75b litres, and then drop by 1.15% y-y in 2022 to 3.89b litres, then flatten y-y at 3.89b litres in 2023.

Exhibit 56: Thailand's market share of industrial LPG (2019)

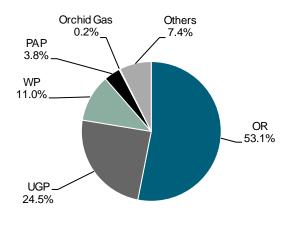
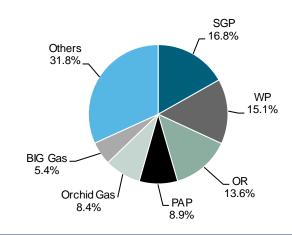


Exhibit 57: Thailand's market share of transportation LPG (2019)



Source: DOEB Source: DOEB

The overall demand for LPG in Thailand has declined in 2020, led by the sharp drop in demand for household, transportation, and petrochemical feedstocks due to the global lockdowns. Given that OR has a high market share in the household, industrial, and feedstock segments via its downstream petrochemical producer, PTT Global Chemical (PTTGC TB, BUY, TP THB86), but not for the transportation segment, we think the demand drop is structural, due to the lower price competitiveness of these products compared to oil fuels. We project the sales volumes of LPG for the household, industrial, and feedstock segments to rebound in 2021-23.

Exhibit 58: Thailand's market share of household LPG (2019)

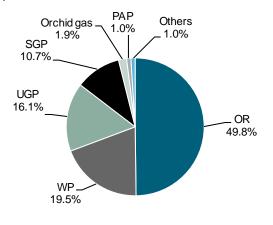
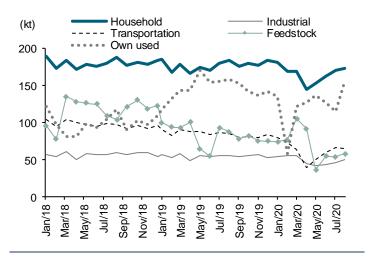


Exhibit 59: Thailand's market share of industrial LPG (2019)



Source: DOEB Source: DOEB

Retail: Sales volume growth from gasoline and diesel

Under its retail segment, OR operates an oil station business to generate revenue and NP from its oil and non-oil businesses. OR is Thailand's leading oil station operator, owning a total of 2,334 fuel stations in Thailand and overseas, as of 4Q20. It also owns 3,575 domestic and international Café Amazon outlets and operates a number of CVS and other F&B franchises, mostly attached to its fuel stations as of 2020.

Exhibit 60: Key business outlets for OR's oil business (2020)

Business	Thailand	Cambodia	Philippines	Laos	Others	Total
PTT station	1,999	106	181	48	-	2,334
FIT Auto	57	1	-	3	-	61
Café Amazon	3,290	167	18	80	20	3,575
7-Eleven and Jiffy	1,954	9	1	13	-	1,977
Texas Chicken/Hua Seng Hong Dim Sum/Pearly Tea	78/70/169	-	-	-	-	78/70/169
Storage terminals	53	7	4	7	-	71

Source: OR

As of 2019, OR ranked number one in Thailand in terms of sales volume, with a 38.9% market share for oil & gas transportation products sold via its fuel stations (diesel, gasoline, and LPG), and in terms of NFS, with a 31.8% market share (1,911 fuel stations in 2019), according to the DOEB.

Exhibit 61: Market share breakdown by number of stations (excluding independent retailers and NGV/LPG stations)

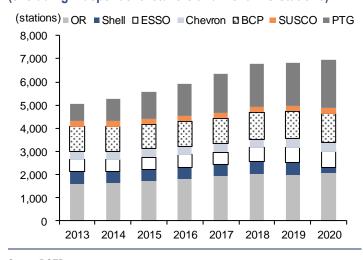
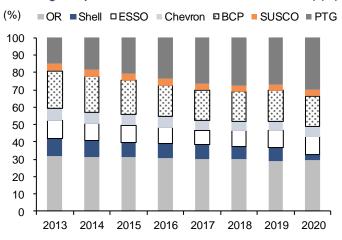


Exhibit 62: Market share breakdown by number of stations (excluding independent retailers and NGV/LPG stations) (%)

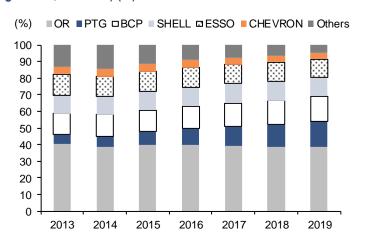


Source: DOEB Source: DOEB

Over the past seven years, OR has successfully maintained its number one ranking in the oil retail industry in Thailand, thanks to its innovative product and business developments, including the in-house Café Amazon and the "Living Community" strategy to develop its fuel stations as small community malls to attract not only vehicle customers for oil filling but also consumers for its F&B, CVS', and other amenities in their neighbourhoods.

Exhibit 63: Market share breakdown by sales volume (diesel, gasoline, and LPG)

Exhibit 64: Market share breakdown by sales volume (diesel, gasoline, and LPG) (%)



Source: DOEB Source: DOEB

Expanding the number of fuel stations (NFS). During 2017-20, OR increased its NFS to 1,999 in Thailand at end-2020, growing at a 7% 3-yr CAGR in Thailand to 1,627 dealer-owned-dealer-operated (DODO) stations and at a 7.2% 3-yr CAGR to 372 company-owned-company-operated (COCO) stations. In 2020, OR continued to increase its NFS to 2,334, adding 88 new fuel stations in Thailand and 33 overseas.

We project OR to add 46/75/130 new fuel stations in Thailand in 2021-23 and 33/35/21 overseas, mainly in Cambodia (adding 20-22 annually), the Philippines (10-20), Laos (2-3), and Myanmar (2-3), as we believe these markets are a strategic fit with OR's proven business model of highly integrated oil & non-oil synergy platforms to leverage its coffee shops and convenient lifestyle.

Exhibit 65: Number of fuel stations in Thailand and overseas – breakdown by business model

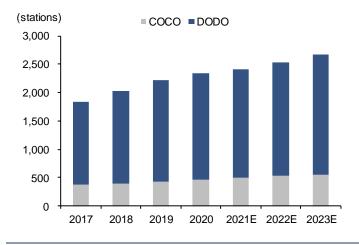
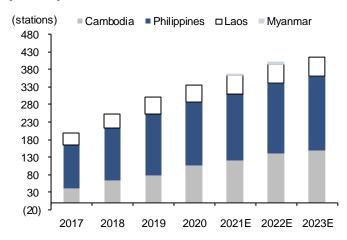


Exhibit 66: Number of fuel stations overseas – breakdown by country



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Our projected increase in NFS is less aggressive than OR's guidance to increase its NFS in Thailand by an average of 108 stations annually to reach 2,500 by 2025 vs our projected NFS of 2,250 by end-2023. We think the NFS increase in Thailand could be in the range of 70-100 stations annually due to the high competition in the industry. For the overseas markets, particularly in Cambodia and the Philippines, we expect the NFS expansion to be more promising, given that OR has already established its footprint in these two major countries.

Exhibit 67: Number of fuel stations in Thailand – breakdown by business model

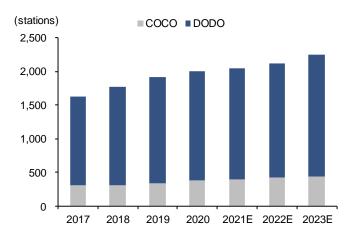
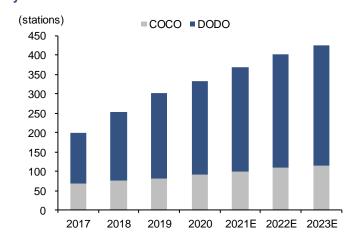


Exhibit 68: Number of fuel stations overseas – breakdown by business model

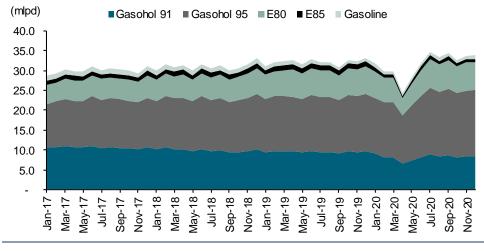


Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Gasoline is a key growth product for OR. Thanks to Thailand's resilient demand for transportation, particularly for gasoline and diesel, and its highly effective containment of the COVID-19 pandemic, the country has seen its oil demand recover to the pre-COVID-19 levels seen in 2019 (y-y basis) and Jan to Feb-20 (within 2020 before the national lockdown occurred in Apr-20).

Exhibit 69: Gasoline and gasohol demand breakdown in Thailand



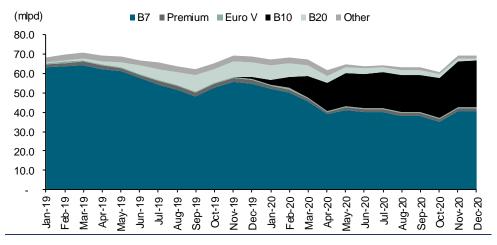
Source: DOEB

According to the DOEB, Thailand's gasoline demand has already rebounded to surpass both the y-y and q-q levels to reach 33.8mlpd in Dec-20, up 1.8% y-y and 6.3% from the pre-COVID level of 31.8mlpd in Feb-20. Meanwhile, the diesel demand has already returned to the pre-COVID level at 69.3mlpd, up 0.6% y-y – Feb-20 was at 68.2mlpd.

We believe the key drivers for the gasoline demand growth in Thailand are the more competitive gasoline prices and consumers' preference for gasoline over diesel and other fuels, including LPG and natural gas for vehicles (NGV) – known as compressed natural gas (CNG) outside of Thailand.

Diesel is the largest petroleum product used for transportation in Thailand. It is mostly sold via retail fuel stations, where OR has long been a market leader. Since 1 Jan-20, the Thai government has mandated the gradual replacement of B7 (7% methyl ester (ME) or B100 and 93% diesel produced from refineries) with B10 in order to structurally boost the demand for crude palm oil (CPO), the key feedstock to produce ME and to effectively reduce the crude imports for refineries.

Exhibit 70: Diesel and biodiesel (B7, B10, B20) demand breakdown in Thailand



Source: DOEB

Due to the COVID-19 outbreak, the demand for diesel and biodiesel sharply plunged in Apr-20 when Thailand entered its full lockdown, but gradually recovered to close to, or exceeded, its seasonal levels since Jul-20. We believe the diesel demand will continue to grow in 2021-22, backed by the high demand from the transportation segment and the return of the country's tourism by mid-2021, based on AOT's forecast.

Exhibit 71: Thailand's diesel demand

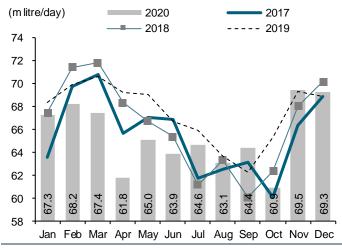
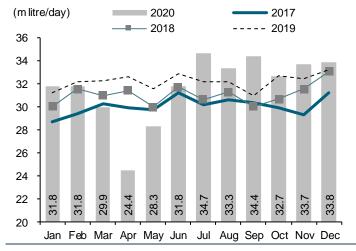


Exhibit 72: Thailand's gasoline demand



Source: DOEB Source: DOEB

For OR's retail fuel station unit, we project that the key sales volume growth in 2021-23 will come from the gasoline demand growth, which we project to increase by 4% y-y in 2021, and continue to grow at 3% y-y in 2022 and 2% in 2023. For diesel, we are less optimistic and project diesel sales volume growth of 2% y-y in 2021-22, and 1.5% y-y in 2023; slightly below its 10-year historical average of 2%.

Exhibit 73: Retail oil sales volume breakdown by product

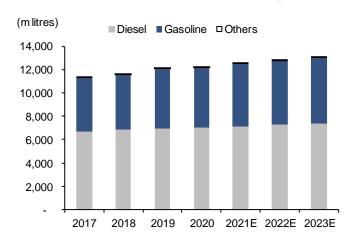
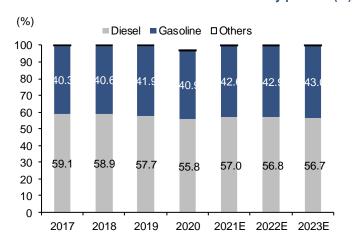


Exhibit 74: Retail oil sales volume breakdown by product (%)



Sources: OR; FSSIA estimates

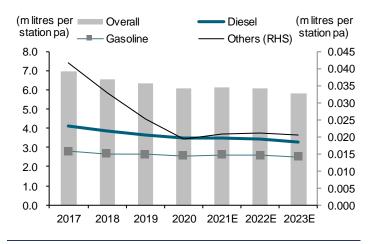
Sources: OR; FSSIA estimates

Sales volumes per station should decline as the number of fuel stations increase. While we project the sales volume growth to remain positive for both gasoline and diesel in 2020-23, we believe OR's annual sales volume per station will decline slightly in 2020-23, dropping from 6.09m litres per station per year (mlps/year) in 2020 down to 5.80-6.13mlps/year in 2021-23. This would result from the projected structural changes in fuel consumption toward electric vehicles (EV) and vehicles with higher fuel consumption efficiency.

For LPG, we believe the total consumption for the transportation industry will continue to decline due to consumers' shift from internal combustion engine (ICE) vehicles (diesel and gasoline) to EVs.

For the international retail segment, there was a similar trend of lower annual sales volumes per station, dropping from 5.4mlps/year in 2019 down to 3.62mlps/year in 2020 due to the COVID-19 impact, but we project to recover to 4.72mlps/year in 2021, 4.96mlps/year in 2022, and 5.42mlpd in 2023, thanks to the higher consumption of fuel for the transportation industry and the slower adaptation of EVs in Thailand.

Exhibit 75: Annual sales volume per station for retail oil products in Thailand



Sources: OR; FSSIA estimates

Exhibit 76: Annual sales volume per station for retail oil products overseas (diesel and gasoline) and in Thailand (diesel and gasoline)



Sources: OR; FSSIA estimates

OR vs competitors in Thailand. Compared to its three arch-rivals in the retail fuel station industry, we think OR stands as one of the most competitive players in the industry, based on:

- OR's DODO-driven business model for its retail fuel station business, with 80% of its NFS being DODO at end-2020, the highest proportion among the four players. This indicates that OR has a stronger brand recognition, a proven integrated oil and non-oil business platform and, most importantly, its highly successful in-house Café Amazon coffee shops.
- Its COCO-based fuel stations should allow OR to leverage its financial, operational, and business model strengths to differentiate itself from competitors. These are the key factors that we think should sustain OR as the leading player in the retail fuel station industry in Thailand and overseas.

Exhibit 77: Fuel station number comparison – breakdown by business model as of 2020

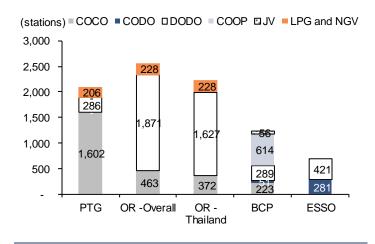
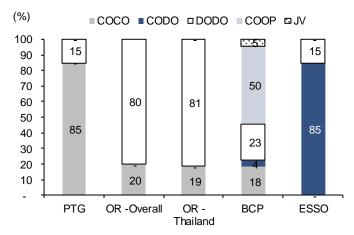


Exhibit 78: Fuel station number comparison – breakdown by business model (%) as of 2020



Note: The number of LPG stations which are located within retail fuel stations are excluded Sources: PTG; OR; BCP; ESSO; FSSIA estimates

Note: The number of LPG stations which are located within retail fuel stations are excluded Sources: PTG; OR; BCP; ESSO; FSSIA estimates

OR generates the highest sales volume per station in the industry. Based on our analysis, using data from the DOEB and related companies, we have found that OR generated the highest sales volume per station in 2020 based on FY2020 annual retail oil sales volumes per station, excluding the number of standalone LPG service stations. The second highest company was Shell (Thailand) (not listed) at 6.1mlps/year. However, including the number of LPG standalone service stations, OR ranked second after Shell. We think the main reasons for Shell's high volume per station are Shell's smaller size, the locations of its fuel stations, mostly in major cities, and that Shell has no LPG stations vs PTT's wider network of stations nationwide, not only in major cities and roads but also in small cities.

Exhibit 79: Annual retail oil sales volume per station

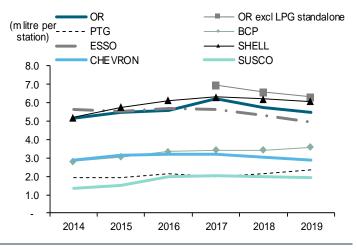
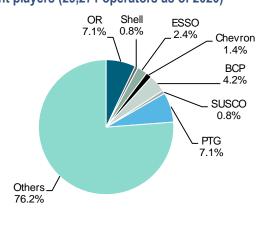


Exhibit 80: Number of fuel stations by operators, including independent players (29,271 operators as of 2020)



Source: OR; DOEB Source: DOEB

Investment cost is low for OR's expansion. We believe OR should be able to fund its expansion plan to increase its NFS in Thailand and overseas, since most of the new fuel stations will be in the asset-light DODO model, in which the investment cost will be mostly absorbed by the dealers, not OR. Under the COCO model, OR will directly invest in the fuel stations, and hence would result in higher investment costs, which we project to range between THB10m/20m/30m for the compact/standard/platinum fuel station platforms, depending on the size and the number of F&B shops and CVS' that are attached to each fuel station.

Exhibit 81: Estimated investment cost for OR's fuel stations (2020E)

	Investment cost	Land size	shops	Location	Station amount	% total
	(THB m/station)	(rai)	(no.)		(no.)	(%)
Platinum	30	>=5	>=2	main road	466	20.3
Standard	20	>=3	>=2	secondary road	1,441	62.7
Compact	10	>=1	>=1	secondary road	61	2.7
Overseas				overseas	329	14.3
Total					2,297	100.0

Sources: OR; FSSIA estimates

We project that OR will continue to maintain the average 20% COCO-based NFS and 80% DODO-based NFS for its expansion in both Thailand and overseas, given the strong brand recognition of its PTT and Café Amazon brands, and the highly integrated station platform based on its "Living Community" concept.

Exhibit 82: Number of fuel stations in Thailand by business model (%)

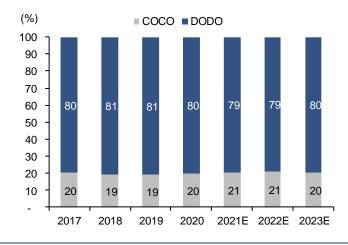
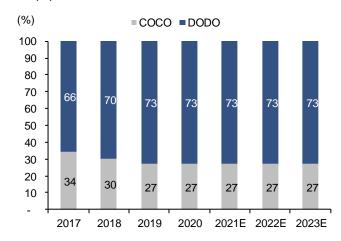


Exhibit 83: Number of fuel stations overseas by business model (%)



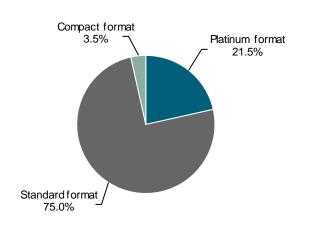
Sources: OR; FSSIA estimates

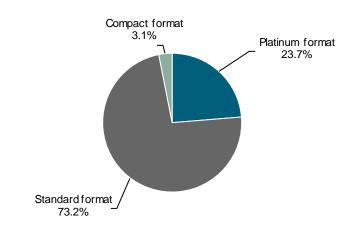
Sources: OR; FSSIA estimates

In addition to the asset-light DODO-driven fuel station additions, OR has also focused on adding new standard-format fuel stations, which require less investment. As of 3Q20, 75% of OR's NFS were standard format, and 3.5% were of compact size, mostly being owned and operated by dealers, thanks the lower investment cost and ease of management compared with the platinum station format.

Exhibit 84: Number of fuel stations – breakdown by format in Thailand and overseas (%) as of 3Q20 (total 2,297 stations)

Exhibit 85: Number of fuel stations – breakdown by format in Thailand (%) as of 3Q20 (total 1,968 stations)





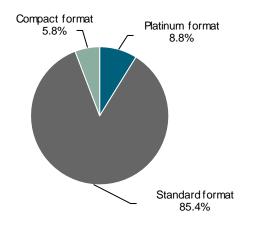
Source: OR Source: OR

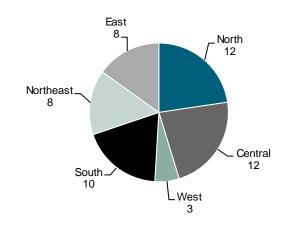
We believe that most of the platinum format fuel stations (466 in Thailand and 29 overseas as of 3Q20), which require a higher investment cost of over THB80m per station, based on our estimate, are COCO, given the higher control over investments, products, and non-oil platforms. The platinum format fuel stations are mostly located in major cities and main roads where traffic and competition are high.

In order to support its large network of fuel stations nationwide, OR owns, operates, or has access to a total of 53 oil storage terminals in Thailand as of 2020. We believe these terminals will be able to accommodate OR's growth plan to increase its NFS in Thailand in 2021-23.

Exhibit 86: Number of fuel stations – breakdown by format overseas (%) as of 3Q20 (total 329 stations)

Exhibit 87: Number of storage terminals – breakdown by region in Thailand as of 3Q20 (total 53 terminals)





Source: OR Source: OR

As a result of OR's strong positioning as a leader in the retail oil industry and commercial wholesale oil markets, we project the EBITDA from its oil units (retail and commercial) to recover from THB12.1b in 2020 to THB13.3b in 2021, and THB14b in 2022-23, surpassing the THB12b EBITDA in 2019 prior to the COVID-19 outbreak.

We project the EBITDA from its retail segment to rise from THB3.5b in 2020 to THB5.6b in 2021 and THB6.4b-6.5b in 2022-23, driven mainly by higher gasoline and diesel sales volumes, the increase in NFS, and the improving sales volume per station thanks to the higher non-oil business integration at OR's fuel stations.

We expect the EBITDA from its commercial segment to rise from THB3.5b in 2020 to THB7.5b-7.6b in 2021-23, despite the negative impact from COVID-19, thanks to the resilient demand for diesel and gasoline and the higher product margins due to the lower projected oil prices.

Exhibit 88: Oil unit EBITDA - breakdown by business unit

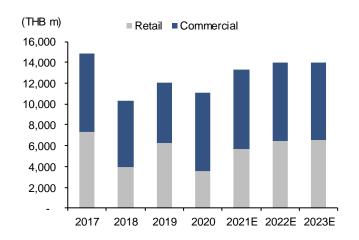
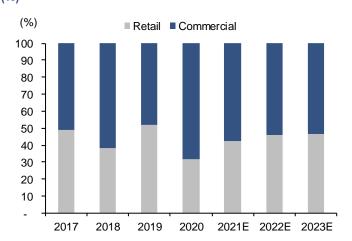


Exhibit 89: Oil unit EBITDA – breakdown by business unit (%)

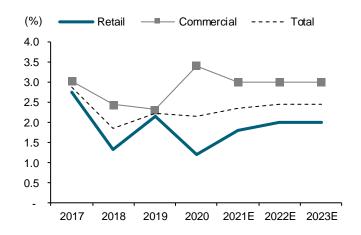


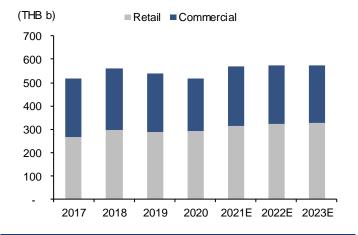
Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

We expect that the EBITDA margins for its retail and commercial segments will diverge from 2021-23, with the commercial segment's EBITDA margin dropping below its 2020 level due to the lower demand. However, in 2021-23, we project the retail EBITDA margin to rise y-y, while the commercial EBITDA margin will likely remain flat y-y at 3%, based on the projected higher oil price of USD55/bbl in 2021, declining to USD50/bbl in 2022-23, effectively benefiting the marketing margin of the retail fuel station unit, while potentially eroding the EBITDA margin of the commercial segment.

Exhibit 90: EBITDA margin of retail and commercial segment Exhibit 91: Oil unit revenue – breakdown by unit





Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Driver #2: Non-oil business – value creation under the community-driven, customer-centric development plan for fuel stations

Among all of the players in Thailand's retail fuel station industry, we believe OR's nonoil business model is the most attractive and successful, thanks to the proven track record of success for its in-house Café Amazon coffee shops and the highly integrated "Living Community" concept for its oil and non-oil ventures, making it one of the most attractive stations for Thai consumers, in our view.

Exhibit 92: EBITDA margin by segment (2020)

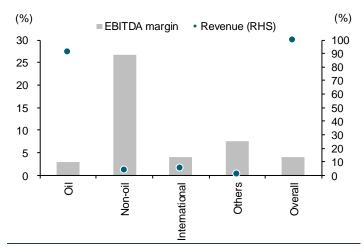
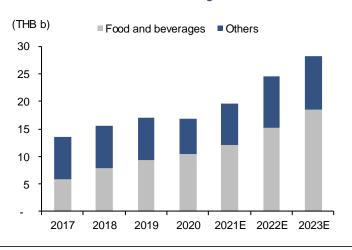


Exhibit 93: Revenue from non-oil segment



Source: OR Sources: OR; FSSIA estimates

Within OR's three main business units, the non-oil segment generated the highest EBITDA margin at 27% with only 4% of OR's total revenue in 2020. The key non-oil driver is Café Amazon and other F&B ventures under various franchises, followed by its CVS' and the rental income from its space management venture.

Exhibit 94: Key non-oil segment financial information

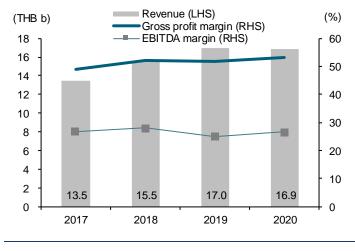
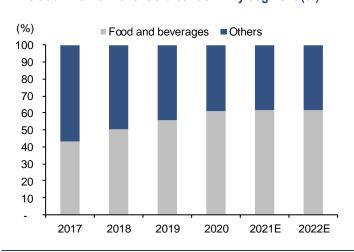


Exhibit 95: Non-oil revenue breakdown by segment (%)



Source: OR Source: OR

The key F&B franchises include Texas Chicken, Hua Seng Hong Dim Sum, and Pearly Tea. Its CVS' include the stores located inside or outside of its fuel stations, with the two major brands being 7-Eleven, under a 10-year agreement with CPALL, and the company-owned Jiffy shops, acquired since 2007 from ConocoPhillips.

Exhibit 96: OR's key non-oil ventures

Brand/Business	Selling point	Rights
Café Amazon	Quality coffee and a variety of other offerings at affordable prices in a lush, green and an environmentally friendly atmosphere that supports community and social awareness	Owner
Texas Chicken	Quality fried chicken at a reasonable price using fresh chicken	Exclusive license
Hua Seng Hong Dim Sum	"Grab and go" quick-service, modern Chinese cuisine	Master franchise
Pearly Tea	Refreshing beverages using premium tea leaves	Owner
7-Eleven	Serve convenience to all communities	Exclusive collaboration with CPALL
Jiffy	Convenience retailer for mobility-lifestyle consumers	Owner
Space management	Good locations with access to high-volume foot traffic and vehicle traffic	Under OR management

Source: OR

With a high EBITDA margin, we project OR's non-oil ventures to be one of the main growth drivers for the company in 2021-23. We project non-oil EBITDA to rise from THB4.5b in 2020 to THB5.4b in 2021, THB7.3b in 2022, and THB8.5b in 2023, driven mainly by EBITDA growth from Café Amazon and its CVS businesses.

Exhibit 97: OR's non-oil businesses



Source: OR

We believe the F&B segment will provide the main EBITDA growth driver for OR's non-oil unit. We project the F&B EBITDA margin to rise from 27.7% in 2020 to 28.3% in 2021, 32% in 2022, and 32.5% in 2023, driven by higher revenue and EBITDA from Café Amazon. We think the EBITDA growth from its CVS', under the 'Others' category, will be slower than the EBITDA growth from the F&B segment, considering the profit-sharing business model with CPALL that applies to most of OR's CVS' in Thailand.

Exhibit 98: EBITDA for non-oil segment (F&B vs others)

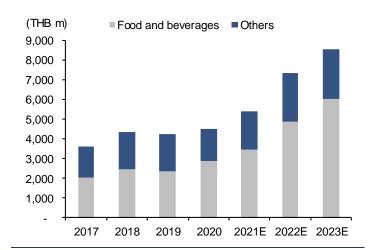
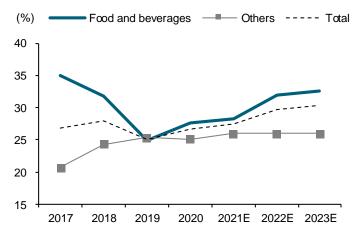


Exhibit 99: EBITDA margin for non-oil segment (F&B vs others)



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Café Amazon: OR's crown jewel. We believe the most striking asset that differentiates OR from its local and overseas competitors is its in-house developed Café Amazon, which is now a flagship F&B under not only OR but also the PTT group. While the actual financial information has not been disclosed for Café Amazon, we have estimated its financial information using the following key assumptions.

Exhibit 100: Key assumptions for Café Amazon's financial analysis

Key assumptions	Unit	2018	2019	2020	2021E	2022E	2023E
Outlets	outlet	2,631	3,172	3,595	4,004	4,432	4,890
Revenue per cup	THB/cup	60	60	62	63	64	65
Number of cups sold in Thailand	m cups	225	264	274	324	399	479
Number of cups sold overseas	m cups	18	21	22	26	34	41
Total	m cups	243	285	295	350	432	519
No. of Café Amazon in-station outlets - Thailand							
Franchised	outlets	1,434	1,556	1,601	1,650	1,720	1,800
COCO outlets	outlets	231	306	358	375	389	439
Total	outlets	1,665	1,862	1,959	2,025	2,109	2,239
No. of Café Amazon standalone outlets - Thailand							
Franchised	outlets	589	793	1,052	1,385	1,753	1,753
COCO outlets	outlets	195	257	299	310	248	548
Total	outlets	784	1,050	1,351	1,695	2,001	2,301
No. of Café Amazon in-station outlets - Thailand	%	67.7	63.5	62.0	61.0	60.0	60.0
No. of Café Amazon standalone outlets - Thailand	%	31.9	35.8	38.0	39.0	40.0	40.0
Financial assumptions							
COGS	% of sales	34	33	32	31	30	30
Depreciation	THB m/outlet	1	1	1	1	1	1
SG&A	% of sales	9	9	9	9	8	8
Interest expense	% of sales	2	2	2	2	1	1
Tax	% of EBT	20	20	20	20	20	20

Sources: OR; FSSIA estimates

Exhibit 101: Café Amazon's revenue and number of outlets

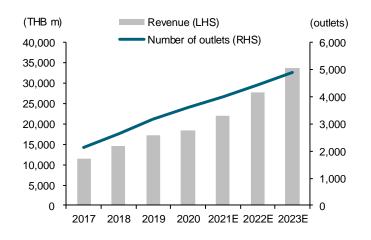
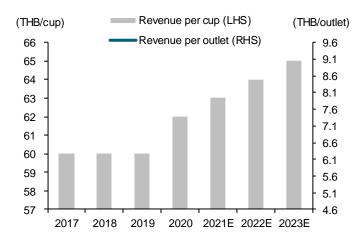


Exhibit 102: Café Amazon's revenue per cup and revenue per outlet



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Based on our assumptions, we project that Café Amazon's revenue will rise from THB18.3b in 2020 to THB33.8b in 2023, growing at a 22.6% CAGR from 2020-23. The key revenue drivers include:

- 1) An expansion in the number of outlets for Café Amazon from 3,575 in 2020 to 4,890 in 2023, growing at a 10.8% CAGR from 2020-23;
- 2) Our assumption of a higher revenue per cup from THB60/cup in 2019 to THB65/cup in 2023, driven by our assumption of higher ticket sales per customer, measured by a per cup basis, according to Café Amazon's strategy of cross-selling the products in its outlets.

Exhibit 103: Café Amazon's annual number of cups sold per outlet in Thailand and overseas

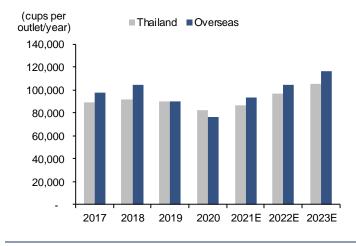
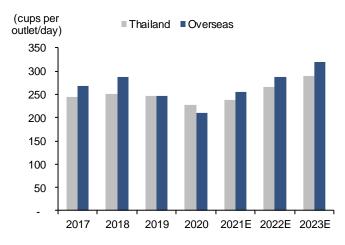


Exhibit 104: Café Amazon's daily number of cups sold per outlet in Thailand and overseas



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

We project the gross margin for Café Amazon to be lower than OR's non-oil segment, though its EBITDA margin should be higher. Most of Café Amazon's outlets are DODO, with lower investment costs for the brick-and-mortar construction works, based on our estimate.

Exhibit 105: Gross profit margin (Café Amazon vs non-oil)

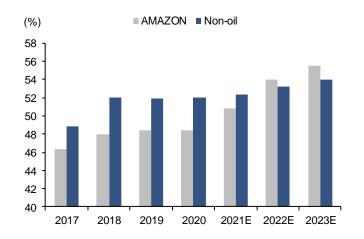
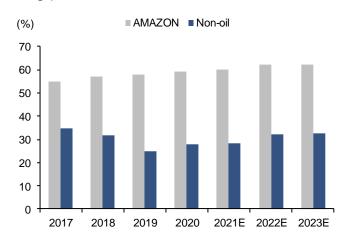


Exhibit 106: EBITDA margin (Café Amazon vs non-oil food & beverage)

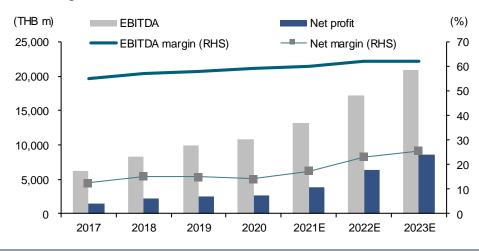


Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimate

We project Café Amazon's EBITDA at 24.7% CAGR and NP at 49.3% CAGR from 2020-22, driven by two key factors: 1) a higher number of outlets; and 2) a higher number of cups sold. We project its NP to grow from THB2.6b in 2020 to THB8.6b in 2023, and its EBITDA to grow from THB10.8b in 2020 to THB20.9b in 2023.

Exhibit 107: Café Amazon's projected net profit, EBITDA, net profit margin, and EBITDA margin



Why is Café Amazon attractive to franchisees?

Based on the investment information from the Café Amazon website, our analysis indicates that investment in Café Amazon for franchisees is highly attractive, with initial investment costs ranging from THB2.4m-3.7m for the small indoor cafés to THB2.4m-4.2m for the large standalone cafés. We found that the estimated payback period for a Café Amazon investment will range from 3.4-4.5 years only, based on our assumptions of 1) a THB60/cup selling price; and 2) an average of 4,500 cups sold per month for small cafés to 6,000 cups sold per month for large cafés. According to management, most Café Amazons owned by franchisees will have a payback period of only 2-3 years, depending on the café locations.

Exhibit 108: Financial analysis of Café Amazon for franchisees (as of 2020)

Format	Unit	Ind	oor	Stand	alone
Size	sqm	>4	40	100-	200
Construction and decoration costs	THB	1,200,000	2,500,000	1,200,000	3,000,000
Fixed initial cost					
Designing cost	THB	40,000	100,000	40,000	100,000
Equipment	THB	779,000	779,000	779,000	779,000
Insurance	THB	100,000	100,000	100,000	100,000
Pre-opening cost	THB	80,000	80,000	80,000	80,000
Franchise fee	THB	150,000	150,000	150,000	150,000
Total fixed initial cost	ТНВ	2,349,000	3,709,000	2,349,000	4,209,000
Depreciation period	year	15	15	15	15
Depreciation expense	THB	156,600	247,267	156,600	280,600
Variable cost					
Royalty fee (% of monthly sales)	%	3.0	3.0	3.0	3.0
Marketing fee (% of monthly sales)	%	3.0	3.0	3.0	3.0
Rental cost for "Point of sales" machine	THB	24,000	24,000	24,000	24,000
Contract period	year		6 renewable	every 3 years	
Assumptions					
Revenue per cup	THB/cup	60	60	60	60
No. of cups sold per month	cup	4,500	6,000	4,500	6,000
Royalty fee (% of monthly sales)	THB	8,100	8,100	8,100	8,100
Marketing fee (% of monthly sales)	THB	8,100	8,100	8,100	8,100
Gross margin	%	35	35	35	35
Analysis of annual financials					
Revenue	THB	3,240,000	4,320,000	3,240,000	4,320,000
Gross profit	THB	1,134,000	1,512,000	1,134,000	1,512,000
Fixed depreciation expense	THB	(156,600)	(247,267)	(156,600)	(280,600)
Variable expense	THB	(194,400)	(194,400)	(194,400)	(194,400)
EBIT	THB	783,000	1,070,333	783,000	1,037,000
Interest expense @ 5% pa	THB	(117,450)	(185,450)	(117,450)	(210,450)
EBT	THB	665,550	884,883	665,550	826,550
Tax rate	%	20	20	20	20
Tax expense	THB	(133,110)	(176,977)	(133,110)	(165,310)
Net profit	ТНВ	532,440	707,907	532,440	661,240
Net margin	%	16.4	16.4	16.4	15.3
Cash flows	ТНВ	689,040	955,173	689,040	941,840
Payback period	year	3.41	3.88	3.41	4.47

Sources: Café Amazon; FSSIA estimates

Café Amazon catalyst #1: A higher number of outlets. We forecast Café Amazon to increase the number of its outlets from 3,150 in 2019 to 4,432 in 2022, with the largest growth coming from franchised outlets in Thailand.

Exhibit 109: Number of Café Amazon outlets by location

	2018	2019	2020	2021E	2022E	2023E
Franchised	2,023	2,349	2,612	3,035	3,473	3,553
COCO outlets	426	563	678	685	637	987
Thailand	1,999	2,449	3,290	3,290	3,740	4,130
Cambodia	110	134	167	170	190	200
Philippines	11	17	18	18	20	25
Laos	54	65	80	70	75	80
Myanmar	5	8	7	10	15	17
Japan	2	2	2	3	5	6
Oman	2	7	6	8	10	12
Singapore	0	3	3	3	3	4
Malaysia	0	1	1	1	2	3
China	0	1	1	1	2	3
Overseas	184	238	285	284	322	350
Total	2,633	3,150	3,575	4,004	4,432	4,890

Sources: OR; FSSIA estimates

OR has increased the number of its Café Amazon outlets quite aggressively since 2017, growing by over 500 new outlets in different geographical locations and platforms, including in the domestic and overseas markets, all in Asia, and via instation and standalone platforms. As of 2019, according to Euromonitor, Café Amazon ranks as the world's sixth largest global coffee brand by number of outlets, as the 12th largest global coffee brand by revenue, and as the number one coffee brand in Cambodia with a 51% market share by revenue.

We project OR's outlet expansion in 2021-23 to mostly occur in Thailand, given its strong brand recognition and large market presence. According to management, OR plans to maintain its 80/20 ratio of DODO/COCO formats for its fuel stations, considering that OR aims to expand the number of Café Amazon outlets at a low cost and fast speed to timely capture the quickly growing demand for cafés inside and outside station forecourts.

Exhibit 110: Number of Café Amazon outlets by ownership type and location

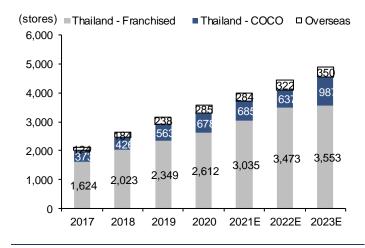
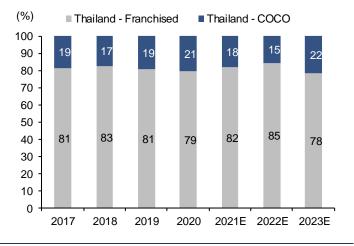


Exhibit 111: Number of Café Amazon outlets by ownership type and location (%)



Sources: OR; FSSIA estimates

According to Euromonitor, the demand for cafés inside forecourts (in-station) is projected to grow from USD388.9m in 2020 to USD643.8m in 2025, growing at 10.6% CAGR, slower than the 21.9% CAGR seen during 2014-19. The key industry demand growth is expected to come from 1) the growth in the number of outlets at 4.6% CAGR in 2020-25; and 2) growth in the number of coffee cups sold at 10.8% in 2020-25.

Exhibit 112: Thailand cafés inside forecourts

	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	Unit	CAGR (2014-2019)	CAGR (2020-2025E)
Café sales	249.7	309.4	363.1	415	388.9	440.2	490.3	541.4	592.8	643.8	USD m	21.9%	10.6%
Number of outlets	2,789	2,957	3,142	3,532	3,567	3,735	3,907	4,087	4,270	4,463	outlets	11.2%	4.6%
Number of coffee cups sold	172	209	236	269	252	288	321	354	388	421	m cups	19.3%	10.8%

Source: Euromonitor

The demand for cafés outside forecourts (standalone) is projected to grow from USD789.3m in 2020 to USD1,219m in 2025, growing at 9.1% CAGR, slower than the 9.2% CAGR seen during 2014-19, according to Euromonitor. The key industry demand growth is expected to come from 1) the growth in the number of outlets at 5.6% CAGR in 2020-25; and 2) growth in the number of coffee cups sold at 5.8% in 2020-25.

Exhibit 113: Thailand cafés outside forecourts

	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	Unit	CAGR (2014-2019)	CAGR (2020-2025E)
Café sales	689	741	836	878	789	868	943	1,026	1,120	1,219	USD m	9.2%	9.1%
Number of outlets	4,333	4,714	5,169	5,251	5,356	5,658	5,974	6,307	6,658	7,022	outlets	4.4%	5.6%
Number of coffee cups sold	573	625	686	727	654	692	732	775	819	866	m cups	8.8%	5.8%

Source: Euromonitor

40

Exhibit 114: Market share by revenue, no. of cups sold, and no. of outlets for cafés inside forecourts in Thailand (%) as of 2019

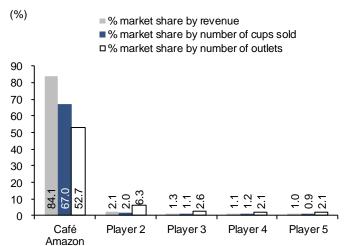
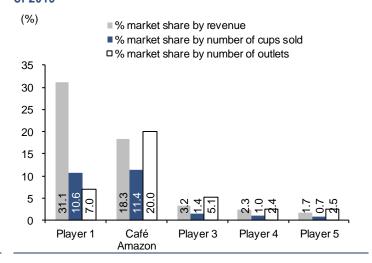


Exhibit 115: Market share by revenue, no. of cups sold, and no. of outlets for cafés outside forecourts in Thailand (%) as of 2019

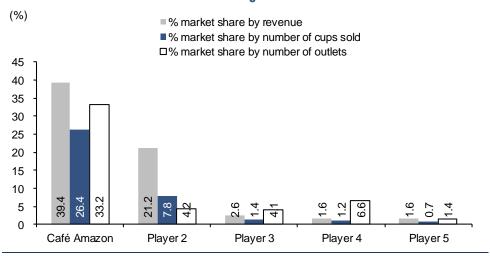


Source: Euromonitor Source: Euromonitor

According to Euromonitor, OR ranked number one in Thailand for cafés inside forecourts, with a total of 1,862 in-station Café Amazon outlets at end-2019. OR ranks second for cafés outside forecourts, with a total of 1,050 standalone Café Amazon outlets at end-2019. However, overall, OR's Café Amazon ranked as the top café in terms of the percentage of market share in revenue, the number of cups sold, and the number of outlets as of end-2019.

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Exhibit 116: Thailand's café market ranking as of 2019



Source: Euromonitor

We project that by 2022 OR will increase the number of its in-station outlets from 1,959 in 2020 to 2,025 in 2021, 2,109 in 2022 and 2,239 in 2023, adding a total of 280 in-station outlets at an average of 93 stations annually. For the standalone outlets, we forecast OR to increase from 1,351 in 2020 to 1,695 in 2021, 2,001 in 2022, and 2,301 in 2023, adding a total of 950 new standalone outlets at an average of 316 outlets annually.

Exhibit 117: Number of Café Amazon outlets in Thailand (instation vs standalone)

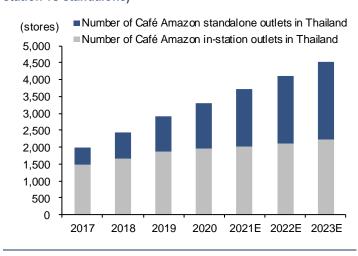
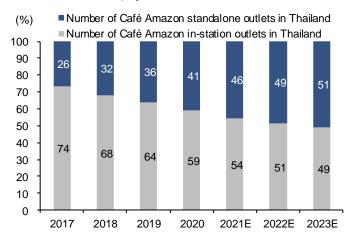


Exhibit 118: Number of Café Amazon outlets in Thailand (instation vs standalone) by %



Sources: OR; FSSIA estimates

Sources: OR FSSIA estimates

We believe this could propel OR to be the market leader for cafés both inside and outside forecourts in Thailand, in terms of the number of cups sold and of outlet numbers by 2023. Our assumption of the 1,230 additional Café Amazon outlets from 2020 to 2023 is in line with management's guidance for OR to add 1,175 new Café Amazon outlets in Thailand in the medium term at an average of 418 outlets annually.

Exhibit 119: Number of Café Amazon in-station outlets in Thailand – breakdown by business type

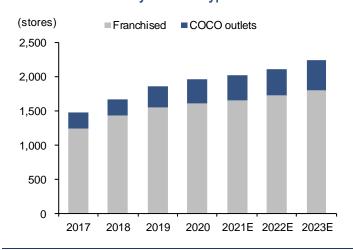
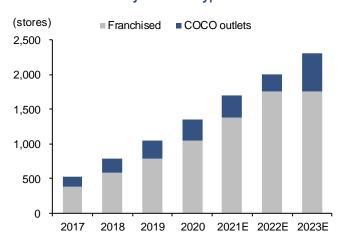


Exhibit 120: Number of Café Amazon standalone outlets in Thailand – breakdown by business type



Source: OR Source: OR

Business model comparison: Fuel stations vs Café Amazon outlets. Employing an asset-light growth strategy, using mostly DODO or franchise-based formats for its new fuel and Café Amazon outlets, we expect that OR will continue to maintain its 80/20 ratio of DODO/COCO for the overall numbers of its fuel stations and Café Amazon outlets in both the domestic and overseas markets in 2020-23.

Exhibit 121: Number of fuel stations in Thailand and overseas by ownership type (%)

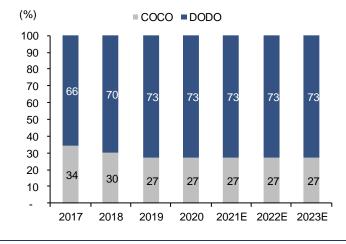
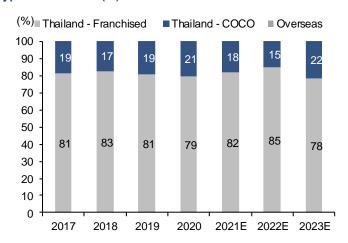


Exhibit 122: Number of Café Amazon outlets by ownership type and location (%)



Source: OR

Note: 'Overseas' includes Myanmar, Japan, Oman and Malaysia Source: OR

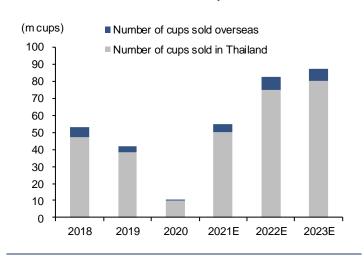
Café Amazon catalyst #2: Higher number of cups sold. We forecast Café Amazon to increase its number of cups sold from 295m in 2020 to 519m in 2023. Most of the growth would be in Thailand, thanks to the higher growth in the number of both standalone and in-station outlets.

We expect the number of cups sold to experience high growth at 55m in 2021, up from 10.8m in 2020 due to the coronavirus impact, and project that OR will see a demand recovery in 2022-23 with the number of cups sold growing by 82.2m in 2021 and 87.2m in 2023.

Exhibit 123: Number of cups sold at Café Amazon



Exhibit 124: Growth in number of cups sold at Café Amazon



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Most of the 2021E growth would be in Thailand at 50m, and estimate 75m in 2022 and 80m in 2023. This is based on the more promising demand growth outlook and the currently small market share of Café Amazon at only 11.4% for outside forecourt cafés by the number of cups sold, based on Euromonitor's data in 2019.

Exhibit 125: Outside forecourt market share by # of cups sold in Thailand (2019)

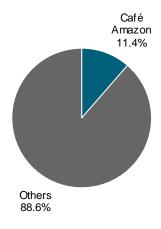
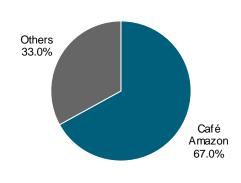


Exhibit 126: Inside forecourt market share by # of cups sold in Thailand (2019)



Source: Euromonitor

Source: Euromonitor

CVS' could provide a surprising upside. On top of Café Amazon, we believe OR's CVS business could provide another key success factor for its fuel stations to attract a higher number of customers to boost the oil sales volume per station and EBITDA from the non-oil segment. CVS EBITDA is classified in the 'Others' category in OR's non-oil segment.

In line with its fuel station numbers, OR has increased its CVS numbers to mostly keep pace with its fuel stations. As of 4Q20, OR had a total of 1,977 CVS outlets vs 1,999 fuel stations in Thailand.

Exhibit 127: OR's convenience store numbers in Thailand

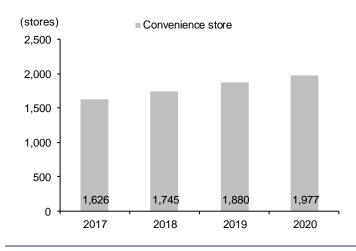
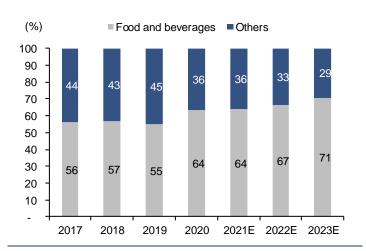


Exhibit 128: Non-oil EBITDA breakdown



Source: OR Source: OR

In OR's fuel stations, there are two CVS formats. First, as of 4Q20, OR had 1,824 7-Eleven outlets operated under a 10-year master collaboration agreement with CPALL to exclusively open 7-Eleven CVS' at OR's fuel stations. The agreement will expire in February 2023. Second, OR operates and owns Jiffy. We estimate that OR operates 130 Jiffy CVS' in Thailand.

Exhibit 129: Number of 7-Eleven CVS' in PTT stations vs number of PTT fuel stations

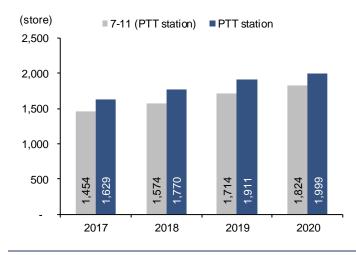
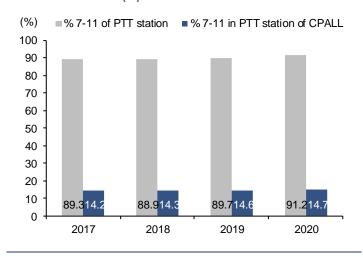


Exhibit 130: Number of 7-11 CVS' in PTT stations vs number of PTT fuel stations (%)



Sources: OR; CPALL; FSSIA estimates

Sources: OR; CPALL; FSSIA estimates

CVS and café expansion plans: OR vs BCP and PTG. Compared to its two key rivals, we believe OR has been catching up with PTG Energy Public Company (PTG) and Bangchak Corporation Public Company Limited (BCP) by increasing the number of its 7-Eleven CVS and Café Amazon coffee outlets.

While PTG has accelerated its 'Max Mart' CVS expansion, in line with the aggressive expansion of its new fuel stations nationwide, PTG lacks the F&B muscle to increase the number of its in-house 'PunThai' coffee shops, given the lower brand recognition than OR's Café Amazon.

BCP has unsuccessfully leveraged its license franchise for the 'SPAR' CVS for its fuel stations, and recently decided to end the SPAR contract in July 2020, instead adopting the Central CVS format with Central Retail Corporation Public Company Limited (CRC) instead.

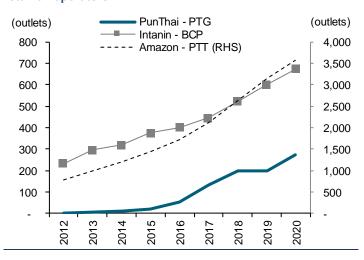
OR has continued to optimise its expansion plans to match the number of its 7-Eleven CVS'. For Café Amazon, OR has recently accelerated its new outlet expansion for both in-station and standalone formats, which we think is a sound growth strategy to leverage the strength of its Café Amazon brand.

Exhibit 131: Number of CVS' inside fuel stations for three key players in Thailand (OR, BCP and PTG)

(outlets) (outlets) PT Max mart - PTG SPAR - BCP 250 2,000 7-Eleven - PTT (RHS) 1,800 200 1,600 1,400 150 1,200 1,000 100 800 600 50 400 200 2019 202

Sources: OR; BCP; PTG's annual reports (2011-20)

Exhibit 132: Number of coffee outlets operated by three key retail oil operators



Sources: OR; BCP; PTG's annual reports (2012-20)

Assessing the risk from CPALL's agreement expiration in Feb 2023. Given that around 89% of the CVS' operated in OR's fuel stations are 7-Elevens with the master collaboration agreement set to expire in Feb 2023, we have analysed the risk for OR in the case where either OR or CPALL decides not to renew the agreement once it expires.

Exhibit 133: Analysis of operating net profit for 7-Eleven stores for OR and CPALL

As of 31 Mar 2020	Revenue/store	Gross profit margin	Gross profit	Sharing GP to CPALL	Operating profit margin	Estimated operating profit
	(THB m/store)	(%)	(THB m)	(%)	(%)	(THB m)
7-11 (Total stores)	24.4	27	6.6	50	3.3	9,660
7-11 (PTT station)	26.8	27	7.2	19	5.9	2,753
Jiffy	23.2	25	5.8	0	5.8	216

Sources: OR; CPALL; FSSIA estimates

Our analysis indicates that there is little difference in the financial returns and NPs generated from the franchise model for 7-Eleven with CPALL and OR's own Jiffy CVS, as our estimated revenue per store for 7-Eleven and Jiffy are similar. It is based on the revenue market share for CVS sales in gas stations in 2019 as estimated by Euromonitor, which includes THB65.2b total CVS sales in gas stations and a revenue market share of 72.1% for 7-Eleven CVS' in OR's stations and a 5.7% revenue market share for Jiffy.

Exhibit 134: Thailand's market ranking of forecourt retailers as of 2019

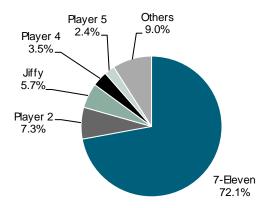
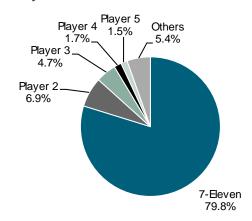


Exhibit 135: Thailand's market ranking of convenience stores by revenue as of 2019



Source: Euromonitor Source: Euromonitor

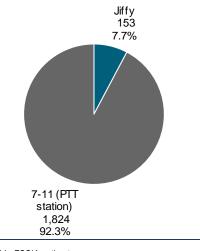
In Thailand, 7-Eleven is the clear leading CVS, commanding a 79.8% market share by revenue and 72.1% market share by revenue for CVS' located inside the forecourts of fuel stations. This could further strengthen 7-Eleven's CVS position with OR's fuel stations to maximise the profitability of both OR and CPALL, in our view.

We believe it is likely that OR will employ its Jiffy CVS for most of its new fuel stations overseas, similar to its 23 Jiffy CVS' integrated with OR's fuel stations in Laos as of 2020 – under the master franchise granted by OR's subsidiary, PTT Retail Management Co., Ltd. (PTTRM) to PTT (Lao) Co., Ltd. (PTT Lao).

Exhibit 136: Number of outlets for PTT's oil stations, Jiffy CVS', 7-Eleven CVS' in PTT's stations, and CPALL's total 7-11 CVS' as of 2020

■7-11 (PTT station) ■ Jiffy □ PTT station ■ CPALL's 7-11 (stores) 16,000 14,000 12,000 10,000 8,000 12,432 6,000 4,000 2,000 1,824 1,999 1,824 PTT's CVS PTT's station CPALL's CVS

Exhibit 137: Number of PTT's CVS' in fuel stations (7-Eleven and Jiffy) as of 2020



Sources: OR; CPALL; FSSIA estimates

Sources: OR; CPALL; FSSIA estimates

Upside from other F&B franchises. According to management, OR plans to open 1) around 20 new outlets p.a. for its Texas Chicken brand during 2021-25, up from 45 outlets in 2019; and 2) open around 19 new Hua Seng Hong Dim Sum outlets during 2021-25, up from 72 outlets in 2019. We think the new F&B stores will further strengthen OR's fuel stations as a one-stop "Living Community", to be one of the top choices for customers to visit for their fuel and food.

Exhibit 138: Number of Texas Chicken outlets in Thailand

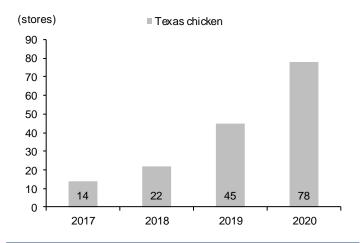
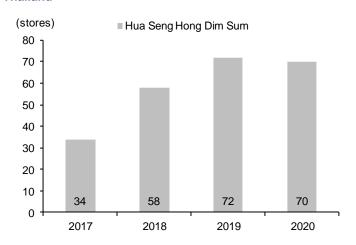


Exhibit 139: Number of Hua Seng Hong Dim Sum outlets in Thailand



Source: OR Source: OR

Space management venture. We believe OR could see a potential revenue upside from its space management business, which generates income from tenants at OR's fuel stations. According to OR's prospectus as of 4Q20, OR's stations host over 210 retail local and international brands, including McDonalds, Burger King, KFC, and A&W.

For its COCO fuel stations, OR receives fixed or variable incomes form tenants, while for its DODO stations, OR receives management fees from tenants.

While, financially, the rental income for OR could be relatively small, we think that, strategically, its space management venture should enhance its fuel stations as a one-of-a-kind concept with a wide variety of F&B stores and brands to choose from.

Exhibit 140: The number of OR's space management outlets in Thailand

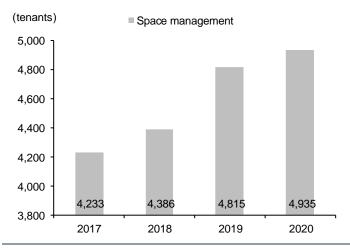
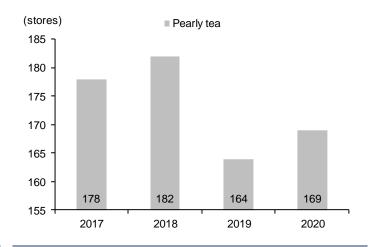


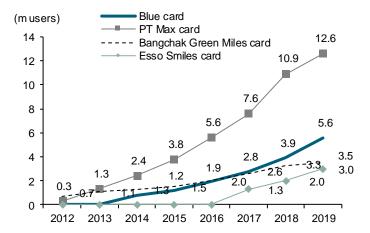
Exhibit 141: The number of OR's Pearly Tea outlets in Thailand



Source: OR Source: OR

Membership card program. With a 6.7m membership in its 'Blue' card as of 3Q20, up from 5.6m at end-2019, OR stands as the second largest retail oil station membership network after PTG's 12.6m membership at end-2019 (source: PTG's annual report). We think OR's attractive rewards and promotions using the points earned via its Blue card from filling fuel at OR's stations should further enhance customers' brand loyalty and increase OR's oil sales volume and non-oil EBITDA.

Exhibit 142: Membership card numbers by operator



Source: PTG; BCP; ESSO; PTT's annual report (2012-18), OR's filing (2019)

Exhibit 143: OR's Blue card membership

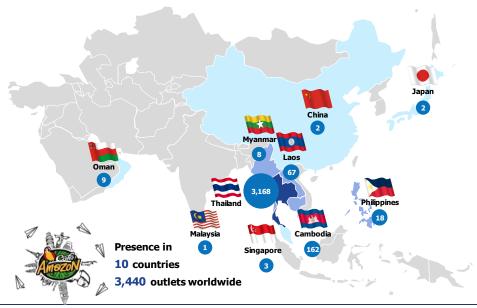


Source: OR

Driver #3: Overseas expansion leveraging its community-driven fuel station platform

With OR's one-stop service concept of "Living Community" fuel stations to satisfy the lifestyles of modern consumers, we believe the company has a strong growth potential to expand its business footprint overseas, not only as a leading fuel station operator, but also as an F&B operator to penetrate new markets and grow its presence in existing markets.

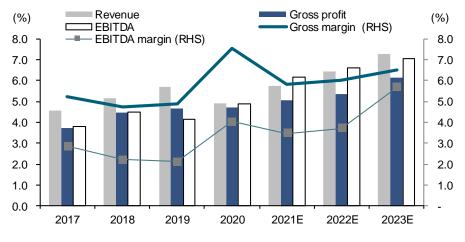
Exhibit 144: Presence of Café Amazon as of 3Q20



Source: OR

According to PTT's website, OR's fuel stations present a lifestyle rather than a service experience, offering 1) CVS' containing necessities for road trips, or simply providing convenient shopping opportunities near OR's fuel stations; 2) F&B led by Café Amazon to quench visitors' thirst; 3) auto services via its FIT Auto shops; and 4) banking services at select locations.

Exhibit 145: Key financials as % of total vs gross margin and EBITDA margin of OR's international segment



As of 2020, OR's international unit remained small, generating lower than 6% of total revenue (4.9%), gross profit (4.7%) and EBITDA (4.9%), and had a 7.6% gross margin and a 4.0% EBITDA margin. We believe OR still has a significant growth opportunity overseas and project its EBITDA from the international segment to grow from 4.9% of total EBITDA in 2020 to 7.1% in 2023 (from EBITDA of THB861m in 2020 to THB1.7b in 2023).

Exhibit 146: Revenue from OR's international segment – breakdown by major country

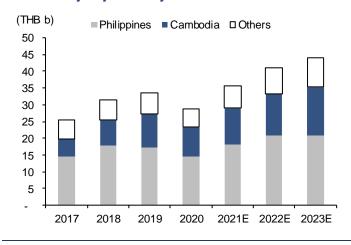
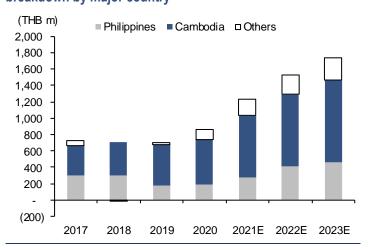


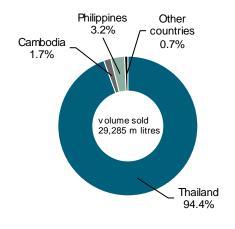
Exhibit 147: EBITDA from OR's international segment – breakdown by major country

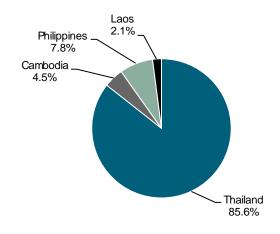


Source: OR Source: OR

Currently, OR is focused on Cambodia and the Philippines, concentrating its fuel sales volumes and its fuel station presence on these two key countries. While OR has been highly successful in Cambodia with its Café Amazon venture (134 outlets at end-2019 and 167 at end-2020), it has also succeeded with its fuel station business by expanding its NFS in the Philippines from 122 in 2017 to 181 in 2020, representing 54% of OR's total fuel stations overseas at 335 as of end-2020.

Exhibit 148: Fuel sales volume breakdown by country (2019) Exhibit 149: Number of fuel stations by country (2020)





Source: OR Source: OR

50

Cambodia remains OR's key growth market for Café Amazon. As of 2020, OR had 167 Café Amazon outlets in Cambodia, representing 58.6% of its total overseas outlets, but still accounting for only 54.7% of OR's total Café Amazon outlets.

Exhibit 150: Café Amazon outlets – breakdown by major location (2020)

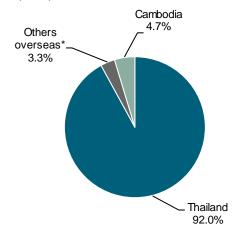
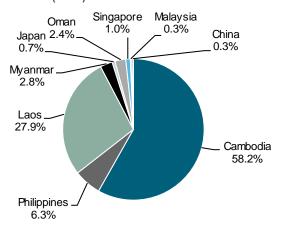


Exhibit 151: Café Amazon outlets overseas – breakdown by major location (2020)



*Note that: "Other overseas" includes the Philippines, Laos, Myanmar, Japan, Oman, Singapore, Malaysia and China

Source: OR

Source: OR

According to Euromonitor, Cambodia still has a strong growth potential for cafés inside and outside station forecourts. Café sales inside forecourts are projected to grow at 8.9% CAGR and cafés outside forecourts are expected to grow at 7.4% CAGR from 2020-25.

Exhibit 152: Cambodia cafés inside forecourts

	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	Unit	CAGR (2014-2019)	CAGR (2020-2025E)
Café sales	8	25	31	38	39	42	46	50	55	59	USD m	95.6%	8.9%
Number of outlets	95	162	192	227	238	253	268	284	301	318	outlets	29.3%	6.0%
Number of coffee cups sold	3	11	13	17	17	20	23	26	30	36	m cups	90.6%	14.0%

Source: Euromonitor

Exhibit 153: Cambodia cafés outside forecourts

	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	Unit	CAGR (2014-2019)	CAGR (2020-2025E)
Café sales	48	89	98	106	106	115	124	132	142	152	USD m	40.3%	7.4%
Number of outlets	319	485	550	428	617	673	720	756	778	794	outlets	29.9%	5.2%
Number of coffee cups sold	24	42	53	68	67	83	103	127	155	188	m cups	46.7%	23.0%

Source: Euromonitor

As Café Amazon is currently a leading café brand in Cambodia for both cafés inside and outside forecourts, we believe OR will continue its strong EBITDA growth in the country. According to OR's expansion plan, it plans to add over 350 new fuel stations and over 310 Café Amazon outlets in Cambodia, the Philippines, and Laos, leveraging its successful "Living Community" fuel station and Café Amazon platforms.

Exhibit 154: Cambodia market ranking of cafés inside forecourts as of 2019

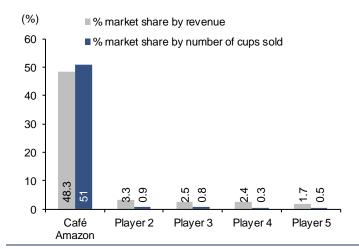
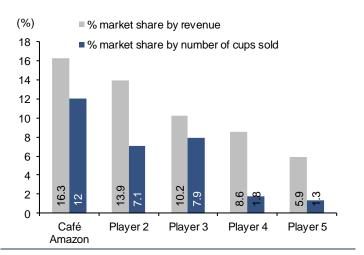


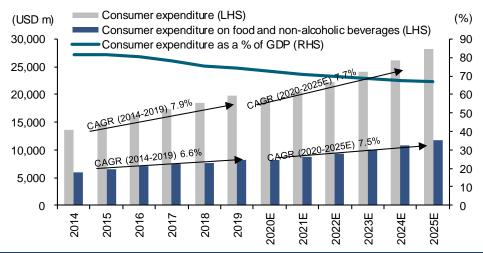
Exhibit 155: Cambodia market ranking of cafés outside forecourts as of 2019



Source: Euromonitor Source: Euromonitor

Euromonitor forecasts that consumer expenditures on food and non-alcoholic beverages will grow at 7.7% CAGR and 7.5% CAGR in 2020-25, respectively, indicating that the growth opportunity for OR's Café Amazon remains promising in Cambodia. The country has accepted Café Amazon as a premiere F&B brand, based on management's guidance.

Exhibit 156: F&B consumption in Cambodia



Source: Euromonitor

The Philippines could be a growth engine for OR's overseas fuel station venture.

While we think it is less likely for OR's Café Amazon to succeed in the Philippines, given the oligopolistic market structures for cafés both inside and outside forecourts, we think OR has already been somewhat successful in penetrating into the caféoutside-forecourt market, with a current market share of 1.4% and 1.5% by revenue and number of cups sold, respectively.

Exhibit 157: Philippines market ranking of cafés inside forecourts as of 2019

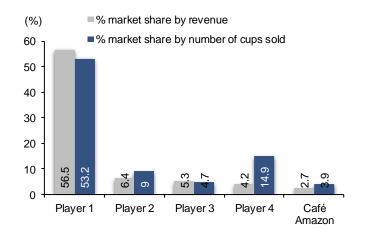
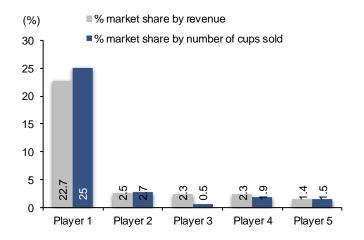


Exhibit 158: Philippines market ranking of cafés outside forecourts as of 2019



Source: Euromonitor Source: Euromonitor

It is interesting to note that in the Philippines, unlike in Thailand and Cambodia, the USD11m market value of cafés inside forecourts (in-station) is much lower than the USD1.03b market value of cafés outside forecourts in 2019. We believe this reflects the different consumer behaviour of Filipinos vs Thais and Cambodians, leading us to believe that Café Amazon has a low chance to succeed in the Philippines, in the cafés inside forecourts category.

Exhibit 159: Philippines cafés inside forecourts

	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	Unit	CAGR (2014-2019)	CAGR (2020-2025E)
Café sales	10	10	11	11	9	9	10	11	12	12	USD m	4.8%	7.5%
Number of outlets	56	58	60	62	63	65	67	69	71	74	Outlets	2.5%	3.2%
Number of coffee cups sold	3	3	3	3	3	3	3	3	3	4	m cups	5.5%	7.1%

Source: Euromonitor

Exhibit 160: Philippines cafés outside forecourts

	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	Unit	CAGR (2014-2019)	CAGR (2020-2025E)
Café sales	899	947	990	1,031	801	836	894	952	1,011	1,074	USD m	5.5%	6.0%
Number of outlets	8,487	8,599	8,718	8,844	8,721	8,779	8,833	8,883	8,928	8,974	Outlets	1.1%	0.6%
Number of coffee cups sold	252	258	264	271	211	218	227	235	243	252	m cups	2.1%	3.7%

Source: Euromonitor

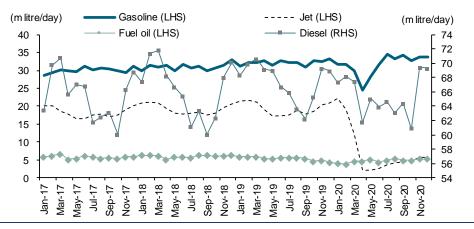
Pandemic-driven global travel bans and lockdowns have disrupted industry demand

In the past 20 years, while there were many pandemics that temporarily impacted the oil demand, none has come as close to the current COVID-19 outbreak in its far-reaching negative impact on the global demand for not only oil but also all products and services, supply chains, and transportation systems globally.

The major pandemics that impacted the oil demand include the Severe Acute Respiratory Syndrome (SARS) in 2002-03, the Bird Flu (Influenza A H5N1) in 2004-07 in the Asia Pacific region and the Middle East Respiratory Syndrome (MERS) in 2012-14 in the Middle East. However, these three pandemics had small and short-term impacts on the global oil demand, given their limited outbreak areas and the short periods of the pandemics.

COVID-19, which started around Feb 2020 in Wuhan, China, has unprecedentedly disrupted the global demand for everything from potato chips to microchips, and especially the global demand for oil, given the tourism disruptions as a result of the global bans on international travel to prevent the further spread of the coronavirus.

Exhibit 161: Thailand's fuel demand



Source: DOEB

In Thailand, while the oil demand had dropped in Feb 2020 due to the limited international flights and China's lockdown, the demand for gasoline and diesel have recovered to close to, or even surpassed, pre-COVID-19 levels since July 2020. Only the jet demand has remained at a depressed level due to the ongoing ban on international flights into Thailand.

Exhibit 162: Key upside and downside risks to the demand for oil products

Key event	Upside risk	Downside risk	Base scenario
COVID-19 outbreak	A COVID-19 vaccine or treatment is developed by end-2020. Government lockdowns are eased sooner than expected. No second wave of the COVID-19 outbreak.	A second global/regional wave of COVID-19 infections occurs, further lockdowns are enforced to contain the spread of the virus.	A COVID-19 vaccine is developed by 1Q21. Government-mandated lockdowns are gradually relaxed from May 2020 onward.
Economic recession (GDP impact)	Faster-than-expected economic recovery in 2020 and 2021, partially driven by government stimulus.	A deeper economic recession as a result of labour markets, government debt or future outbreaks. Geopolitical tensions and trade disputes could also hinder recovery.	The global economy could experience a GDP contraction of -4.0% in 2020 and rebound in 2021 to a growth rate of 5%. Economic recovery expected to begin in 2H20.
Changing consumer behaviours in the "new normal"	Increased preference of personal vehicle usage as opposed to public transport.	Higher-than-expected "telecommuting" adoption, increased consumer aversion toward international tourism and overseas flights.	Consumer and industrial behaviours return to 2019 habits for the most part, changes in certain demand areas offset effects in other sectors.
Longer-than-expected international travel restrictions	Increased demand for road fuels as consumers prefer the usage of road transport. Air travel restrictions lifted earlier than expected.	Delayed lifting of international travel restrictions, allowing for the recovery of flight numbers only until 2023.	International travel restrictions are gradually lifted starting from 1H20. Recovery for the aviation sector lags that of road fuel, however demand for jet/kerosene rebounds to 2019 levels by end-2021.

Source: Wood Mackenzie

As Thailand's leading providers of oil and F&B products under its retail fuel station business, mainly in Thailand, OR has suffered from the weaker demand for oil products in its retail, commercial and international segments. However, we think that since 3Q20 OR has seen demand recoveries for most of its products, except for jet

fuel, which we think will continue to be weak into 2021 due to the continued ban on international flights and tourism.

Industry outlook remains promising for retail oil stations and F&B

The retail fuel station industry and oil product markets have been clearly led by OR in Thailand, as OR is one of PTT's leading subsidiaries for the downstream retail fuel station business, which includes the refined oil products of diesel and gasoline, as well as LPG for transportation. We have classified OR's businesses into three main industries: 1) retail oil stations; 2) other oil & gas products under OR's commercial unit; and 3) non-oil ventures, including F&B, CVS, and other related businesses.

Oil market in Thailand

Thailand is a net importer of crude oil but an exporter of refined oil products, thanks to the government's policy back in the 1990s to promote the heavy industry of downstream refineries and petrochemical products to capitalise on the country's oil & gas exploration and production in the 1980s in the Gulf of Thailand. Hence, the country currently imports over 0.8m bbls per day (bpd) of crude oil annually as a key feedstock for around a 1.2mbpd refinery capacity. Most of the crude imports are from countries in the Middle East, given the close proximity and the crude quality fit for most Thai refiners.

Given the excess refinery capacity of 1.2mbpd vs a demand of only 0.8-0.9mbpd in the domestic market, Thailand exports excess refined oil products, mostly diesel and fuel oil, to neighbouring countries, including those countries with shortfalls in refinery capacity like Cambodia, Laos, Malaysia, Vietnam and Singapore – the regional oil trading hub in Southeast Asia.

Exhibit 163: Thailand imported oil products – approximate volume by source country as of 2019

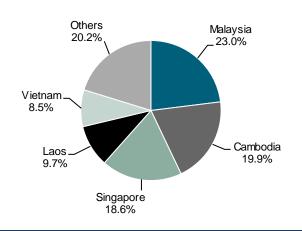
Others 35.7%

China 16.3%

Kuw ait 9.1%

Saudi Arabia 9.3%

Exhibit 164: Thailand exported oil products – approximate volume by destination country as of 2019



Source: Wood Mackenzie

Source: Wood Mackenzie

According to Wood Mackenzie, Thailand's demand for oil declined by 4.9% y-y to 83.6b litres in 2020 due to the economic slowdown as a result of COVID-19. However, the oil demand is projected to recover by 8.5% y-y in 2021 and 2.4% y-y in 2022 to reach 92.8b litres. Post 2022, the total product demand is forecast to grow from 92.8b litres in 2022 to 101.1b litres in 2035, growing at 0.7% CAGR.

The oil demand for road transportation is forecast to account for the largest share of the country's total oil consumption at 46.9% for 2022-35, followed by aviation at 28.8%, with the residential, commercial, and agricultural sector (RCA) at 8.8% and the remaining sectors (industrial, petrochemical feedstock, marine fuels, and other sectors) at 15.4%.

Exhibit 165: Demand breakdown by business (2020-24E)

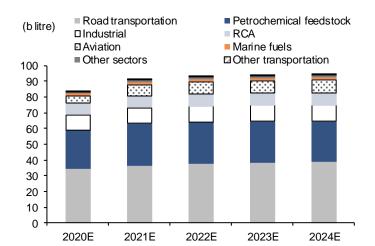
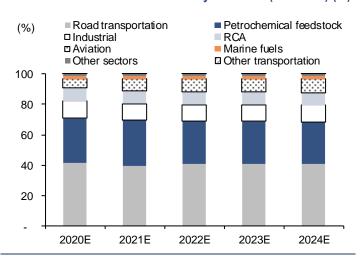


Exhibit 166: Demand breakdown by business (2020-24E) (%)



Source: Wood Mackenzie

Source: Wood Mackenzie

By product, gasoline and diesel (gasoil) combined are forecast to account for 46.4% of the overall demand growth in 2022-35, followed by jet fuel, naphtha (petrochemical feedstock), and refinery fuel at 28.8%, 18.3%, and 2.0%, respectively.

In Thailand there are three major fuels used for transportation. While diesel is the main fuel for commercial transportation, with a demand of over 60mlpd in 2019, gasoline is a major fuel for passenger transportation with a demand in the range of over 20mlpd in 2019. LPG demand for transportation in Thailand has continued to shrink since 2017 due to the less competitive price compared to gasoline and diesel.

Exhibit 167: Demand breakdown by product (2020-24E)

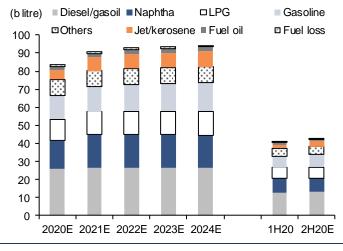
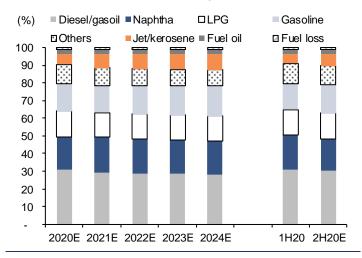


Exhibit 168: Demand breakdown by product (2020-24E) (%)



Source: Wood Mackenzie

Source: Wood Mackenzie

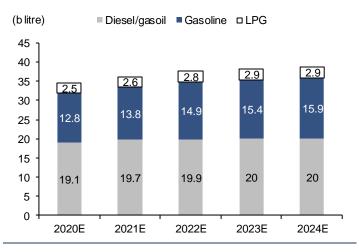
Road transportation demand consumption. Thailand ranks as the third largest country in Southeast Asia for domestic road fuel consumption, with a market size of 34.9b litres in 2019. The demand for road transportation is projected to decline by 1.4% y-y to 34.5b litres in 2020 due to the impact of COVID-19 but recover in 2021 onward as the country reopens its economy, based on Wood Mackenzie's forecast.

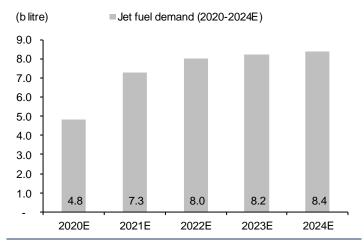
Near-term demand is expected to rise gradually by 4.7% y-y to 36.1b litres in 2021 and by 4.3% y-y to 37.7b litres in 2022. Post 2022, the demand for road transportation is expected grow to 41.5b litres by 2035, growing at 0.8% CAGR in 2022-35. Excluding LPG, the demand for gasoline and diesel, the two main fuels sold in fuel stations, is expected to increase from 34.8b litres in 2022 to 38.7b litres in 2035, based on Wood Mackenzie's forecast.

Jet fuel demand collapse due to COVID-19 in 2020. During 2000-19, the demand for jet fuel in Thailand grew at 3.9% CAGR, driven by rising tourism and higher international flight traffic in Thailand. In 2020, the jet fuel demand dropped by 32.5% y-y, from 7.1b litres in 2019 to 4.8b litres in 2020 due to the COVID-19 impact, but is projected to gradually recover in 2021-22, growing at 50.8% y-y to 7.3b litres in 2021 and at 8.9% y-y to 8b litres in 2022, based on Wood Mackenzie's forecast.

Post 2022, the jet fuel demand is projected to reach 10.3b litres by 2035, growing at 2% CAGR in 2022-35. While Thailand's GDP and tourism growth are expected to continue supporting the future jet fuel demand, increased fuel efficiency, saturated growth in the number of kilometres travelled by passengers and load factor are likely to weigh on the demand growth for aviation. However, Wood Mackenzie still believes that jet fuel demand will be one of the fastest growing oil products amongst the country's total oil demand.

Exhibit 169: Fuel demand for road transportation (2020-24E) Exhibit 170: Jet fuel demand (2020-24E)





Source: Wood Mackenzie

Source: Wood Mackenzie

Flatter LPG demand outlook from 2020-35. LPG demand grew at 5.8% CAGR in 2000-19, driven by the rising demand for transportation, mainly for taxis. However, the overall LPG demand declined during 2014-16 as a result of lower LPG demand in the road and petrochemical sectors, impacted by the lower oil price to drive down the prices of alternative fuels (LPG vs gasoline and diesel) and feedstocks (LPG vs naphtha from refineries).

Exhibit 171: LPG demand by business (2020-24E)

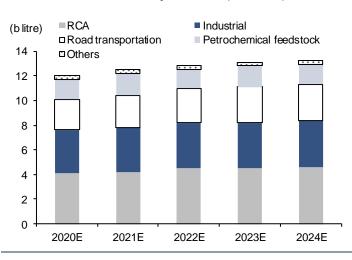
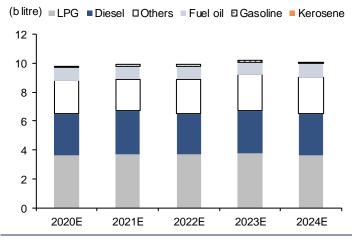


Exhibit 172: Industrial fuel demand by product (2020-24E)



Source: Wood Mackenzie

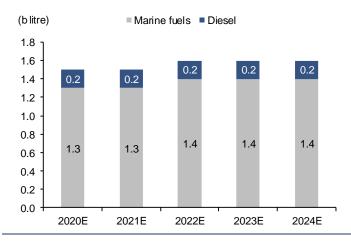
Source: Wood Mackenzie

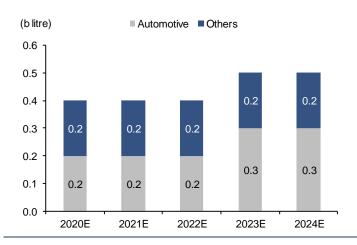
LPG demand dropped by 5.3% y-y in 2020 due to the COVID-19 impact but is projected to recover in 2021-22, growing at 4.2% y-y to 12.5b litres in 2021 and at 3% y-y to 12.9b litres in 2022. For 2022-35, Wood Mackenzie forecasts that LPG demand will remain stable, with an average growth rate of only 0.02% CAGR.

While the LPG demand for RCA, industrial, and road transportation, is projected to rise from 2020-35, the growth should be offset by the demand drop in petrochemical feedstocks, as naphtha will likely partly replace LPG as a better feedstock choice for PTTGC after starting up its 0.75mtpa new naphtha cracker at end-2020.

Exhibit 173: Marine fuels demand by product (2020-24E)

Exhibit 174: Lubricant demand by business (2020-24E)





Sources: Wood Mackenzie Sources: Wood Mackenzie

Marine sector. Oil demand for the marine sector, which includes fuel oil and diesel, is projected to decline by Wood Mackenzie from 2020-35. Near-term demand was projected to drop by 2.6% y-y in 2020 due to the COVID-19 impact but rise by 2.8% y-y to 1.6b litres in 2021 and by 3.4% y-y in 2022, driven by government-backed economic initiatives. However, post 2022, Wood Mackenzie forecasts that demand for the marine sector will decline at -0.3% CAGR in 2022-35, caused by LNG penetration in the marine fuels sector.

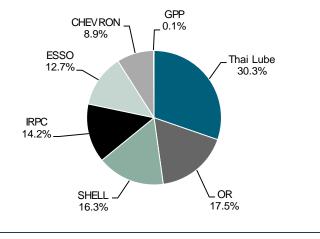
Asphalt market remains promising in 2021-22. Thailand's asphalt market amounted to 1b litres in 2019, and grew at 3.9% CAGR in 2010-19, according to the DOEB. Wood Mackenzie estimates that asphalt demand dipped by 3% y-y in 2020 due to the national lockdown that effectively reduced construction activities, but expects it to recover in 2021-22 as the country ramps up construction works for many megaprojects initiated and approved by the government.

Asphalt demand is projected to grow at 5.2% y-y to 1b litres in 2021 and at 9.8% y-y to 1.1b litres in 2022. Post 2022, the asphalt demand in Thailand is projected to grow at 3.3% CAGR in 2022-35 to reach 1.8b litres by 2035. Most of the demand growth for asphalt in Thailand should be driven by the infrastructural development works under the Eastern Economic Corridor (EEC) investment scheme to add new railways, roads, motorways, airports and ports.

Exhibit 175: Asphalt demand (2020-24E)

(b litre) 1.3 1.2 1.2 1.1 1.1 1.0 1.0 1.0 1.0 1.1 1.2 1.2 0.9 2023E 2020F 2021E 2022F 2024F

Exhibit 176: Thailand's asphalt market share by sales volume in 2019



Source: Wood Mackenzie Source: DOEB

FINANSIA

Thailand's retail fuel station industry

The retail fuel station industry in Thailand is more or less an oligopoly, dominated by a few players with a combined market share of over 80%. OR has long been a leading player in Thailand's retail fuel station industry, commanding over one-third of the market share by oil sales volume and by the number of fuel stations.

Among all six major players, OR, along with two other oil companies, Esso Thailand and Star Petroleum Refining (SPRC TB, BUY, TP THB12), have operations in the full value chain of the downstream oil business, including imports/exports, storage, wholesales, and retail via their networks of retail fuel stations nationwide.

PTG has recently emerged to be one of Thailand's leading operators of retail fuel stations, expanding the amount of its fuel stations at the fastest pace during the past five years, mainly along secondary roads and in smaller cities, the areas mainly overlooked by incumbent players due to lower vehicle traffic.

ESSO and Shell are two dominant premium oil product operators in the retail fuel station sector. While premium oil products, mainly unleaded gasoline, high octane gasohol (blending products of ethanol or methanol with gasoline produced from refineries), have been a niche market with only 10-15% of the total oil demand, the marketing margin of these premium oil products is 2-5x higher than that of normal oil products at their retail selling price.

BCP is Thailand's third largest player in the retail fuel sector with a 14.9% market in 2019. Using its "Greenovative" strategy to emphasize its green and innovative experience for customers, BCP has been successful in maintaining its oil sales volume market share. However, BCP was struggling to develop its CVS business using the licensed SPAR brand, and decided to quit and change to CVS' operated with Central Group at its fuel stations.

Exhibit 177: Summary of key players in Thailand's retail fuel market in 2019

Participant	Market share breakdown by sales volume through service stations (Position)	Retail sales volume through service stations	Number of service stations		Va	alue chain -		
	(%)	(b litre)	(station)	Refining	Import/Export	Storage	Wholesale	Retail
OR	38.9 (1)	11.2	2,147		/	1	/	/
PTG	15.3 (2)	4.4	1,883			1	/	1
ВСР	14.9 (3)	4.3	1,201	1	/	1	/	/
SHELL	11.4 (4)	3.3	538		/	/	/	/
ESSO	11.0 (5)	3.2	638	/	/	/	/	/
CHEVRON	3.8 (6)	1.1	357	/	/	/	/	/

Note: Market share includes gasoline, diesel and LPG sales volumes sold through retail stations only Sources: DOEB; OR; PTG; BCP; SHELL; ESSO; CHEVRON

Industry oil product tax structure. Thailand has long imposed excise taxes at different rates on each refined oil product, depending on the government's policy to decide which product to subsidise in order to promote its consumption in the country using a subsidy from the oil fund. If any products are targeted for reduced consumption by the government, the excise tax rate will be raised, normally at a gradually increased rate, to discourage consumers from using that product and to eventually switch to using other oil products targeted for promotion by the government.

Exhibit 178: Thailand's petroleum excise tax rate on retail oil products

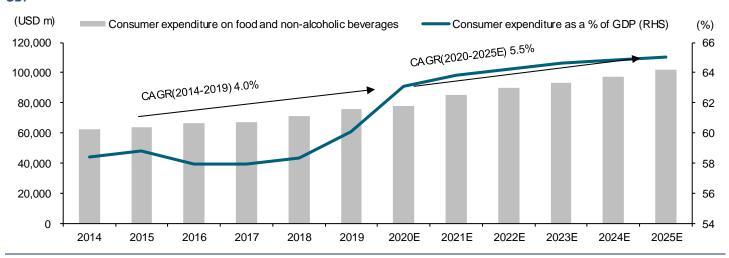
Product	15 May 2019 – 27 October 2020
	(THB/litre)
ULG91	-
ULG95	6.5
Gasohol 91 E10	5.85
Gasohol 95 E10	5.85
Gasohol E20	5.2
Gasohol E85	0.98
Jet/kerosene	0.31
ADO	5.99
ADO B5	-
ADO B10	5.8
ADO B20	5.15
Fuel oil	5% value
LPG	2.17

Source: Energy Policy and Planning Office (EPPO)

Thailand retail market

According to Wood Mackenzie, Thailand's consumer expenditure registered at a healthy CAGR of 5.6% in 2014-19 and is projected to increase from 2020-25 to reach 430.8b in 2025. Consumer expenditures on food and non-alcoholic beverages, including coffee, is expected to grow at a CAGR of 5.5% in 2020-25 to reach USD102.2b in 2025, driven by increasing disposable income leading to a greater demand for higher quality necessities.

Exhibit 179: Thailand's consumer expenditures on food and non-alcoholic beverages and consumer expenditures as % of GDP



Source: Euromonitor Passport – Economics and Consumer 2020 Edition, as of June 2020

FINANSIA

Eastern Economic Corridor is a policy growth engine to promote investment and oil demand.

The EEC Act was enacted in May 2018 to officially launch the Thai government's ambitious infrastructure investment scheme to develop Thailand's eastern provinces into a leading economic zone with connectivity to the rest of ASEAN. Investments are focused on the three eastern provinces of Chonburi, Rayong, and Chachoengsao.

The Thai government has set aside over THB1.9t in funds for 44 megaprojects. We expect infrastructure projects and commercial property developments to boost the demand for cement and asphalt for many new infrastructure projects that are expected to be constructed in the next 5-10 years, according to the EEC's roadmap.

Exhibit 180: EEC public and private investments

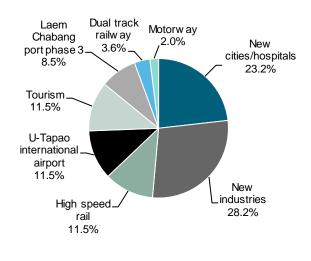


Exhibit 181: EEC investment map



Source: Thailand Board of Investment

Source: Pugnatorius

We believe the EEC will be the key growth driver for the transportation fuel demand (gasoline, diesel, LPG) on new roads, motorways, and highways, for fuel oil on new ports (marine fuel oil and diesel), and for jet fuel on new airports. Hence, we think the new investment projects under the EEC should be the medium- to long-term demand drivers for OR's future demand for its retail fuel stations and the commercial segment for fuel oil, lubricants, asphalt, jet, diesel, and LPG.

Exhibit 182: Thailand's megaprojects – 44 investment projects

	No. of projects	Fiscal budget	Borrowing	PPP*	Investment	Total
	(no.)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)
Approved by the cabinet						
- Under construction	17	169,176	475,268	126,037	11,848	782,329
Motorway: Pattaya-Mabtaput						
Motorway: Bang-pa-in - Saraburi - Nakornratchasima						
Motorway: Bangyai - Kanchanaburi						
- In preparation	12	43,085	286,432	23,679	59,543	412,739
Approved by PPP* pending cabinet approval	2	32,960	168,095		19	201,073
Pending proposal to the cabinet	13	14,569	439,356		76,245	530,170
Total 44 investment projects	44	259,790	1,369,151	149,716	147,655	1,926,311

*Public-private partnership Source: Ministry of Transport

Key assumptions and risks

Our net profit growth forecasts for 2021-23 are based on the following key assumptions:

Sales volume growth

We project that the overall sales volumes for the retail segment, which comprise the three key products of gasoline, diesel, and LPG, will grow at 2.9% y-y in 2021, up from 0.8% y-y in 2020, due to the pandemic impact, and expect the sales volume growth to rise to 2.4% y-y in 2022 and 1.7% in 2023, driven by the demand growth for gasoline at 4%/3%/2% in 2021-23.

We project diesel sales volume growth to be lower than the gasoline's, growing at 2% in 2021-22, and 1.5% in 2023, up from 0.5% y-y in 2020, as we project that the demand for gasoline and diesel in Thailand will remain solid in 2021-23 thanks to the small impact from the COVID-19 outbreak on transportation and travel within Thailand.

LPG sales volume growth declined by 20% y-y in 2020 due to the COVID-19 outbreak but could recover to grow by 10% y-y in 2021 and 3% y-y in 2022.

For the commercial segment, we project the sales volume growth for all except gasoline and diesel to drop in 2021-23. Jet demand growth declined by 25% y-y in 2020 due to the ban on international flights, while we project jet demand growth to rebound to 35% y-y in 2021 and 2% y-y in 2022, as we think that international flights will resume by mid-2021.

We project the sales volume growth for diesel at 1.5-2% y-y in 2021-23, as we think that diesel will be less preferred than gasoline for transportation in Thailand, particularly for passenger vehicles. Meanwhile, we project that diesel demand in Thailand will be gradually replaced by rising EV numbers.

Exhibit 183: Key assumptions for sales volumes

Assumptions	Unit	2020	2021E	2022E	2023E
Total sales volume		27,459	29,406	29,856	30,405
Retail	m litres	12,179	12,528	12,834	13,054
Commercial	m litres	13,889	15,139	15,023	15,051
International	m litres	1,391	1,738	1,999	2,299
Domestic	m litres	26,069	27,668	27,857	28,106
Retail sales volume	m litres	12,179	12,528	12,834	13,054
Diesel	m litres	7,004	7,144	7,287	7,396
Gasoline	m litres	5,137	5,342	5,502	5,612
Others	m litres	39	43	45	46
Commercial sales volume	m litres	13,889	15,139	15,023	15,051
LPG	m litres	3,750	3,936	3,891	3,898
Jet	m litres	2,500	3,028	4,206	4,214
Diesel	m litres	4,722	5,147	3,996	4,004
Fuel oil	m litres	1,597	1,529	1,532	1,535
Gasoline	m litres	833	908	811	813
Others	m litres	486	590	586	587

Fuel station assumptions

We project the NFS to increase by 80-100 stations annually, rising from 2,332 in 2020 to 2,674 in 2023. Thailand could see a higher growth of number of oil stations from 1,999 in 2020 to 2,250 in 2023.

We expect OR to expand the number of its oil stations overseas by c30 stations annually, rising from 333 in 2020 to 424 in 2023. We expect that most of the oil stations would be in the Philippines, followed by Cambodia, Laos, and Myanmar.

We forecast that OR will maintain the proportion of its COCO/DODO business model for its oil stations at around a 20/80 ratio, based on OR's guidance.

We project LPG stations to be relatively stable during 2021-23, as we think OR will focus less on LPG stations and shift its strategic focus to oil stations and non-oil ventures.

Exhibit 184: Key assumptions for retail fuel stations

Assumptions	Unit	2020	2021E	2022E	2023E
Oil stations	number of stations				
Thailand oil stations	number of stations	1,999	2,045	2,120	2,250
COCO	number of stations	372	395	420	430
DODO	number of stations	1,627	1,650	1,700	1,820
% total					
COCO	%	19	19	20	21
DODO	%	81	81	80	82
Thailand LPG stations	number of stations	228	230	220	237
International - oil stations	number of stations	333	368	403	424
Cambodia	number of stations	100	120	140	150
Philippines	number of stations	180	190	200	210
Laos	number of stations	50	53	55	56
Myanmar	number of stations	3	5	8	8
Total COCO/DODO	number of stations	333	368	403	424
COCO	number of stations	90	100	109	115
DODO	number of stations	243	268	294	309
% total					
COCO	%	27	27	27	27
DODO	%	73	73	73	73
Total - oil stations	number of stations	2,332	2,413	2,523	2,674
COCO	number of stations	462	495	529	435
DODO	number of stations	1,870	1,918	1,994	1,824
Growth in number of stations	number of stations	189	119	81	110
Oil stations – Thailand	number of stations	88	46	75	130
Oil stations - international	number of stations	31	35	35	21
LPG - Thailand	number of stations	(19)	2	(10)	0

Price assumptions

We believe the price of retail oil will be relatively stable in the range of THB24-25/litre in 2021-23, since the Thai government is expected to employ the oil fund to stabilise the retail oil price at oil stations. For the commercial segment, we expect the average selling price to rise from THB16.1/litre in 2020 to THB16.5-16.8/litre in 2021-23, driven by our projected higher Dubai crude oil price from USD40/bbl in 2020 up to USD55/bbl in 2021 and USD50/bbl in 2022-23.

Margin assumptions

We forecast gradually higher EBITDA margins for the oil, non-oil, and international segments in 2021-23, driven by 1) the economies of scale and higher operating efficiency for the oil segment; 2) higher contributions from the high-margin Café Amazon and CVS'; and 3) the expansion of the number of oil stations overseas with the integrated oil and non-oil business platform.

Exhibit 185: Key assumptions for margins

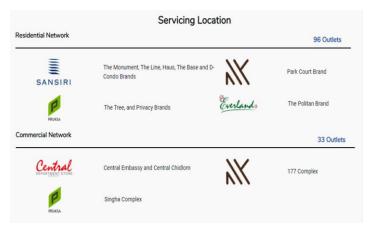
Assumptions	Unit	2020	2021E	2022E	2023E
Price	THB/litre	14.4	19.3	19.2	18.9
Retail	THB/litre	24.0	25.0	25.0	25.0
Commercial	THB/litre	16.1	16.8	16.8	16.5
International	THB/litre	20.6	21.0	21.0	21.0
Dubai oil price	USD/bbl	40	55	50	50
Exchange rate	THB/USD	32	33	33	33
EBITDA margins	%	4.0	3.2	3.6	3.1
Oil	%	3.1	2.3	2.4	2.2
Non-oil	%	26.6	27.4	29.7	24.4
International	%	4.0	3.5	3.7	4.4
Others	%	7.5	11.8	12.6	4.5
EBITDA-oil	%	2.2	2.3	2.4	2.2
Retail	%	1.2	1.8	2.0	0.9
Commercial	%	3.4	3.0	3.0	3.9
EBITDA-non-oil	%	26.6	27.4	29.7	24.4
Food and beverages	%	27.7	28.3	32.0	25.6
Others	%	25.1	26.0	26.0	22.7
EBITDA-International	%	3.0	3.5	3.7	4.4
Philippines	%	1.3	1.5	2.0	1.1
Cambodia	%	6.4	7.0	7.0	9.1

Key risks

We see three key risks to OR's NP outlook. First, we think the highly volatile oil price could lead to an inventory gain/loss risk, which could be significant, to our NP forecasts in 2021-23. However, we think the risk is manageable, given that OR has a diversified business portfolio, both geographically and by product category, and OR's fuel station business growth is more volume-driven vs margin-driven.

Second is the downside risk from EVs to gradually replace the oil demand. We think, however, that OR has a way to manage this risk by installing EV chargers at its fuel stations and/or replace the oil fuelling heads with EV chargers if the demand for EV charging stations is sufficient.

Exhibit 186: SHARGE's service locations



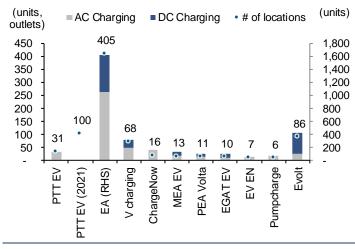
 $Source: \underline{SHARGE}$

Exhibit 188: Charging EV stations at OR's oil stations



Source: OR

Exhibit 187: # of locations with EV infrastructure in Thailand as of March 2021



Sources: EVAT, OR

Exhibit 189: Charging EV stations at OR's oil stations



Source: OR

Exhibit 190: Charging heads at EV charging stations



Exhibit 191: OR EV station locations as of 2020



Source: OR Source: OR

After the Thai government's approval of the standard cost of electricity for all EV charging stations at THB2.63/kWh for the off-peak tariff, which is lower than the average THB3.2/kWh and the on-peak tariff of THB4.3/kWh, the number of EV charging stations has started to increase.

According to the Electric Vehicle Association of Thailand (EVAT), the country now has a total of 647 charging stations as of Nov-20, led by private sector companies. Energy Absolute (EA TB, BUY, TP THB76) has 405 stations, followed by other state-owned enterprise (SOE) operators, including PTT (25 stations), the Provincial Electricity Authority of Thailand (PEA, 11), and the Electricity Generating Authority of Thailand (EGAT, 10).

Exhibit 192: Accumulated hybrid and BEV registrations

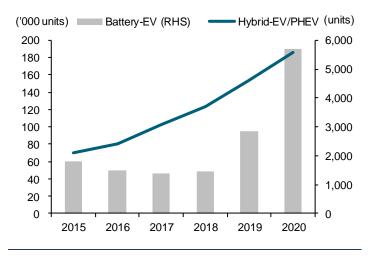
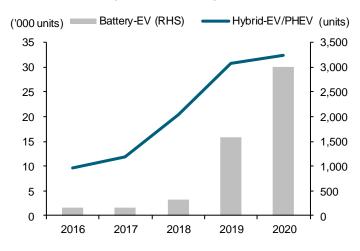


Exhibit 193: New hybrid and BEV registrations



Source: EVAT Source: EVAT

According to EVAT, while the number of battery EVs (BEVs) remains low, with registered BEVs in 2018 to Jun-20 totalling 4,301 – comprising 2,301 E-bikes, 1,731 EV cars, 120 E-buses, and 149 E-tricycles (Tuk-Tuks) – hybrid EVs (HEVs) and plugin hybrid EVs (PHEVs) amounted to 167,767 – comprising 162,192 cars, 5,573 motorbikes, one bus and one truck.

Exhibit 194: Accumulated HEV/PHEV registrations in 2020

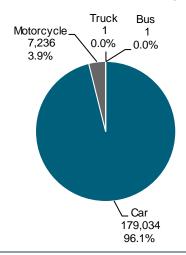
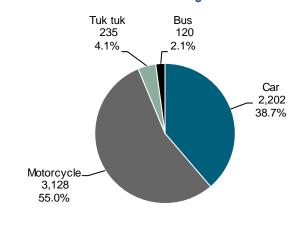


Exhibit 195: Accumulated BEV registrations in 2020



Source: EVAT

Source: EVAT

Exhibit 196: New HEV/PHEV registrations in 2020

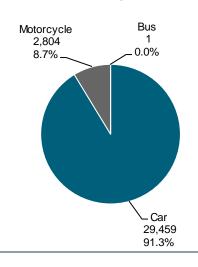
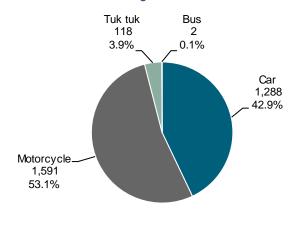


Exhibit 197: New BEV registrations in 2020

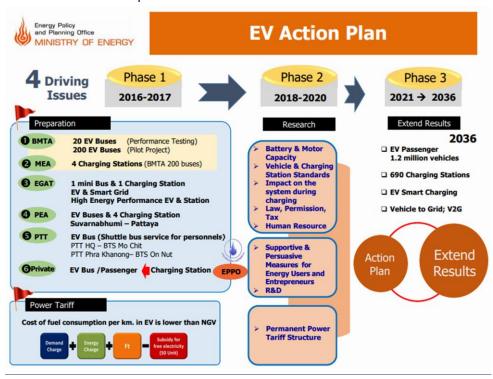


Source: EVAT

Source: EVAT

In the past few years, most EVs were not the fully battery powered BEVs but the semior quasi-battery powered HEVs and PHEVs. However, in 9M20, the number of new BEVs in Thailand jumped markedly to 2,267, accounting for 9.0% of all new EVs, up from 1,572 BEVs (4.9% of total EVs) in 2019 and 325 BEVs (1.6%) in 2018.

Exhibit 198: EV action plan



Source: EPPO

Exhibit 199: EV charging station



Source: EPPO

Financials

We believe OR's financial performance in 2020-22 will not only enter a sustainable growth trajectory, but its margin could improve over time due to its highly integrated, fully synergized business model of the "Living Community" to create value for shareholders and stakeholders.

Net profit growth to resume in 2021-22 after a weak 2020

After OR's NP weakened by 19.3% in 2020, dragged down by the impact of the COVID-19 pandemic, we project OR's NP to experience growth of 21.8% CAGR from 2020-23, driven by the expansion of its fuel stations and Café Amazon outlets in both Thailand and overseas, the oil demand recovery in 2H20 into 2021-22, and the projected increase in high-margin non-oil revenue growth.

While OR's revenue dipped by 26.3% y-y in 2020 due to the COVID-19 outbreak and lower oil price, we project its revenue to rebound by 42.7% y-y in 2021, 2.6% y-y in 2022, and 1.8% y-y in 2023, driven by an increase in oil sales volumes for its retail and commercial segments, as well as an increase in non-oil revenues, mainly from the F&B segment.

Exhibit 200: Net profit and net profit margin projections

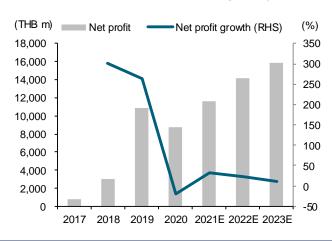
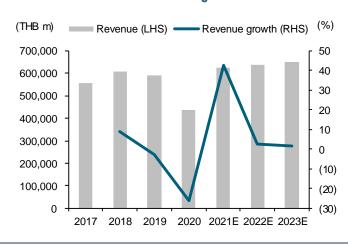


Exhibit 201: Revenue and revenue growth



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Margin trend in 2020-23. We believe OR's net margin and EBITDA margin will trend upward in 2021-23, driven by a higher proportion of high-margin revenues from its non-oil businesses, particularly Café Amazon. We believe OR's overall net margin will be less susceptible to the oil price volatility, based on the projected increase in EBITDA and NP generated from the more sustainable F&B businesses.

Exhibit 202: EBITDA margin by segment

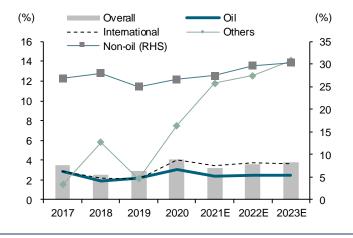
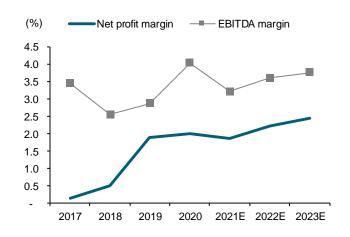


Exhibit 203: Net profit margin and EBITDA margin



Sources: OR; FSSIA estimates

Strong balance sheet to fund future growth

Post IPO, OR's balance sheet is stronger, despite the projected annual capex of THB10.8b in 2020, rising to THB24.8b in 2021, and then declining to THB15.9b in 2022, based on OR's guidance. We project OR's cash and cash equivalents to increase from an estimated THB19b in 2020 to THB54.7b in 2023, even after funding its annual capex.

We forecast its net debt to equity ratio to drop from 0.84x in 2020 to a net cash level in 2021-23, thanks to the IPO cash raised to fund its capex.

Exhibit 204: Cash, debt, and equity

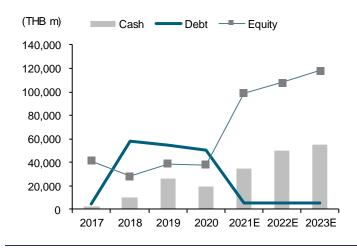
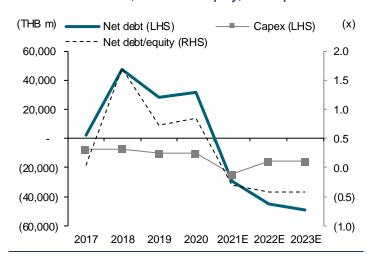


Exhibit 205: Net debt, net debt to equity, and capex



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

The high capex should be sufficiently funded in 2021-23. According to OR's business plan, its capex plan will peak in 2021-22 at THB15.9b-24.8b before declining to THB11.6b-12.9b in 2023-25.

We project its debt to significantly drop from THB50.8b in 2020 down to THB5.5b in 2021, as OR plans to use its IPO cash to partially repay its debt. Equity should similarly improve to THB103.8b post IPO in 2021, driven by the IPO cash and rising operating cash flows that we forecast for 2021-23.

Exhibit 206: Capex plan

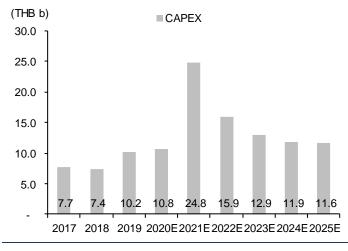
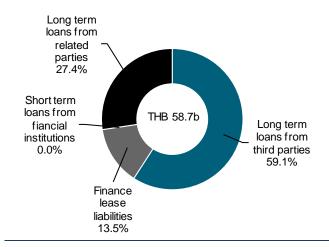


Exhibit 207: Debt breakdown (3Q20)



Source: OR Source: OR

Capex are mostly for the oil business. Of the total 2021-25E capex, over one-third would be for the expansion of its oil business, including the expansion of its fuel station network and commercial marketing, while non-oil capex would be mostly for the expansion of non-oil outlets. Capex for the international segment would similarly be for the expansion of the fuel and non-oil networks, based on our estimate.

Exhibit 208: Capex breakdown by segment

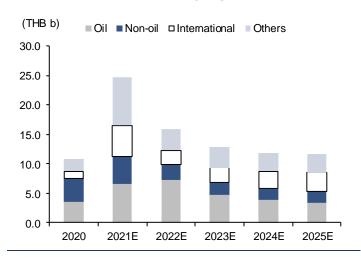
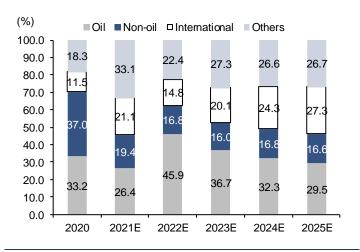


Exhibit 209: Capex breakdown by segment (%)



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

We think OR will spend most of its capital on investments for the expansion of its fuel stations (11.8-25.5% in 2020-25E), the expansion of its retail non-oil outlet network (16.0-37.0%), and the expansion of its fuel station and non-oil outlets overseas (11.5-27.3%). This reflects that OR has quite an ambitious expansion plan to expand its market presence and increase its market share in both the retail oil and non-oil F&B businesses, particularly for the expansion of its Café Amazon outlets, in our view.

Exhibit 210: Capex breakdown by network expansions, other domestic investments, and international expenditures

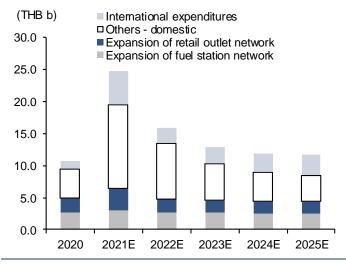
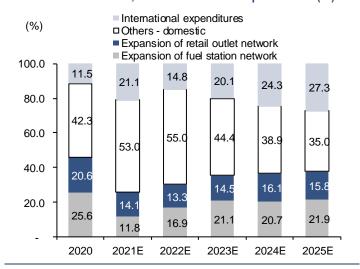


Exhibit 211: Capex breakdown by network expansions, other domestic investments, and international expenditures (%)



Sources: OR; FSSIA estimates

Significantly improving debt service coverage ratio post IPO. Thanks to the IPO cash raised and the projected rising free cash flows, OR's debt service coverage ratio has improved substantially from its low level of 5.6x at end-2020. This should significantly reduce the financial burden on OR and prepare it for the funding of its future growth projects.

Exhibit 212: Net interest bearing debt to equity

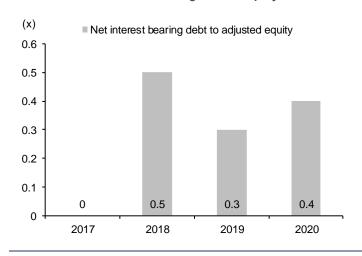
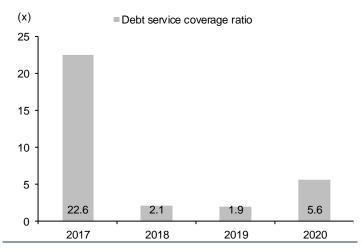


Exhibit 213: Debt service coverage ratio



Source: OR Source: OR

Declining ROE due to higher investments and equity. Post IPO in 2021-23, we project ROEs to decline due to the higher equity base and rising investments that we think will gradually generate higher NPs post 2022. Hence, we do not see the declining ROEs in 2021-22 as a worrying sign of the deteriorating capability of OR's management to generate superior returns for shareholders over the medium term.

Exhibit 214: ROE, ROA, and net profit margin

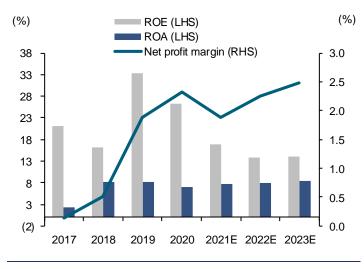
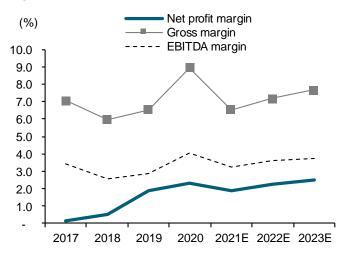


Exhibit 215: Net profit margin, gross margin, and EBITDA margin



Sources: OR; FSSIA estimates

Sources: OR; FSSIA estimates

Dupont analysis. Based on our Dupont analysis, we found that OR's declining ROEs from 2020 to 2023E would mainly be dragged down by the lower leverage (total asset/total equity) that we project to drop from 4.7x in 2019 to 1.7x in 2023, thanks to OR's rising free cash flow and cash raised from its IPO to reduce its leverage ratio.

Furthermore, the gradually lower asset turnover (sales/total assets) that we project to decline from 3.79x in 2019 to 3.27x in 2023 would be driven by the higher asset base that is projected to grow at a faster rate than the sales growth, given that OR is now in a growth phase to expand its presence both overseas and in the domestic market for its fuel stations, F&B and other non-oil ventures.

Exhibit 216: DuPont analysis

	2019	2020	2021E	2022E	2023E
	(THB m)				
Sales	577,134	428,804	613,593	629,451	640,491
Total assets	152,176	144,979	175,222	185,112	195,786
Asset Turnover (x)	3.79	2.96	3.50	3.40	3.27
Operating profit	7,586	7,861	9,558	11,811	13,508
OPM (%)	1.3	1.8	1.6	1.9	2.1
Net profit	10,896	9,963	11,568	14,207	15,883
NPM (%)	1.9	2.3	1.9	2.3	2.5
Shareholders' equity*	32,712	38,059	68,307	103,295	112,840
Leverage	4.7	3.8	2.6	1.8	1.7
ROE (%)	33.3	26.2	16.9	13.8	14.1

^{*}Shareholders' equity is the average of the current year and prior year, in order to reconcile with returns on average ROE Source: FSSIA estimates

Initiate with a BUY call and TP of THB41

We apply the sum-of-the-parts (SoTP) valuation methodology to derive our valuation range for OR, as we think each of OR's business units embraces a different risk-reward ratio at different business cycles. We subtract the projected net debt at end-2021 to derive our final valuation range for OR.

For the valuation of each business unit, we use the forward EV/EBITDA as a key valuation methodology, considering that each business unit has high earnings visibility in 2021-23 due to the less commodity-driven, volume-driven, fee-based NPs generated from its retail fuel stations and non-oil F&B segment.

Exhibit 217: SoTP valuation

2021E	EBITDA	EBITDA margin	EV/EBITDA	Valuation	Value	Comments
	(THB m)	(%)	(X)	(THB m)	(THB/shr)	
Oil business	13,989	2.3	10.9	152,719	17.0	
Retail	6,417	1.8	12.0	77,003	8.6	At 12x FY22E EV/EBITDA
Commercial	7,572	3.0	10.0	75,716	8.4	At 10x FY22E EV/EBITDA
Non-oil	7,311	27.4	22.3	163,269	18.1	
Food & Beverage	4,869	28.3	23.0	111,993	12.4	At 23x FY22E EV/EBITDA
Others	2,442	26.0	21.0	51,276	5.7	At 21x FY22E EV/EBITDA
International	1,525	3.5	15.0	22,881	2.5	At 15x FY22E EV/EBITDA
Others	93	11.8	8.0	740	0.1	At 8.0x FY21E EV/EBITDA
Total	22,917		14.8	339,609	37.7	At 14.8x FY21E EV/EBITDA
Net debt	29,204	nm	nm	29,204	3.2	FY22E net debt
Total value	52,122		7.1	368,813	41.0	

Source: FSSIA estimates

Using the forward EV/EBITDA valuations of its closest local peers – PTG for retail oil, SUSCO for commercial wholesale oil, CBG for F&B, and CPALL for CVS – we apply different EV/EBITDA valuations to each business segment to reflect their different risk-reward characteristics as follows:

Retail oil station business: We employ a valuation of 12x 2022E EV/EBITDA, a premium to PTG's 5-6x 2021E EV/EBITDA, for OR's retail oil valuation. This reflects OR's superior oil sales volume marketing margins, thanks to its higher sales proportion of gasoline and premium oil products compared with PTG's, along with OR's higher annual oil sales volume per station due to its larger average station size and the more prime station locations to attract higher consumer traffic.

Commercial oil business: We use 10x 2022E EV/EBITDA, a premium to SUSCO's valuation of 5-6x 2021E EV/EBITDA, to reflect OR's commercial wholesale oil business, which we think is similar to SUSCO's export and jet fuel wholesale businesses, accounting for two-thirds of SUSCO's revenue (one-third of SUSCO's remaining revenue comes from its retail oil station unit). We believe the premium valuation to SUSCO's is justified, as OR's commercial segment has a more diversified product and market portfolio and is much larger in size than SUSCO's jet fuel wholesales and export units.

Food & beverage: Given OR's strong brand and high margin and growth outlook for F&B, we believe the valuation of 23x 2022E EV/EBITDA – a premium to CBG's 18-20x 2021E EV/EBITDA range – is justified for OR's F&B unit, as we think the F&B unit, particularly its flagship Café Amazon, should generate lower EBITDA and net margins than CBG's.

CVS: For the non-oil others segment (which includes CVS'), we employ a 21x 2022E EV/EBITDA range, a premium to the valuation range of 15-17x 2021E EV/EBITDA for CPALL, the operator of the 7-Eleven shops at OR's fuel stations, to reflect the superior traffic and profitability of CVS' located at OR's fuel stations vs CPALL's other CVS'.

International and others: We apply a low valuation range of 8.0-15x 2022E EV/EBITDA for the valuations of OR's international and other segments, which we think will remain small with a mixed bag of businesses: retail oil stations, non-oil F&B,

and commercial oil sales. This is justified by the higher operational, regulatory, and competition risks of OR's international unit in ASEAN countries.

Exhibit 218: Valuation and financial comparisons of Thai retail peers

		Share	Market	3Y EPS	P	E	R(DE	P/I	3V	EV/ EE	BITDA
Company	BBG	price	Сар	CAGR	21E	22E	21E	22E	21E	22E	21E	22E
		(THB)	(USD m)	(%)	(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)
Berli Jucker*	BJC TB	37	4,770	(4.5)	26.7	22.5	4.9	5.8	1.3	1.3	15.2	14.2
CP All*	CPALL TB	67.75	19,579	(1.8)	34.8	27.8	17.2	19.2	7.0	6.1	21.7	18.8
Siam Global House*	GLOBAL TB	21.1	3,124	11.5	36.0	30.4	14.5	15.8	5.0	4.6	22.7	19.8
Home Product Center*	HMPRO TB	14.6	6,177	1.6	32.7	29.7	26.3	27.3	8.4	7.9	19.1	17.4
Siam Makro*	MAKRO TB	37.5	5,791	8.3	25.4	22.7	30.5	31.0	7.4	6.7	15.3	13.8
Central Retail Corp*	CRC TB	37.25	7,227	(6.8)	45.5	29.4	9.0	13.1	4.0	3.7	16.0	13.1
*FSSIA Coverage			46,667	(0.4)	33.5	27.1	17.1	18.7	5.5	5.0	18.3	16.2
Dohome	DOHOME TB	18.80	1,489	15.4	43.8	36.7	13.6	15.0	5.9	5.3	27.0	23.2
Lawson	2651 JP	5,640.00	5,159	(18.6)	65.0	27.6	3.2	7.5	2.1	2.1	5.8	5.3
Dairy Farm Intl Hldgs	DFI SP	4.35	5,939	4.8	19.5	15.4	22.0	25.2	4.2	3.8	15.6	14.1
Better Life Commercial Cha-A	002251 CH	8.13	1,070	27.7	23.4	18.9	4.4	5.5	1.0	0.9	10.6	9.5
Regional peers			13,656	(15.9)	37.9	24.6	10.8	13.3	3.3	3.0	14.7	13.0
Overall average			60,323	(4.8)	35.3	26.1	14.6	16.5	4.6	4.2	16.9	14.9

Prices as of 26 March 2021

 $Sources: Bloomberg; *FSSIA \ estimates$

Exhibit 219: Valuation and financial comparisons of regional food & beverage peers

Year to Dec	BBG	Share	Market	3Y EPS	F	PE	F	ROE	P	/BV	- EV/ E	BITDA -
Company	code	price	Сар	CAGR	21E	22E	21E	22E	21E	22E	21E	22E
		(LCY)	(USD m)	(%)	(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)
Carabao Group*	CBG TB	134.00	4,265	25.9	30.6	26.7	40.1	38.6	11.3	9.5	21.7	18.8
Osotspa*	OSP TB	34.25	3,275	9.9	26.2	24.4	20.2	21.4	5.3	5.2	18.5	17.2
*FSSIA coverage			7,540	17.9	28.4	25.6	30.2	30.0	8.3	7.3	20.1	18.0
Thai Beverage	THBEV SP	0.72	13,703	7.8	16.0	15.0	18.1	17.5	2.7	2.5	14.1	13.5
Suntory Beverage & Food	2587 JP	4,225.00	11,910	(2.7)	20.9	19.0	7.8	8.2	1.6	1.5	8.0	7.6
Asahi Group Holdings	2502 JP	4,687.00	21,678	2.2	15.2	13.9	10.0	10.1	1.5	1.4	11.9	11.0
Kirin Holdings	2503 JP	2,185.50	18,222	3.5	17.0	14.5	12.3	13.2	2.0	1.8	10.8	9.9
Ito En Ltd	2593 JP	7,140.00	5,811	(6.9)	128.3	77.7	4.8	8.5	5.8	5.6	26.3	21.5
Fraser & Neave Holdings	FNH MK	30.90	2,735	5.2	26.0	24.1	15.4	16.0	3.8	3.5	16.8	15.5
Nestle (Malaysia) Berhad	NESZ MK	136.50	7,724	0.1	51.4	48.1	107.8	113.2	64.7	62.9	31.3	29.6
Monster Beverage Corp	MNST US	91.65	48,404	14.1	34.0	30.2	27.3	28.3	7.1	6.2	24.2	21.9
Peer average			130,187	2.9	38.6	30.3	25.4	26.9	11.1	10.7	17.9	16.3
Overall average			137,726	5.9	36.6	29.3	26.4	27.5	10.6	10.0	18.4	16.7

Prices as of 26 March 2021

Sources: Bloomberg; *FSSIA estimates

Exhibit 220: Valuation and financial comparisons of Thai retail oil station peers

Year to Dec	BBG	Share	Market	3Y EPS	P	E	RC)E	P/E	3V	EV/ EB	ITDA
Company	code	price	Сар.	CAGR	21E	22E	21E	22E	21E	22E	21E	22E
		(LCY)	(USD m)	(%)	(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)
Thailand												
PTT Oil and Retail *	OR TB	33	12,216	(0.8)	34.2	27.9	16.9	13.8	4.0	3.7	18.5	14.3
PTG Energy*	PTG TB	20.5	1,101	10.1	17.8	16.4	22.8	21.6	3.8	3.3	7.0	6.5
ESSO Thailand*	ESSO TB	8.5	946	(213.9)	6.8	6.5	26.3	22.2	1.6	1.3	5.0	4.4
Bangchak Corp*	BCP TB	26.25	1,147	52.4	13.7	6.3	5.6	11.5	0.8	0.7	9.4	7.2
Susco*	SUSCO TB	3.4	109	(3.3)	12.5	10.6	8.3	8.8	1.0	0.9	23.3	18.3
Siamgas & Petro	SGP TB	11.50	679	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thailand avg			15,520	10.1	2.8	2.1	3.7	3.8	0.4	0.4	1.7	1.4
Malaysia												
Petronas Dagangan	PETD MK	19.90	4,767	(1.7)	30.6	25.4	11.4	13.5	3.4	3.4	13.1	12.0
Malaysia avg			4,767	(1.7)	30.6	25.4	11.4	13.5	3.4	3.4	13.1	12.0
Oil stations under cov			3,194	10.1	29.6	24.0	16.9	14.6	3.6	3.3	16.1	12.5
Average (all)			20,286	7.3	9.3	7.6	5.5	6.1	1.1	1.1	4.3	3.9

Prices as of 26 March 2021 Sources: Bloomberg; *FSSIA estimates

Corporate Governance - OR

Board structure

Number of Independent Directors (ID)	6/10
Percentage of IDs on the board	60% (vs SEC guideline of at least 1/3)
ID participation/attendance at board meetings	100%
ID participation in audit/remuneration committees	3/3 in audit committee, and 1/3 in remuneration committees
ID terms (years of service, re-election/replacement procedures)	Not more than 9 consecutive years from the date of first appointment. To re-appoint independent directors after such period, the Board of Directors must duly consider the necessity. At present, no independent directors serve in office longer than the defined period.

Source: OR

Additional comments: 1) In 2020, The Board of Directors approved the revision of the OR Corporate Governance, Ethical Standards, and Code of Business Ethics Handbook and prescribed that the Chairman should be an independent director and shall not serve as a chairman of a sub-committee and that a chairman of a sub-committee should be an independent director. The definition of the word "fraud" was also revised to be more comprehensive of all forms of fraud. 2) The OR Corporate Governance Handbook also requires independent directors to convene at least 1 meeting among themselves per year. In 2020, the independent directors held 1 such meeting.

Audit Practices

Auditor	The Office of the Auditor-General (OAG)
Length of service	Since inception
Reporting incidents	None
Fee track record	OR received a Subject Waiver letter from OAG for 2020 audit fee collection due to the situation of the COVID-19 epidemic, with notification regarding the reduction of the 2020 audit fee to THB 1,950,000. In addition, OR's subsidiaries had the resolution to approve the payment of audit fee to the auditors of the subsidiaries which are OAG, EY Office Limited (EY), KPMG Phoomchai Audit Ltd. Limited (KPMG) and Win Thin & Associates, totaling THB 11,298,472.56. OR paid other non-audit fees to its auditors, which were audit fees for revenue generated from the business operations of Café Amazon at Suvarnabhumi Airport terminal in the amount of
	THB 50,000, and inspection fee for certification and confirmation of the sales volume of oil, fuel and natural gas at Don Mueang Airport and Suvarnabhumi Airport in the amount THB 250,000.
Policy on change of audit firm	None

Source: OR

Additional comments: None

Compensation and remuneration

Directors' remuneration vs earnings/ROE/share performance	THB7.5m vs 2020's NP of THB8,791m
Changes/stability in senior management	None
Incidents of termination of senior management	None
Track record on insider sales	None

Source: OR

Additional comments: None

Shareholders' rights

Communication - shareholder participation in AGMs/EGMs	AGM to be held within 4 months after the end of each accounting year and EGM when needed. 2021 AGM has been scheduled on 7 Apr 2021
Related party transactions	None
Voting issues - policies, incidents of rejected proposals	None

Source: OR

Additional comments: OR was listed on the SET on 11 February 2021

Financial Statements

PTT Oil and Retail Business

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	577,134	428,804	613,593	629,451	640,491
Cost of goods sold	(539,465)	(390,479)	(573,461)	(584,195)	(591,347)
Gross profit	37,669	38,325	40,132	45,256	49,143
Other operating income	6,075	4,045	4,247	4,459	4,682
Operating costs	(26,481)	(25,261)	(24,544)	(25,178)	(25,620)
Operating EBITDA	17,262	17,109	19,836	24,537	28,206
Depreciation	(3,602)	(5,203)	(6,030)	(8,267)	(10,016)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	13,660	11,906	13,805	16,271	18,190
Net financing costs	(1,376)	(702)	(774)	(151)	(151)
Associates	744	535	750	825	908
Recurring non-operating income	744	535	750	825	908
Non-recurring items	0	0	0	0	0
Profit before tax	13,028	11,739	13,781	16,944	18,946
Tax	(2,132)	(1,776)	(2,213)	(2,737)	(3,063)
Profit after tax	10,896	9,963	11,568	14,207	15,883
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	_	-	-	-	_
Reported net profit	10,896	9.963	11,568	14,207	15,883
Non-recurring items & goodwill (net)	0	0	0	0	0
Recurring net profit	10,896	9,963	11,568	14,207	15,883
Per share (THB)					
Recurring EPS *	1.21	1.11	0.96	1.18	1.32
Reported EPS	1.21	1.11	0.96	1.18	1.32
DPS	0.00	0.50	0.40	0.45	0.50
Diluted shares (used to calculate per share data)	9,000	9,000	12,000	12,000	12,000
Growth					
Revenue (%)	(2.9)	(25.7)	43.1	2.6	1.8
Operating EBITDA (%)	14.7	(0.9)	15.9	23.7	15.0
Operating EBIT (%)	20.5	(12.8)	16.0	17.9	11.8
Recurring EPS (%)	262.5	(8.6)	(12.9)	22.8	11.8
Reported EPS (%)	262.5	(8.6)	(12.9)	22.8	11.8
Operating performance		(,			
Gross margin inc. depreciation (%)	5.9	7.7	5.6	5.9	6.1
Gross margin of key business (%)	5.9	7.7	5.6	5.9	6.1
Operating EBITDA margin (%)	3.0	4.0	3.2	3.9	4.4
Operating EBIT margin (%)	2.4	2.8	2.2	2.6	2.8
Net margin (%)	1.9	2.3	1.9	2.3	2.5
Effective tax rate (%)	17.6	17.0	17.0	17.0	17.0
Dividend payout on recurring profit (%)	17.0	45.2	41.5	38.0	37.8
Interest cover (X)	10.5	45.2 17.7	18.8	113.0	126.2
Inventory days	16.4	19.1	14.9	17.6	17.7
Debtor days	27.8	29.2	13.5	5.2	17.7
Creditor days	28.7	32.9	22.7	26.8	26.8
Operating ROIC (%)	17.6	16.0	18.3	22.9	25.8
ROIC (%)	13.3	11.2	12.3	15.0	25.6 16.8
* *			16.9		16.8
ROE (%)	33.3	26.2		13.8	
ROA (%) * Pre-exceptional, pre-goodwill and fully diluted	8.1	7.1	7.6	8.0	8.4
71 3			00045	0000	*****
Revenue by Division (THB m)	2019	2020	2021E	2022E	2023E
Thailand	556,852	393,575	567,195	577,840	582,860
Cambodia	3,202	14,090	17,612	20,254	20,254
Philippines	17,081	14,519	18,148	20,871	20,871

Sources: PTT Oil and Retail Business; FSSIA estimates

Financial Statements

PTT Oil and Retail Business

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	10,896	9,963	11,568	14,207	15,883
Depreciation	3,602	5,203	6,030	8,267	10,016
Associates & minorities	6,075	4,045	4,247	4,459	4,682
Other non-cash items	-	-	-	-	-
Change in working capital	13,027	493	18,771	14,222	216
Cash flow from operations	33,599	19,703	40,616	41,156	30,798
Capex - maintenance	(2,856)	(3,191)	(4,217)	(5,781)	(7,004)
Capex - new investment	(10,200)	(10,200)	(24,767)	(15,902)	(15,902)
Net acquisitions & disposals	(7.700)	(5.007)	(00.550)	-	- (0.000)
Other investments (net)	(7,796)	(5,987)	(20,550)	(10,121)	(8,898)
Cash flow from investing	(20,853)	(19,378)	(49,533)	(31,804)	(31,804)
Dividends paid	0	(4,500)	(4,800)	(5,400)	(6,000)
Equity finance	0	0	54,000	0	0
Debt finance	3,616	3,608	45,303	0	11 420
Other financing cash flows Cash flow from financing	(552) 3,064	(6,729) (7,621)	(69,886) 24,617	11,642 6,242	11,420 5,420
Non-recurring cash flows	3,004	(7,021)	24,017	0,242	3,420
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	15,810	(7,296)	15,700	15,594	4,414
Free cash flow to firm (FCFF)	14,306.58	1,772.23	(8,142.13)	9,503.03	(854.88)
Free cash flow to equity (FCFE)	15,810.19	(2,796.04)	(33,500.00)	20,993.73	10,413.82
,	,	(2,100101)	(20,2000)		,
Per share (THB) FCFF per share	1.59	0.20	(0.90)	1.06	(0.09)
-CFF per share -CFE per share	1.59	(0.31)	(0.90)	2.33	(0.09)
Recurring cash flow per share	2.29	2.13	1.82	2.24	2.55
Salance Sheet (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Tangible fixed assets (gross)	41,600	43,498	68,265	84,167	100,068
Less: Accumulated depreciation Tangible fixed assets (net)	(1,502) 40,098	(1,502) 41,996	(7,532) 60,732	(15,799) 68,367	(25,816) 74,253
ntangible fixed assets (net)	5,872	41,996 5,624	5,624	5,624	5,624
Long-term financial assets	3,072	3,024	3,024	3,024	3,024
nvest. in associates & subsidiaries	6,240	5,218	5,218	5,218	5,218
Cash & equivalents	26,300	19,004	34,704	50,298	54,712
A/C receivable	39,013	29,543	15,994	2,094	2,094
nventories	21,856	19,021	27,934	28,457	28,805
Other current assets	716	1,027	1,469	1,507	1,533
Current assets	87,885	68,594	80,101	82,356	87,144
Other assets	12,082	23,547	23,547	23,547	23,547
Total assets	152,176	144,979	175,222	185,112	195,786
Common equity	38,295	37,823	98,791	107,798	117,881
Minorities etc.	412	93	93	93	93
Total shareholders' equity	38,708	37,916	98,884	107,891	117,974
Long term debt	50,335	41,634	5,000	5,000	5,000
Other long-term liabilities	16,257	24,961	24,961	24,961	24,961
Long-term liabilities	66,592	66,595	29,961	29,961	29,961
A/C payable	41,579	28,898	42,441	43,235	43,764
Short term debt	4,076	9,169	500	500	500
Other current liabilities	1,222	2,402	3,437	3,525	3,587
Current liabilities	46,877	40,469	46,377	47,260	47,851
Total liabilities and shareholders' equity	152,176	144,979	175,222	185,112	195,786
Net working capital	18,783	18,291	(481)	(14,703)	(14,919)
nvested capital	83,075	94,675	94,641	88,053	93,723
functudes convertibles and preferred stock which is being	ireated as debt				
Per share (THB)				0 ==	
Book value per share	4.26	4.20	8.23	8.98	9.82
·	3.60	3.58	7.76	8.51	9.35
Tangible book value per share					
Fangible book value per share Financial strength			44.		
Financial strength Net debt/equity (%)	72.6	83.9	(29.5)	(41.5)	(41.7)
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%)	18.5	21.9	(16.7)	(24.2)	(25.1)
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x)	18.5 1.9	21.9 1.7	(16.7) 1.7	(24.2) 1.7	(25.1) 1.8
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x)	18.5	21.9	(16.7)	(24.2)	(25.1)
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x)	18.5 1.9	21.9 1.7	(16.7) 1.7	(24.2) 1.7	(25.1) 1.8
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x) Valuation Recurring P/E (x) *	18.5 1.9 19.9 2019 27.1	21.9 1.7 11.5 2020 29.6	(16.7) 1.7 (10.3) 2021E 34.0	(24.2) 1.7 244.9 2022E 27.7	(25.1) 1.8 174.9 2023E 24.7
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x) /aluation Recurring P/E (x) * Recurring P/E @ target price (x) *	18.5 1.9 19.9 2019 27.1 33.9	21.9 1.7 11.5 2020 29.6 37.0	(16.7) 1.7 (10.3) 2021E 34.0 42.5	(24.2) 1.7 244.9 2022E 27.7 34.6	(25.1) 1.8 174.9 2023E 24.7 31.0
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x) /aluation Recurring P/E (x) * Recurring P/E @ target price (x) * Reported P/E (x)	18.5 1.9 19.9 2019 27.1	21.9 1.7 11.5 2020 29.6 37.0 29.6	(16.7) 1.7 (10.3) 2021E 34.0 42.5 34.0	(24.2) 1.7 244.9 2022E 27.7 34.6 27.7	(25.1) 1.8 174.9 2023E 24.7 31.0 24.7
Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) Finterest cover (x) /aluation Recurring P/E (x) * Reported P/E (x) Dividend yield (%)	18.5 1.9 19.9 2019 27.1 33.9 27.1	21.9 1.7 11.5 2020 29.6 37.0 29.6 1.5	(16.7) 1.7 (10.3) 2021E 34.0 42.5 34.0 1.2	(24.2) 1.7 244.9 2022E 27.7 34.6 27.7 1.4	(25.1) 1.8 174.9 2023E 24.7 31.0 24.7 1.5
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x) /aluation Recurring P/E (x) * Reported P/E @ target price (x) * Reported P/E (x) Dividend yield (%) Price/book (x)	18.5 1.9 19.9 2019 27.1 33.9 27.1	21.9 1.7 11.5 2020 29.6 37.0 29.6 1.5 7.8	(16.7) 1.7 (10.3) 2021E 34.0 42.5 34.0 1.2 4.0	(24.2) 1.7 244.9 2022E 27.7 34.6 27.7 1.4 3.6	(25.1) 1.8 174.9 2023E 24.7 31.0 24.7 1.5 3.3
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x) /aluation Recurring P/E (x) * Reported P/E (x) Dividend yield (%) Price/book (x) Price/tangible book (x)	18.5 1.9 19.9 2019 27.1 33.9 27.1 - 7.7 9.1	21.9 1.7 11.5 2020 29.6 37.0 29.6 1.5 7.8 9.2	(16.7) 1.7 (10.3) 2021E 34.0 42.5 34.0 1.2 4.0 4.2	(24.2) 1.7 244.9 2022E 27.7 34.6 27.7 1.4 3.6 3.8	(25.1) 1.8 174.9 2023E 24.7 31.0 24.7 1.5 3.3 3.5
Tangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x) Valuation Recurring P/E (x) * Recurring P/E @ target price (x) * Reported P/E (x) Dividend yield (%) Price/book (x) Price/tangible book (x) EV/EBITDA (x) **	18.5 1.9 19.9 2019 27.1 33.9 27.1 - 7.7 9.1 18.7	21.9 1.7 11.5 2020 29.6 37.0 29.6 1.5 7.8 9.2 19.1	(16.7) 1.7 (10.3) 2021E 34.0 42.5 34.0 1.2 4.0 4.2 18.3	(24.2) 1.7 244.9 2022E 27.7 34.6 27.7 1.4 3.6 3.8 14.2	(25.1) 1.8 174.9 2023E 24.7 31.0 24.7 1.5 3.3 3.5
Fangible book value per share Financial strength Net debt/equity (%) Net debt/total assets (%) Current ratio (x) CF interest cover (x) /aluation Recurring P/E (x) * Reported P/E (x) Dividend yield (%) Price/book (x) Price/tangible book (x)	18.5 1.9 19.9 2019 27.1 33.9 27.1 - 7.7 9.1	21.9 1.7 11.5 2020 29.6 37.0 29.6 1.5 7.8 9.2	(16.7) 1.7 (10.3) 2021E 34.0 42.5 34.0 1.2 4.0 4.2	(24.2) 1.7 244.9 2022E 27.7 34.6 27.7 1.4 3.6 3.8	(25.1) 1.8 174.9

Sources: PTT Oil and Retail Business; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

AV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AV AOT	ADVANC AP	AF ARIP	ARROW	ASP	BAFS	ALT BANPU	AMA BAY	BCP	BCPG	BDMS
					BLA		BPP		BTS	
BEC	BEM	BGRIM	BIZ	BKI		BOL		BRR		BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
OV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICHI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
_IT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	ОТО	PAP	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT		PPS				PRM			PTG	
	PORT		PR9	PREB	PRG		PSH	PSL		PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S&J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEAOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
ГНІР	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TMB	TMILL	TNDT
ΓNL	TOA	TOP	TPBI	TQM	TRC	TSC	TSR	TSTE	TSTH	TTA
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
									UDIS	ΟV
/GI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		
ERY GO	OD LEVEL									
S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	АН	AHC	AIT
ALLA	AMANAH	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	В	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
STAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
MH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
ICKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
.&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T		TAKUNI	TBSP
								TAE		
CC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
ΓMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS .	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
JPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIIK	WP	XO
/UASA	ZEN	ZIGA	ZMICO							
SOOD LE	VEI									
		ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
'UP	A									
352	ВС	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
SSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
ИDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
		PF			PMTA	POST				PRIME
DCEAN	PAF		PK	PLE			PPM	PRAKIT	PRECHA	
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TPIPP	TPLAS
П	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		
		Description						Score R	lange	
		Excellent						90-1	00	
		Very Good						80-8	39	

The disclosure of the survey results of the Thai Institute of Directors Association ('IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date.

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	Al	AIE	AIRA	AKP	AMA	AMANAH	AP	AQUA	ARROW
ASK	ASP	AYUD	В	BAFS	BANPU	BAY	BBL	всн	ВСР	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	СМ	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	occ	OCEAN	OGC	ORI	PAP	PATO	РВ	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TMB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIIK	XO
ZEN	TRUE									
DECLARE	D									
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
ВМ	BROCK	BUI	СНО	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

Level

Certified

This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.

Declared This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

Disclaimer:

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; * FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Suwat Sinsadok FSS International Investment Advisory Securities Co., Ltd

The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

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Company	Ticker	Price	Rating	Valuation & Risks
PTT Oil and Retail Business	OR TB	THB 32.75	BUY	The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) a lower marketing margin; and 3) weaker-than-expected jet demand.
PTT	PTT TB	THB 40.75	BUY	Risks to our SoTP-based valuation are the oil price and potential earnings downside from government intervention.
PTG Energy	PTG TB	THB 20.50	BUY	The downside risks to our SoTP-based TP include 1) a government cap on oil prices; and 2) weaker demand for diesel and gasoline.
Susco	SUSCO TB	THB 3.40	BUY	The downside risks to our SOTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) a lower marketing margin; and 3) weaker-than-expected jet fuel demand.
Carabao Group	CBG TB	THB 133.00	BUY	The key downside risks to our DCF-based TP are 1) slower-than-expected sales growth in Myanmar, Cambodia, and the vitamin C drink market; 2) a decrease in domestic energy drink market share; and 3) higher-than-expected SG&A expenses from overseas operations, such as in China and the UK.
Esso Thailand	ESSO TB	THB 8.55	BUY	The downside risks to our SoTP-based TP on ESSO include 1) lower-than-expected demand for petroleum products, 2) a higher crude premium, and 3) unplanned shutdowns of its refinery and petrochemical plants.
Bangchak Corp	BCP TB	THB 26.25	BUY	The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) higher crude premiums; and 3) unplanned shutdowns of the company's refinery plants.
Osotspa PCL	OSP TB	THB 34.00	BUY	The key downside risks to our DCF-based TP are 1) a decline in energy drink market share in Myanmar due to strong competition; 2) a slow recovery in the economy; and 3) lower-than-expected SG&A savings from the Fit Fast Firm program.
Berli Jucker	BJC TB	THB 37.50	HOLD	Key downside risks to our DCF-based TP could come from 1) competition with Tesco Lotus which could impact its sales and gross margin; and 2) a lower-than-expected utilisation rate and profit margin from its packaging unit after losing major customers in Thailand. The key upside risk is from easing competition in the hypermarket segment.
CP AII	CPALL TB	THB 69.00	BUY	The key downside risks to our DCF-derived TP are: 1) the higher-than-expected impact from a loss of service income from the convenience store business; 2) the worse-than-expected overseas performance of Makro; and 3) the slow recovery of tourist numbers.
Siam Global House	GLOBAL TB	THB 20.90	BUY	The key downside risks to our DCF-based TP are volatile farm incomes and farm prices which could negatively impact purchasing power, especially in the provinces.
Home Product Center	HMPRO TB	THB 14.80	BUY	The key downside risks to our DCF-based TP include: 1) lower-than-expected SSSG; 2) the slow recovery of tourist numbers; and 3) operating losses from its overseas business.
Siam Makro	MAKRO TB	THB 37.00	BUY	The key downside risks to our DCF-based TP include: 1) lower-than-expected SSSG; 2) lower-than-expected GPM improvement; and 3) operation losses from its overseas business.
Central Retail Corp	CRC TB	THB 37.25	BUY	The key downside risks to our DCF-based TP include 1) the new wave of COVID-19; and 2) lower-than-expected sales from the high-margin fashion business.
Airports of Thailand	AOT TB	THB 68.25	BUY	Downside risks to our DCF-based target price include 1) a slowdown in the recovery of international passengers; 2) delays in the Suvarnabhumi Airport expansions (satellite terminal and northern expansion); and 3) the termination of the duty-free concession contracts from King Power.
PTT Global Chemical	PTTGC TB	THB 63.50	BUY	The key downside risks to our EV/EBITDA-based TP are the weaker-than-expected HDPE price and HDPE-naphtha margin.
Star Petroleum Refining	SPRC TB	THB 9.25	BUY	TP is based on EV/EBITDA. Downside risks are a sharp rise in oil price and weak demand for refined oil products.
Energy Absolute	ЕА ТВ	THB 60.50	BUY	Downside risks to our SoTP-based TP include: 1) lower-than-expected demand for electricity in Thailand; 2) lower crude prices; and 3) lower-than-expected demand for batteries.

Source: FSSIA estimates

Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 29-Mar-2021 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as (target price* - current price) / current price.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

Neutral. The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

Underweight. The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

Overweight (O). Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Neutral (N). Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Underweight (U). Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.